



A BASELINE SURVEY OF PENANG AS AN AGE-FRIENDLY CITY 2023

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ACKNOWLEDGEMENTS

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This report will serve as a valuable resource for all those interested in promoting healthy ageing and shaping policies responsive to vulnerable populations' needs.

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Executive Summary

The baseline survey, conducted from March to June 2023, collected data from 1,501 adults residing on Penang Island. It covered demographic and social characteristics and the availability and perceived importance of various domains outlined by the WHO for an Age-Friendly City. Most respondents were from the Timur Laut district division, predominantly of Chinese ethnicity, with most falling within the 61-70 age group.

Demographics and Residency Duration:

- 28.2% of participants had lived in Penang for less than 30 years.
- 29.3% had lived in Penang for about 30-50 years.
- 42.4% had lived in Penang for more than 50 years.

Perceptions of Age-Friendliness:

Approximately 38.7% of Penangites agreed that Penang is age-friendly, indicating an overall positive perception of the city. When rating the city's suitability for the older population, 49.6% rated it as excellent, 40.7% as average, and only 9.7% viewed it as poor.

Housing:

Many highlighted the importance of senior-friendly home fixtures and affordable housing options.

Home fixtures availability was emphasised across both genders and age groups.

Transportation:

Important features identified by respondents included audiovisual pedestrian crossings, priority parking, and accessible public transport, though some questioned the current availability of these amenities.

Outdoor Spaces and Recreation:

More than half of the respondents reported visiting recreational parks less than five times a week, with the 61-70 age group being the most frequent visitors.

Social Interaction:

Face-to-face interaction was identified as the preferred mode of socialisation. The results recognised the importance of senior entertainment and ensuring representation of the older population in decision-making bodies for interventions, programs, and activities targeted for them on Penang Island.

Internet and Services:

While Internet access was widely reported, there was less acknowledgement of the availability of tailored services for seniors.

Employment and Education:

Respondents expressed a desire for flexible job opportunities and continued education.

Healthcare:

Access to health wellness programs, conveniently located health facilities, and home visits by healthcare workers were crucial.

Overall, the survey provides valuable insights into the demographics, perceptions, and needs of the older population in Penang, mainly focusing

on four key domains: housing, transportation, social interaction, and healthcare. These findings could inform targeted initiatives and policies aimed at improving the quality of life and well-being of older individuals on Penang Island.

Glossary of Acronyms

Health Care Workers (HCW)

Malaysian Healthy Ageing Society (MHAS)

Penang Women's Development Corporation (PWDC)

Penang Island City Council (MBPP)

World Health Organization (WHO)

Introduction

Background

Penang, situated on the northwest coast of Peninsular Malaysia, is widely known as the Pearl of the Orient. It is divided between the mainland and the island, with the latter serving as a significant tourist destination and a hub of economic activity. Penang is Malaysia's third most densely populated state with a population density of 1,718 persons per square kilometre. Furthermore, the older persons population in Penang constitutes 12.3% of its total population, ranking it fourth in Malaysia in this regard. The island is home to 791,200 people and boasts a diverse and dynamic industrial landscape, encompassing manufacturing, tourism, and service sectors that significantly contribute to the state's economic growth.

Notably, Penang is currently the second fastest-ageing state in Malaysia and is projected to become an aged and super-aged state by 2030 and 2040, respectively.

In anticipation of this demographic shift and alignment with the decade of ageing goals, the Penang Island City Council (MBPP) and the Penang Women's Development Corporation (PWDC) have entered a three-year public-private partnership with the Malaysian Healthy Aging Society (MHAS) as a consultant. This collaboration aims to launch the Age-Friendly City Project, aligning with WHO guidelines. The primary objective of this initiative is to transform Penang into an age-friendly city by implementing facilities and services that cater to the diverse needs of residents across different age groups and abilities.

Aim

This initiative aimed to conduct a survey targeting a representative sample of Penang Island residents. The survey had the dual purpose of identifying favourable and unfavourable instances of infrastructure and practices while also gathering suggestions for enhancing the island's age-friendliness. The questionnaire was carefully designed to incorporate key indicators, which are expected to be utilised in future surveys and serve as valuable measures for assessing changes over the years as Penang progresses towards becoming an age-friendly city.

Methodology and Sample:

Questionnaire and Data Collection

Data were collected from adult residents of Penang Island between March 2023 and June 2023. The survey utilised the English version of the American Association of Retired Persons Livable Communities—Great Places for All Ages Survey Questionnaire, which

had been previously validated and deployed locally. The survey was translated into Bahasa Malaysia and Mandarin, with back-translation performed by native-speaking academics. The finalised survey comprised three main components: demographic characteristics (11 items), social characteristics (12 items), and an assessment of the availability and significance of the eight domains of a WHO Age-Friendly City—Domain 1: outdoor environment, Domain 2: transport and mobility, Domain 3: housing and infrastructure, Domain 4: social inclusion, Domain 5: social participation, Domain 6: civic engagement, Domain 7: communication and information, and Domain 8: community health. The validated survey was administered in person, through face-to-face sessions during stakeholder engagements, and online via Google Forms distributed through non-government agencies, with 315 and 1168 participants, respectively. Eligible men and women above 18 years residing in Penang Island who could provide informed consent were enrolled in the survey.

Data Analysis:

The data analysis was conducted using IBM SPSS Statistics version 27 (IBM Corp., Armonk, NY). This study presents the results of socio-demographic characteristics among adults residing on Penang Island from March 2023 to June 2023. Data from all enrolled participants was included in the analysis. Unless explicitly stated otherwise, all variables were treated as categorical.

The analysis utilized cross-tabulation, a statistical method for examining the distribution of cases across multiple categorical variables. Statistically significant differences are reported when a notable divergence in the frequency of cases between categories occurs, and this divergence is unlikely to have happened by chance (e.g., with a probability of chance occurrence less than 0.05, or 5%). Such significant differences are denoted by the corresponding probability (e.g., $p < 0.05$, or 'NS' for non-significant, with a p-value greater than this threshold), based on Pearson Chi-squared exact 2-sided tests. The frequencies of cases are presented as percentages of the respondents to each question, adjusted to one decimal place, unless specified otherwise. Missing values are noted, and it's important to acknowledge that due to variable amounts of missing data throughout the dataset, the total percentage for certain categories may not sum to 100%

Ethics

Informed consent was obtained from study participants before the survey was administered; this was a default requirement that participants had to fulfil before responding to the survey queries, whether submitted personally or electronically. The study was conducted following the World Medical Association Declaration of Helsinki, and the Institutional Review Board (PUIRBHR0404) of Perdana University approved the study.

1. Demographic Profile

The demographic data is derived from a survey conducted to assess the age-friendly city features of Penang, providing insights into participant characteristics. The survey included 600 male and 901 female participants, with the majority falling within the 61-70 age group, followed by the 51-60 and <40 age groups. Most participants were married (62.8%), as shown in Figure 1.1. Participants primarily hailed from the Timur Laut district division (68.2%), and the majority identified as Chinese (71.5%), followed by Malay (14.1%), Indian (10.2%), and others (4.2%). Household composition varied, with a significant percentage living with their spouse (55.7%), and a notable proportion living alone (16.3%). Income distribution varied, with the highest percentage falling within the >RM 10,000 bracket (22.3%), followed by the RM 2,000 - RM 3,999 income bracket (20.4%). Most participants were employed (50.4%), with salary (47.3%) being the primary income source. Educational backgrounds varied, with the majority having attained tertiary education (51.7%), as shown in Table 1.1.

Table 1.1: Demographic data for Age-Friendly City Survey of Penang

Characteristics	Category	Number (N)	Percentage
Gender	Male	600	40
	Female	901	60
Age Groups	<40	317	21.1
	40-50	216	14.4
	51-60	347	23.1
	61-70	431	28.7
	>70	190	12.7
District Division	Barat Daya	477	31.8
	Timur Laut	1024	68.2
Ethnicity	Malay	212	14.1
	Chinese	1073	71.5
	Indian	153	10.2
	Others	63	4.2
Household Composition	Live alone	244	16.3
	Live with spouse	836	55.7
	Live with kids	607	40.4
	Live with grandkids	129	8.6
	Live with relatives	237	15.8
	Live with friends	223	14.9
Household Income	<RM 1,000	201	13.4
	RM 1,000 - RM 1,999	148	9.9
	RM 2,000 - RM 3,999	306	20.4

	RM 4,000 - RM 5,999	252	16.8
	RM 6,000 - RM 7,999	149	9.9
	RM 8,000 - RM 9,999	110	7.3
	>RM 10,000	335	22.3
Employment Status	Employed	756	50.4
	Outside workforce	665	44.3
	Unemployed	80	5.3
Income Source	Salary	710	47.3
	Pension-EPF	311	20.7
	Savings	117	7.8
	Rent/interest investment	43	2.9
	Family	202	13.5
	Welfare/zakat/NGO	23	1.5
	Others	192	12.8
*Education			
	Primary	41	2.7
	Secondary	365	24.3
	Tertiary	776	51.7
	Postgraduate	317	21.1

* Missing values: 2

Table 1.2: Relationship between subcategories of demographic variables and different age groups

Category	Yes %					*P Value
	<40	40-50	51-60	61-70	>70	
Widowed	0.1	0.3	1.1	2.1	1.9	<0.001
Live alone	3.7	1.4	3.1	5.3	2.8	0.004
Income less than RM 1000	2.3	0.8	2.3	5.4	2.5	<0.001
Living on a pension	0.6	0.3	3.5	10.6	5.73	<0.001
Unemployed	0.7	0.8	1.7	1.5	0.6	<0.001

*p value refers to the outcome of the statistical tests (i.e., the probability that a given difference in the distribution of cases across categories (in this case, age group) could occur by chance). P-values <0.05 are statistically significant. N.S. refers to non-significant (i.e., p greater than 0.05).

Tables 1.2 and 1.3 present the results of chi-squared statistical tests examining variations in demographic variables based on age groups and gender. The aim was to

identify the age group and gender with the highest proportion of respondents living alone, widowed, and reliant on a pension with an income below RM 1000. The analysis revealed a significant association (p -value < 0.001), indicating a higher percentage of women belonging to the 61-70 age group being widowed and living alone.

Table 1.3: Relationship between subcategories of demographic variables and gender

Category	Yes %		*P Value
	Female	Male	
Widowed	4.3	1.3	<0.001
Live alone	11.7	4.5	<0.001
Income less than RM 1000	8.4	5	NS
Living on a pension	12.1	8.6	NS
Unemployed	2.7	2.6	NS

*p value refers to the outcome of the statistical tests (i.e., the probability that a given difference in the distribution of cases across categories (in this case, age group) could occur by chance). P-values < 0.05 are statistically significant. N.S. refers to non-significant (i.e., p greater than 0.05).

Figure 1.1: Marital status of respondents

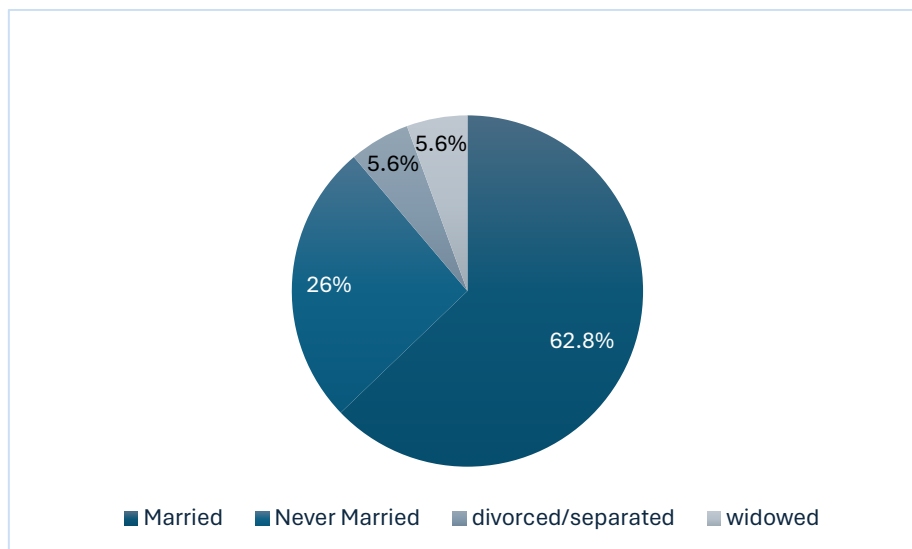


Figure 1.2: Mapping of locations of the respondents

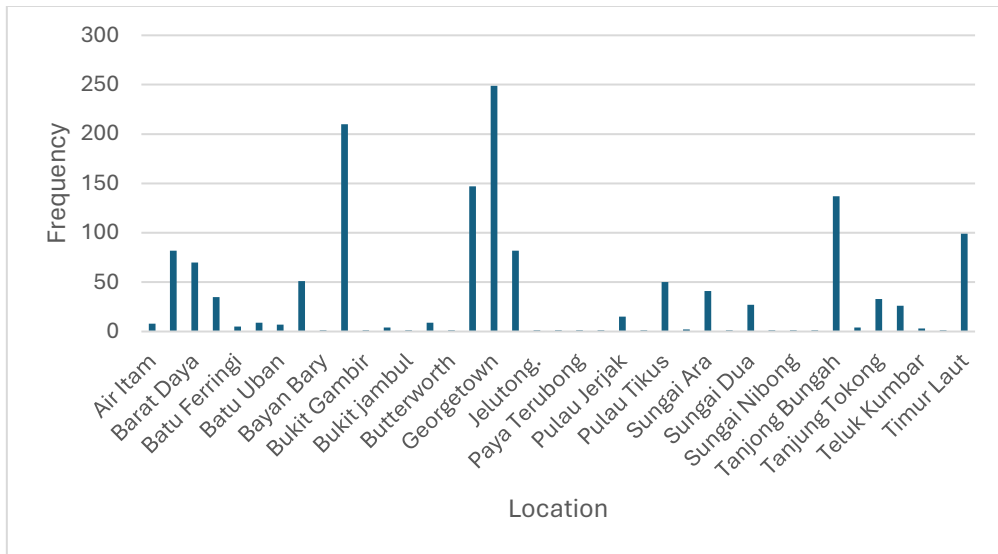


Table 1.4: Permanent residents of Penang

Category	Yes	
	N	%
Yes	1492	99.4
No	9	0.6

Table 1.5: Duration of living in Penang.

Category	Yes	
	N	%
Less than 30 years	424	28.2
30-50 years	440	29.3
Greater than 50 years	637	42.4

Table 1.6: Rate Penang Island as a place for an older person (age >60 Years)

Category	Yes	
	N	%
Poor	146	9.7
Average	611	40.7
Excellent	744	49.6

Table 1.7: Is it important to remain living on Penang Island?

Category	Yes	
	N	%
Yes	1346	89.7
No	110	7.3
Not sure	45	3.0

Table 1.8: How important is living independently in your home as you age?

Category	Yes	
	N	%
Yes	1433	95.5
No	68	4.5

The data in Table 1.4 indicates that 99.4% of the respondents are permanent residents of Penang. In Table 1.5, the duration of residency in Penang is outlined, with 28.2% living there for less than 30 years, 29.3% for 30-50 years, and 42.4% for over 50 years.

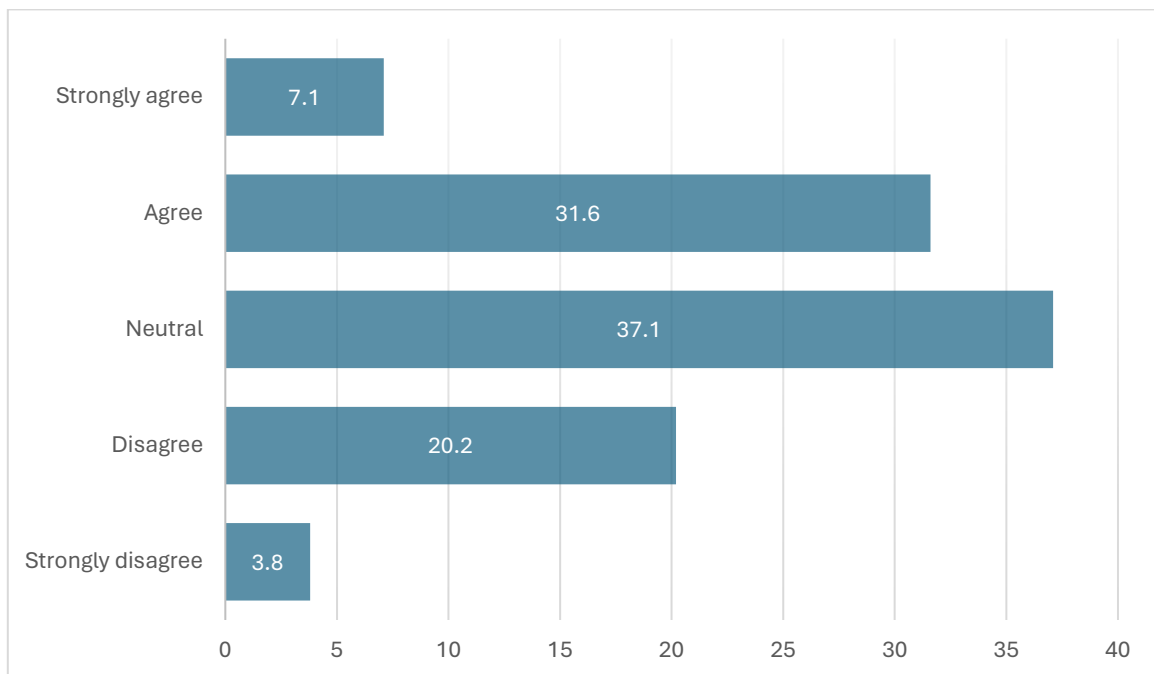
Furthermore, Table 1.6 illustrates the perception of Penang Island for older individuals, with 9.7% rating it as poor, 40.7% as average, and 49.6% as excellent.

Additionally, Table 1.7 underscores the importance of remaining on Penang Island, with 89.7% responding 'yes,' 7.3% responding 'no,' and 3.0% being unsure.

Lastly, Table 1.8 highlights the significance of living independently in one's home as one ages, with 95.5% responding 'yes' and 4.5% responding 'no.'

These findings offer valuable insights into the perspectives and preferences of permanent residents of Penang. They illuminate their residency duration, perceptions of the island as a place for older individuals, the importance of remaining on the island, and the significance of living independently as they age. Figure 1.2 maps the respondents' locations, whereas Figure 1.3 visually represents people's perception of Penang as an age-friendly city, offering insight into their expectations for making the island more age-friendly.

Figure 1.3: Penang is an age-friendly city (%)



2. Housing

The objective of the housing section in the questionnaire was to assess the satisfaction levels of Penang residents with their current housing arrangements and to identify the types of modifications they may require or desire for their homes. One of the questions aimed to gauge whether respondents would need specific changes or improvements in their homes to facilitate ageing in place. These included adjustments for easier access into or within the home, bathroom modifications, and the possibility of having a bedroom, bathroom, and kitchen on the first floor.

Table 2.1 displays the frequency of 'yes' responses, providing an overview of the prevalence of housing modification needs and preferences among the respondents, specifically regarding modifications for toilets. Table 2.2, meanwhile, presents a cross-tabulation of responses by gender, offering insights into how housing modification needs and preferences vary between gender groups, with a notably higher percentage of females expressing a preference for home modifications. These findings enhance our understanding of Penang residents' housing requirements and preferences, informing housing policies, urban planning, and support services to better meet the community's needs.

Table 2.1: The number and percentage of respondents that reported yes to home modifications.

Category	Yes	
	N	%
Home modifications required	904	60.2
Home modifications for toilet	1115	74.3
Home modifications for the first floor	819	54.6

Table 2.2: Gender-wise distribution of respondents that reported yes to home modifications.

Category	Yes %		P-Value
	Male	Female	
Home modifications required	22.7	37.5	0.028
Home modifications for toilet	29.0	45.2	NS
Home modifications for the first floor	21.1	33.5	NS

Table 2.3: Age-wise distribution of respondents that reported yes to home modifications.

Category	Yes %					P-Value
	<40	40-50	51-60	61-70	>70	
Home modifications required	15.0	9.6	14.6	15.5	5.5	<0.001
Home modifications for toilet	17.0	11.5	17.5	20.7	7.7	<0.001
Home modifications for the first floor	14.3	8.9	13.3	12.9	5.2	<0.001

Table 2.3 highlights that the respondents in the age group of 61-70 reported the highest percentage (15.5%) of requiring home modifications, followed closely by those in the age group of less than 40 (p value<0.001).

Table 2.4 showcases the results of inquiries into respondents' perceptions regarding whether Penang Island has certain age-friendly features and the importance they place on these features or facilities. This includes homes with no-step entries, wider doorways, bedrooms and bathrooms on the first floor, and bathroom grab bars. Additionally, the table provides insights into the availability of affordable housing options for seniors and the importance of financial assistance for home modifications

The results indicate that a substantial proportion of respondents perceive the presence and importance of home fixtures, such as no-step entry, wider doorways, and grab bars in bathrooms, with 36.5% acknowledging their availability and 89.9% emphasising their importance. Additionally, while 21.3% report the availability of affordable housing options for seniors, 89.5% underscore the importance of such housing. Moreover, a

majority (87.1%) express the importance of financial assistance for home modifications, although only 19.0% report the availability of such support.

Table 2.4: Respondents perception of the availability and importance of age-friendly home features

Category	Yes	
	N	%
Available home fixtures	548	36.5
Importance of home fixtures	1349	89.9
Available, affordable housing	320	21.3
Importance of affordable housing	1343	89.5
Importance of financial assistance home modification	1308	87.1
Available financial assistance for home modification	285	19.0

Available home fixtures missing values=7 Importance of home fixtures missing values=7 Available, affordable housing missing values=5 Importance of affordable housing missing values= 5 Importance of financial assistance home modification missing values=8 Available financial assistance for home modification= 8

Table 2.5: Gender-wise distribution of respondents' perception of the availability and importance of age-friendly home features

Category	Yes %		P-value
	Male	Female	
Available home fixtures	19.2	17.3	<0.001
Importance of home fixtures	36.4	53.4	NS
Available, affordable housing	12.3	9.0	<0.001
Importance of affordable housing	35.7	53.8	NS
Importance of financial assistance home modification	35.3	51.8	NS
Available financial assistance for home modification	11.1	7.9	<0.001

Available home fixtures missing values=7 Importance of home fixtures missing values=7 Available, affordable housing missing values=5 Importance of affordable housing missing values= 5 Importance of financial assistance home modification missing values=8 Available financial assistance for home modification= 8

Table 2.6: Age-wise distribution of respondents' perception of the availability and importance of age-friendly home features

Category	Yes %					P-value
	<40	40-50	51-60	61-70	>70	
Available home fixtures	6.3	5.3	8.3	11.6	5.1	0.036
Importance of home fixtures	18.9	12.4	20.7	26.3	11.5	NS
Available, affordable housing	3.7	3.0	4.9	6.6	3.2	NS
Importance of affordable housing	19.0	12.3	21.0	25.7	11.5	NS
Available financial assistance for home modification	3.3	2.7	4.4	5.7	2.9	NS
Importance of available financial assistance for home modification	18.5	11.6	20.3	25.3	11.5	NS

Available home fixtures missing values=7 Importance of home fixtures missing values=7 Available, affordable housing missing values=5 Importance of affordable housing missing values= 5 Importance of financial assistance home modification missing values=8 Available financial assistance for home modification= 8

The data in Table 2.5 reveals that a higher percentage of male respondents (19.2%) perceive the availability of age-friendly home fixtures compared to female respondents (17.3%), with a statistically significant P-value of <0.001. The perception of available, affordable housing was higher among male respondents (12.3%) compared to female respondents (9%), with a statistically significant P-value of <0.001. However, the importance of the availability of financial assistance for home modification was perceived to be higher among female respondents.

Examining age-friendly home features across different age groups in Table 2.6, the data show that perceptions of available home fixtures vary by age, with the highest percentage (11.6%) reported among respondents in the 61-70 age group. However, the perceived importance of these fixtures does not significantly vary across age groups. Similarly, perceptions of the availability and importance of affordable housing show no significant differences among the age groups. Likewise, there are no substantial variations across age groups in the perceived importance of financial assistance for home modifications or in the availability of financial aid for such modifications. Additionally, most participants, particularly those in the Timur Laut district, recognize the importance and accessibility of these amenities.

3. Transportation

This section addresses questions related to transportation, focusing on the primary modes of transportation used by respondents for regular activities such as shopping, visiting doctors, or travelling to various locations. These modes include personal vehicles, private ride-hailing services (e.g., Grab), public buses, bicycles, and trains. The findings, illustrated in Figure 3.1, reveal that personal transport is the most commonly used form of transportation among the respondents across both genders (as reported in Table 3.1) and all age groups (as shown in Table 3.2), with Grab (ride-hailing service) being the second most popular choice.

Figure 3.1: A most common form of transport preferred.

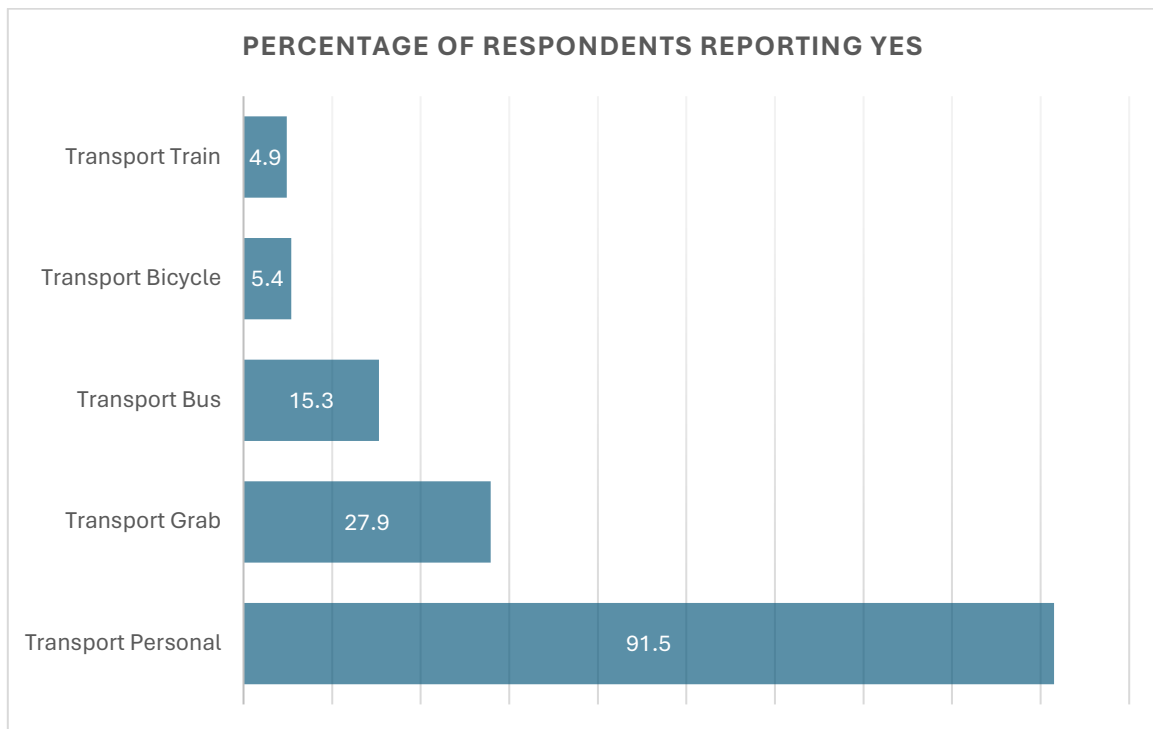


Table 3.1: Gender-wise distribution of the most common form of transport preferred.

Category	Yes %		P-value
	Male	Female	
Transport Personal	37.4	54.2	0.026
Transport Grab	9.7	18.1	0.016
Transport Bus	6.1	9.1	NS
Transport Bicycle	2.7	2.6	0.044
Transport Train	1.7	3.1	NS

Table 3.2: Age-wise distribution of the most common form of transport preferred.

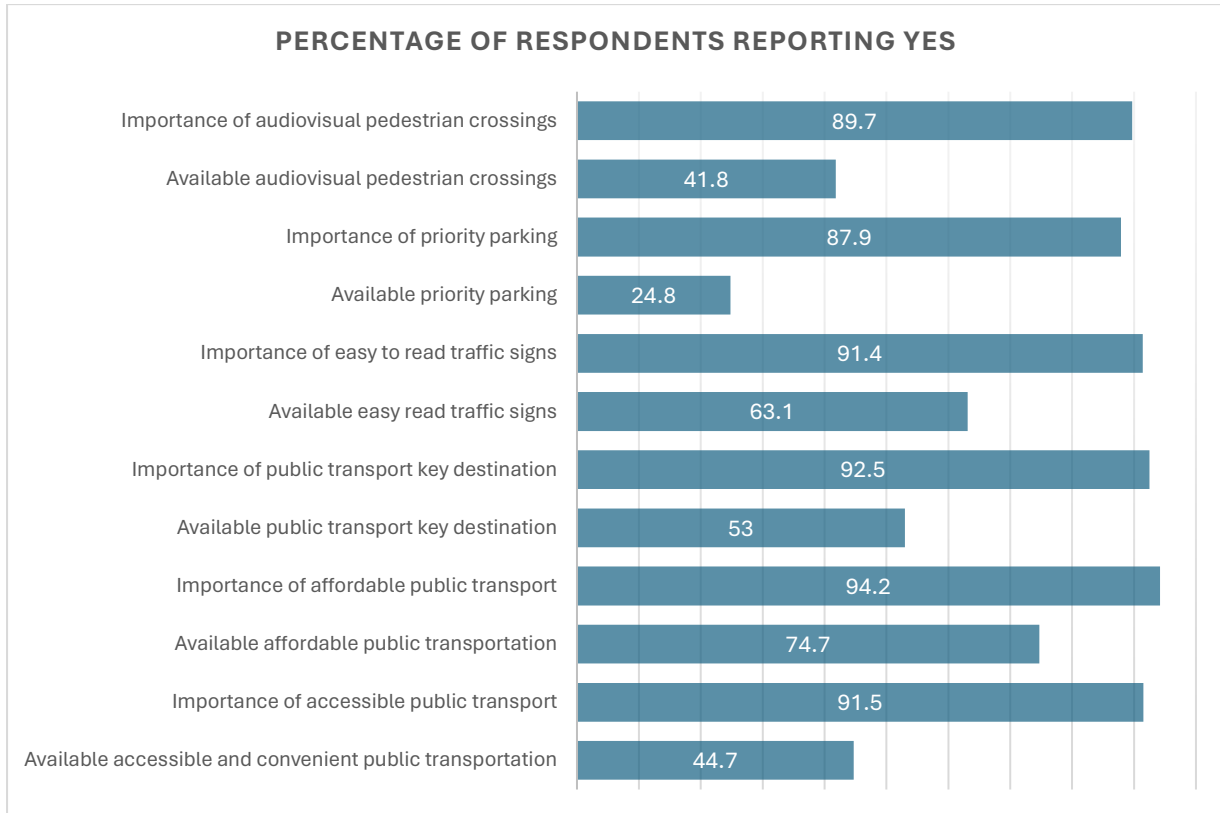
Category	Yes %					P-value
	<40	40-50	51-60	61-70	>70	
Transport Personal	17.8	13.5	22.0	26.7	11.5	<0.001
Transport Grab	8.2	4.3	6.6	6.0	2.9	<0.001
Transport Bus	4.1	1.7	2.3	4.9	2.1	0.005
Transport Bicycle	1.1	0.5	1.4	1.9	0.5	NS
Transport Train	1.5	0.3	1.0	1.6	0.5	NS

The questions also addressed the significance and availability of accessible and convenient public transportation, affordable public transport options, and their role in providing access to various destinations such as hospitals, clinics, parks, shopping centres, banks, and other key locations. The importance of easily readable traffic signs, priority parking bays for the older population, and audio/visual pedestrian crossings for ensuring safe and inclusive urban mobility was highlighted.

Figure 3.2 summarises the key findings from these questions, indicating the percentage of respondents who answered affirmatively. While most of the respondents recognise the importance of features such as audiovisual pedestrian crossings, priority parking, easy-to-read traffic signs, and accessible public transport, a comparatively lower percentage of males and those belonging to the age group 40-50 believe that these

features are currently available (Table 3.3 and 3.4). Furthermore, most respondents who recognised the importance and accessibility of these features were located in the Timur Laut district.

Figure 3.2: Importance and availability of standard transport features in Penang



Missing values: Available accessible convenient public transportation=12 Importance of accessible public transport=12 Available affordable public transportation=8 Importance of affordable public transport=8 Available public transport key destination=6 Importance of public transport key destination=6 Available easy-read traffic signs=8 Importance of easy-to-read traffic signs=8 Available priority parking=8 Importance of priority parking=8 Available audiovisual pedestrian crossings=11 Importance of audiovisual pedestrian crossings=11

Table 3.3: Gender-wise distribution of importance and availability of standard transport features in Penang

Category	Yes %		P-value
	Male	Female	
Available accessible and convenient public transportation	24.0	20.7	<0.001
Importance of accessible public transport	36.7	54.8	NS
Available affordable public transportation	32.4	42.2	<0.001
Importance of affordable public transport	37.6	56.6	NS
Available public transport key destination	25.4	27.6	<0.001
Importance of public transport key destination	37.0	55.5	NS
Available easy read traffic signs	27.8	35.3	<0.001
Importance of easy-to-read traffic signs	36.7	54.7	NS
Available priority parking	12.8	12.0	<0.001
Importance of priority parking	35.4	52.4	NS
Available audiovisual pedestrian crossings	18.3	23.5	0.010
Importance of audiovisual pedestrian crossings	35.6	54.1	NS

Missing values: Available accessible convenient public transportation=12 Importance of accessible public transport=12 Available affordable public transportation=8 Importance of affordable public transport=8 Available public transport key destination=6 Importance of public transport key destination=6 Available easy-read traffic signs=8 Importance of easy-to-read traffic signs=8 Available priority parking=8 Importance of priority parking=8 Available audiovisual pedestrian crossings=11 Importance of audiovisual pedestrian crossings=11

Table 3.4: Age-wise distribution of importance and availability of standard transport features in Penang

Category	Yes %					P-value
	<40	40-50	51-60	61-70	>70	
Available accessible and convenient public transportation	9.1	5.3	10.3	13.5	6.5	NS
Importance of accessible public transport	19.4	12.5	21.4	26.5	11.7	NS
Available affordable public transportation	14.7	9.9	17.2	22.0	10.8	<0.001
Importance of affordable public transport	20.1	13.0	21.8	27.4	11.9	NS
Available public transport key destination	10.1	7.2	12.1	16.0	7.7	0.048
Importance of public transport key destination	19.6	12.9	21.5	26.7	11.8	NS
Available easy-read traffic signs	12.9	9.1	14.7	18.3	8.2	NS
Importance of easy-to-read traffic signs	19.3	12.7	21.5	26.5	11.5	NS
Available priority parking	5.1	3.1	5.7	7.3	3.5	NS
Importance of priority parking	18.6	11.7	20.8	25.2	11.6	0.010
Available audiovisual pedestrian crossings	7.9	6.1	9.9	12.7	5.3	NS
Importance of audiovisual pedestrian crossings	18.8	12.2	20.9	26.1	11.7	NS

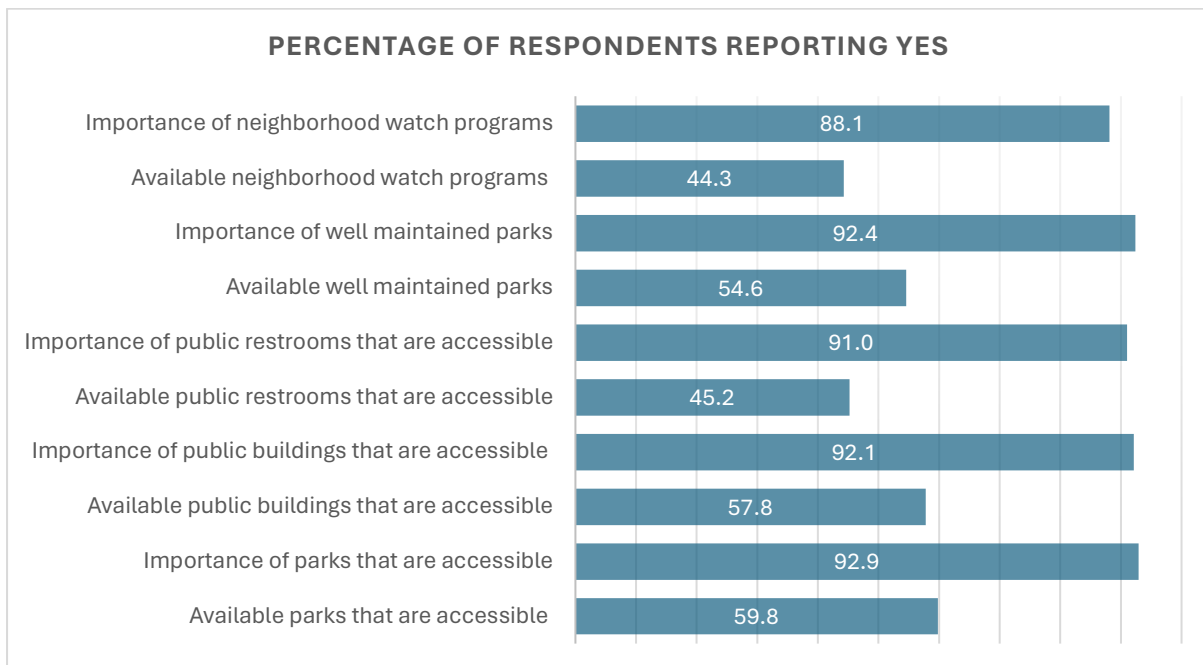
Missing values: Available accessible convenient public transportation=12 Importance of accessible public transport=12 Available affordable public transportation=8 Importance of affordable public transport=8 Available public transport key destination=6 Importance of public transport key destination=6 Available easy-read traffic signs=8 Importance of easy-to-read traffic signs=8 Available priority parking=8 Importance of priority parking=8 Available audiovisual pedestrian crossings=11 Importance of audiovisual pedestrian crossings=11

4. Outdoor Spaces and Buildings

Outdoor spaces play a crucial role in age-friendly cities by enhancing older residents' well-being and quality of life. Well-maintained green spaces and safe, accessible pedestrian infrastructure are key to creating an environment where older individuals feel included and can navigate easily. This section summarises people's opinions on the importance and availability of outdoor spaces and age-friendly areas in Penang.

The respondents were questioned about the availability and significance of accessible parks, public buildings, public restrooms and well-maintained parks. as well as the presence and importance of neighbourhood watch programs such as *RELA* and *Rukun Tetangga* reported in Figure 4.1.

Figure 4.1: Importance and availability of accessible outdoor spaces and buildings



Available parks that are accessible= 7, Importance of parks that are accessible=7, Available public buildings that are accessible=9, Importance of public buildings that are accessible=9, Available public restrooms that are accessible=8, Importance of public restrooms that are accessible=8, Available well-maintained parks=11, Importance of well-maintained parks=11, Available neighborhood watch programs=13, Importance of neighborhood watch programs=13

The survey revealed that a majority (59.8%) of respondents acknowledged the presence of accessible parks, with a significant emphasis on their importance (92.9%). Additionally, 57.8% of participants noted the availability of accessible public buildings, highly rating their importance at 92.1%. Moreover, 45.2% of respondents reported the presence of accessible public restrooms, stressing their importance (91.0%). The data also showed that 54.6% of participants identified well-maintained parks as available,

emphasizing their importance at 92.4%. Lastly, 44.3% of respondents recognized the availability of neighborhood watch programs, with 88.1% highlighting their importance. Tables 4.1 and 4.2 detail the perceptions of availability and importance of accessible outdoor spaces and buildings across genders and age groups. The data reveal varying levels of importance and availability for different amenities, with some showing statistically significant variances while others do not. Notably, females demonstrated a greater appreciation of the importance of outdoor features compared to males. Furthermore, the majority of respondents acknowledging the significance and availability of these features are from the Timur Laut district.

Table 4.1: Gender-wise perception of the importance and availability of accessible outdoor spaces and buildings

Category	Yes %		P-value
	Male	Female	
Available parks that are accessible	27.1	32.6	<0.001
Importance of parks that are accessible	37.4	55.4	NS
Available public buildings that are accessible	27.5	30.3	<0.001
Importance of public buildings that are accessible	37.0	55.0	NS
Available public restrooms that are accessible	21.6	23.6	<0.001
Importance of public restrooms that are accessible	36.4	54.6	NS
Available well-maintained parks	24.9	29.7	<0.001
Importance of well-maintained parks	37.3	55.1	NS
Available neighborhood watch programs	22.1	22.1	<0.001
Importance of neighborhood watch programs	36.3	51.8	0.006

Available parks that are accessible= 7, Importance of parks that are accessible=7, Available public buildings that are accessible=9, Importance of public buildings that are accessible=9, Available public restrooms that are accessible=8, Importance of public restrooms that are accessible=8, Available well-maintained parks=11, Importance of well-maintained parks=11, Available neighborhood watch programs=13, Importance of neighborhood watch programs=13

Table 4.2: Age-wise perception of the importance and availability of accessible outdoor spaces and buildings

Category	Yes %					P-value
	<40	40-50	51-60	61-70	>70	
Available parks that are accessible	12.0	8.1	13.9	18.4	7.4	NS
Importance of parks that are accessible	19.3	12.8	21.5	27.4	11.9	NS
Available public buildings that are accessible	11.3	7.8	12.5	18.1	8.3	0.010
Importance of public buildings that are accessible	19.4	12.7	21.2	27.1	11.7	NS
Available public restrooms that are accessible	8.5	5.7	9.9	14.7	6.5	0.006
Importance of public restrooms that are accessible	19.3	12.3	21.3	26.7	11.4	NS
Available well-maintained parks	9.9	7.4	11.7	17.7	7.9	<0.001
Importance of well-maintained parks	19.4	12.4	21.4	27.4	11.9	0.020
Available neighborhood watch programs	7.8	5.0	10.5	14.7	6.3	<0.001
Importance of neighborhood watch programs	18.1	11.9	20.3	26.3	11.5	0.028

Available parks that are accessible= 7, Importance of parks that are accessible=7, Available public buildings that are accessible=9 Importance of public buildings that are accessible=9, Available public restrooms that are accessible=8, Importance of public restrooms that are accessible=8, Available well-maintained parks=11, Importance of well-maintained parks=11, Available neighborhood watch programs=13, Importance of neighborhood watch programs=13

The survey also inquired about the frequency of visits to recreational parks by the respondents. More than half (59.9%) reported visiting recreational parks fewer than five times a week, as shown in Figure 4.2. A cross-tabulation analysis of park visits by age revealed that the under-40 age group ($p \leq 0.001$) and females (p -value = 0.014) had a higher frequency of park visits. The statistical analysis underscored a high level of significance across all age groups, as evidenced by the low p -values, underscoring the widely recognized value of visiting recreational parks.

Figure 4.2: Recreational Park visits per week.

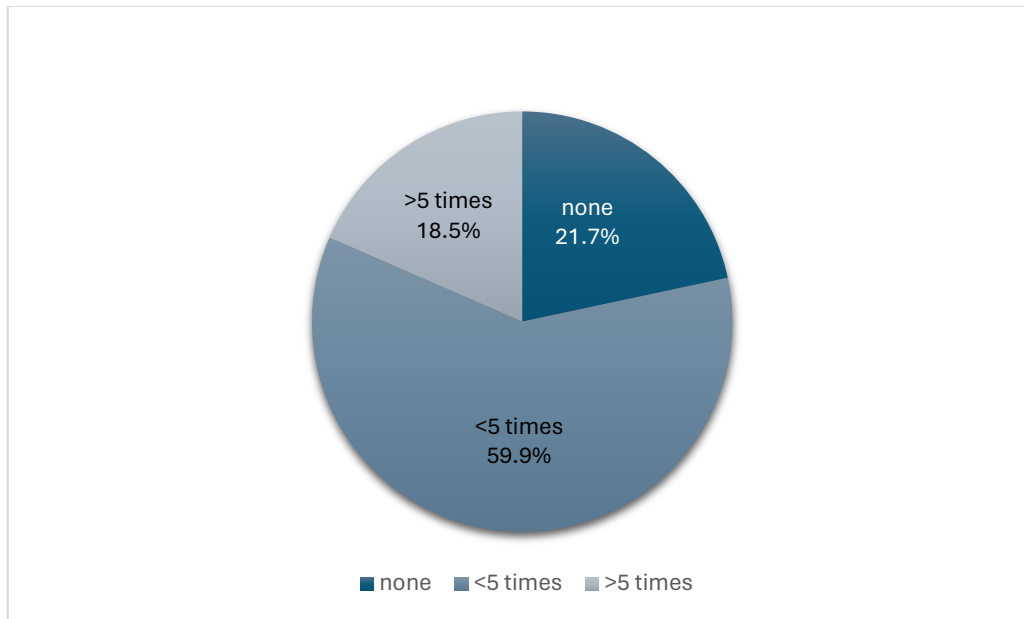


Table 4.3: Recreational Park visits per week for different age groups.

Category	Recreational Park visits (N)			*P Value
	None	<5	>5	
<40	54	239	24	<0.001
40-50	40	149	27	<0.001
51-60	77	192	78	<0.001
61-70	109	221	101	<0.001
>70	45	98	47	<0.001

*p value refers to the outcome of the statistical tests (i.e., the probability that a given difference in the distribution of cases across categories (in this case, age group) could occur by chance). P-values <0.05 are statistically significant. N.S. refers to non-significant (i.e., p greater than 0.05).

Table 4.4: Recreational Park visits per week for different genders.

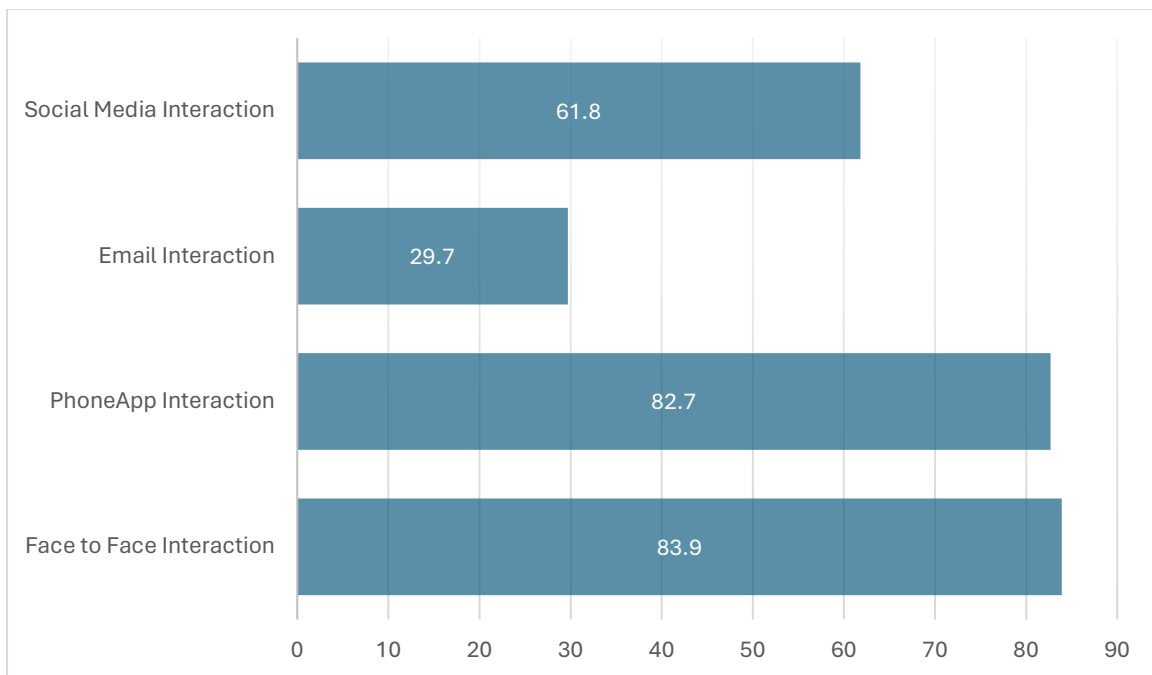
Category	Recreational Park visits (N)			*P Value
	None	<5	>5	
Female	214	537	150	0.014
Male	111	362	127	0.014

*p value refers to the outcome of the statistical tests (i.e., the probability that a given difference in the distribution of cases across categories (in this case, age group) could occur by chance). P-values <0.05 are statistically significant. N.S. refers to non-significant (i.e., p greater than 0.05).

5. Social Participation

This section examines the preferred modes of social interaction among Penang residents. Figure 5.1 displays the frequency of preferred interactions with community friends, family, or neighbors. Face-to-face interaction was reported as the most common method (83.9%), followed by phone app interaction (82.7%), and then social media (61.8%), with email being the least preferred mode of interaction (29.7%).

Figure 5.1: Preferred type of social interaction(%)



The data presented in Table 5.1 illustrates the preferred modes of social interaction across different age groups. The findings reveal interesting insights into individuals' communication preferences within various age demographics.

Table 5.1: Preferred type of social interaction across different age groups

Category	Yes %					*P Value
	<40	40-50	51-60	61-70	>70	
Face-to-face interaction	17.3	12.1	20.0	24.0	10.6	NS
Phone app interaction	18.1	12.1	19.3	23.7	9.5	0.043
Email interaction	3.4	4.4	7.1	10.7	4.1	<0.001
Social media interaction	15.0	9.3	14.7	17.7	5.2	<0.001

*p value refers to the outcome of the statistical tests (i.e., the probability that a given difference in the distribution of cases across categories (in this case, age group) could occur by chance). P-values <0.05 are statistically significant. N.S. refers to non-significant (i.e., p greater than 0.05).

Table 5.2: Preferred type of social interaction across both genders

Category	Yes %		*P Value
	Male	Female	
Face-to-face interaction	33.4	50.4	NS
Phone app interaction	32.1	50.6	0.044
Email interaction	11.7	18.0	NS
Social media interaction	23.0	38.7	0.006

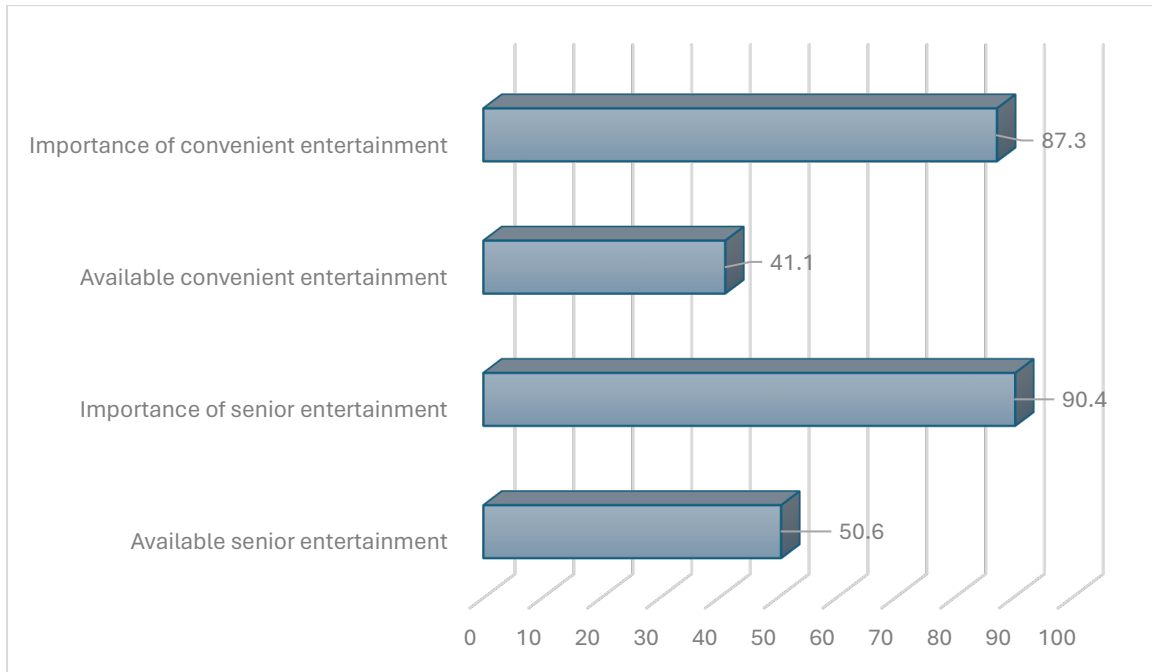
*p value refers to the outcome of the statistical tests (i.e., the probability that a given difference in the distribution of cases across categories (in this case, age group) could occur by chance). P-values <0.05 are statistically significant. N.S. refers to non-significant (i.e., p greater than 0.05).

Distinct patterns emerge in the preferences for various modes of social interaction among different age groups. Specifically, the 61-70 age group exhibited the greatest inclination towards phone app interaction at 23.7% (p value= 0.043), with females displaying a higher preference for phone app interaction than males (p value= 0.044). Furthermore, most respondents favouring phone app interaction over face-to-face interaction are residents of the Timur Laut district.

6. Respect and Social Inclusion

In this section, we explore the responses of Penang residents to the survey on their available and preferred social interaction activities. The survey focused on entertainment options for seniors, including benefits such as discounted entries, accessible transportation, and favourable locations. It also delved into cultural celebrations and activities, like festivals and spiritual events, and various volunteer opportunities for seniors. Moreover, the survey covered different types of social clubs catering to hobbies such as gardening, reading, and arts and crafts. Half of the respondents (50.6%) reported the availability of entertainment tailored for seniors, with a significant majority (90.4%) emphasising its importance. Additionally, 41.1% acknowledged the availability of conveniently located entertainment options, with 87.3% underscoring the importance of such amenities for seniors, as depicted in Figure 6.1. Tables 6.1 and 6.2 further break down the data by gender and age, illustrating the significance and availability of entertainment options for seniors.

Figure 6.1: Importance and availability of entertainment for seniors(%)



Missing values: Available senior entertainment=8, Importance of senior entertainment=8, Available convenient entertainment=10, Importance of convenient entertainment=10

Table 6.1: Perception of importance and availability of entertainment for seniors across different age groups

Category		Yes %					P Value
		<40	40-50	51-60	61-70	>70	
Available entertainment	senior	10.3	6.5	12.1	14.8	6.9	NS
Importance of entertainment	senior	18.8	12.5	21.2	26.2	11.7	NS
Available entertainment	convenient	6.9	5.2	9.6	13.4	6.0	<0.001
Importance of entertainment	convenient	18.5	12.0	20.5	25.2	11.2	NS

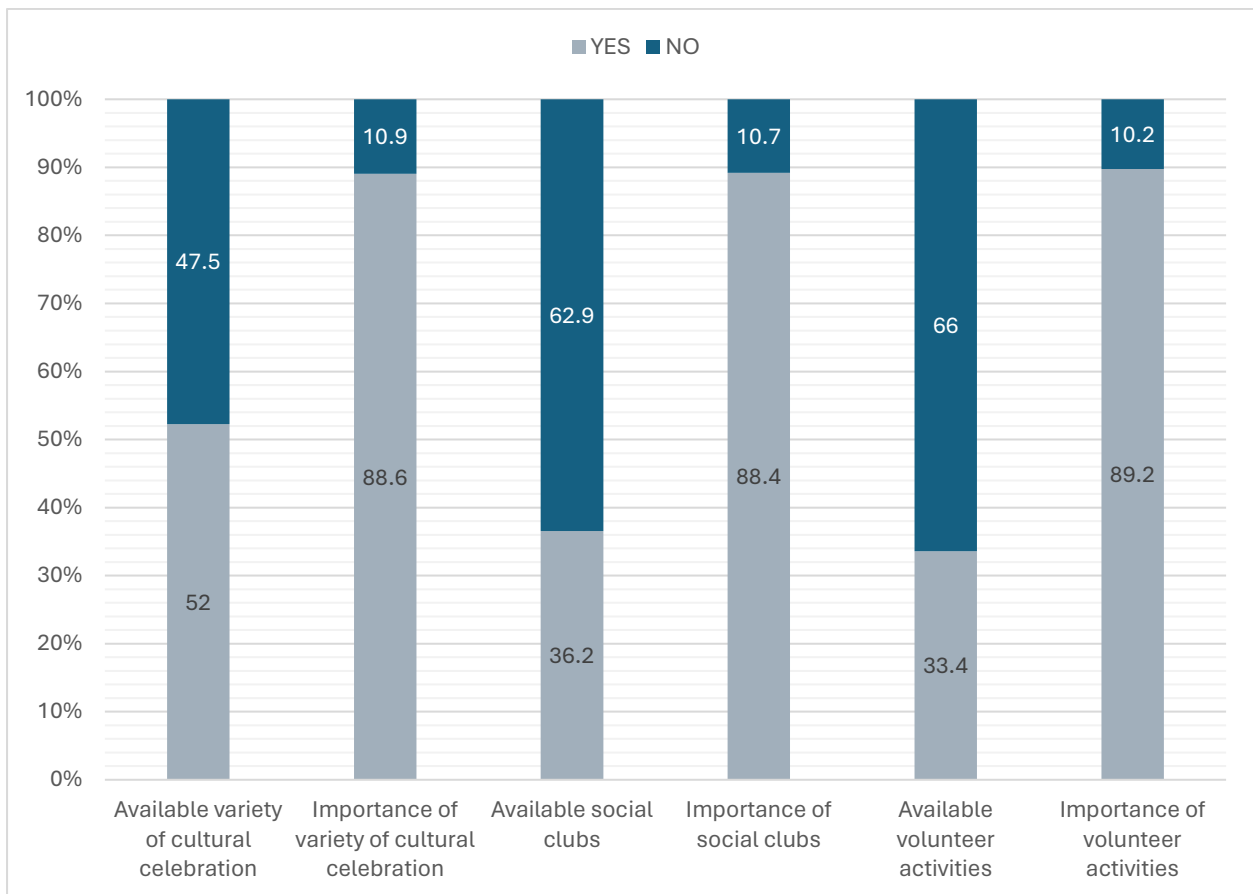
Missing values: Available senior entertainment=8, Importance of senior entertainment=8, Available convenient entertainment=10, Importance of convenient entertainment=10

Table 6.2: Perception of importance and availability of entertainment for seniors across both genders

Category	Yes %		P Value
	Male	Female	
Available senior entertainment	22.7	27.8	<0.001
Importance of senior entertainment	36.1	54.3	NS
Available convenient entertainment	21.1	20.0	<0.001
Importance of convenient entertainment	34.7	52.6	0.026

Missing values: Available senior entertainment=8, Importance of senior entertainment=8, Available convenient entertainment=10, Importance of convenient entertainment=10

Figure 6.2: Feedback on the presence and significance of elderly respect and social inclusion in Penang.



Missing values: Available variety of cultural celebration=7, Importance of variety of cultural celebration=7, Available social clubs=14, Importance of social clubs=14, Available volunteer activities=9, Importance of volunteer activities=9

Half of the respondents (52%) noted the availability of various cultural celebrations, with a significant 88.6% emphasizing their importance. Additionally, 36.2% indicated the availability of social clubs, with 88.4% highlighting their importance. Furthermore, 33.4% reported the availability of volunteer activities, with an overwhelming 89.2% underscoring their significance. These findings emphasise the gap between the limited availability of these forms of gatherings/events and their considerable importance, indicating a strong demand for and recognition of the value of social and cultural aspects in the lives of the older population. In the age group analysis, interest levels and perceived importance varied, with the 61-70 age group showing higher percentages of affirmative responses, particularly regarding the importance of these activities. Gender-wise analysis suggested differences in perceptions between males and females on the availability and importance of cultural celebrations, social clubs, and volunteer activities, with females generally exhibiting higher percentages of affirmative responses. However, males reported greater availability of volunteer activities than females, with a statistically significant difference (p -value < 0.001), as detailed in Tables 6.3 and 6.4.

Table 6.3: Age-wise feedback on the presence and significance of elderly respect and social inclusion in Penang.

Category	Yes %					P Value
	<40	40-50	51-60	61-70	>70	
Available variety of cultural celebration	9.7	7.2	12.8	15.5	6.8	NS
Importance of variety of cultural celebration	18.6	12.1	20.5	25.8	11.6	NS
Available social clubs	6.0	4.5	9.2	11.3	5.2	0.005
Importance of social clubs	18.5	11.7	21.0	25.6	11.6	0.020
Available volunteer activities	6.3	3.5	8.5	10.5	4.7	0.006
Importance of volunteer activities	19.2	11.9	21.0	25.6	11.6	0.014

Missing values: Available variety of cultural celebration=7, Importance of variety of cultural celebration=7, Available social clubs=14 Importance of social clubs=14, Available volunteer activities=9, Importance of volunteer activities=9

Table 6.4: Gender-wise feedback on the presence and significance of elderly respect and social inclusion in Penang.

Category	Yes %		P Value
	Male	Female	
Available variety of cultural celebration	23.0	29.0	<0.001
Importance of variety of cultural celebration	35.6	52.9	NS
Available social clubs	17.1	19.1	<0.001
Importance of social clubs	35.2	53.2	NS
Available volunteer activities	17.5	15.9	<0.001
Importance of volunteer activities	36.3	53.0	NS

Missing values: Available variety of cultural celebration=7, Importance of variety of cultural celebration=7, Available social clubs=14 Importance of social clubs=14, Available volunteer activities=9, Importance of volunteer activities=9

Table 6.5: Gender-wise perception of availability and significance of decision-making bodies for the elderly in Penang Island

Category	Yes %		P-Value
	Male	Female	
Available decision-making bodies	15.7	12.4	<0.001
Importance of decision-making bodies	35.8	52.3	NS

Missing values: Available decision-making bodies=5 Importance of decision-making bodies =5

Table 6.6: Age-wise perception of availability and significance of decision-making bodies for the elderly in Penang Island

Category	Yes %					P-Value
	<40	40-50	51-60	61-70	>70	
Available decision-making bodies	5.5	3.4	6.1	9.2	4.0	NS
Importance of decision-making bodies	18.3	11.9	21.0	25.6	11.4	0.031

Missing values: Available decision-making bodies=5 Importance of decision-making bodies =5

Tables 6.5 and 6.6 summarise the respondents' perspectives on the availability and importance of decision-making bodies for the older person, such as community councils or committees where the older person can participate and provide expert opinions. A significantly low percentage of male and female respondents reported the availability of such bodies. However, both genders, especially women and those belonging to the age group of 61-70 and residing in Timur Laut district, emphasized the significant need for and importance of such bodies being present on Penang Island.

7. Communication and Information

This section of the report highlights the importance and accessibility of communication services designed to be age-friendly and meet the unique needs of the older population on Penang Island. Respondents were asked about the availability and importance of various features, including written materials tailored to seniors, such as forms and brochures in large font sizes, and telephone services adapted for seniors, offering instructions at a slower pace. The survey also explored the availability of Internet access, emphasising the importance of providing free access to computers and the Internet in

public facilities like libraries, centres, or government buildings, enabling seniors to engage with technology for diverse purposes. Additionally, it examined the availability and importance of multilingual information, including flyers, maps, and other resources, to ensure inclusivity and accessibility for seniors of different linguistic backgrounds. Table 7.1 presents the frequency and percentage of 'Yes' responses, illustrating respondents' views on these services.

Table 7.1: Availability and importance of elder-friendly communication services

Category	Yes	
	N	%
Internet access	1408	93.8
Available written information for seniors	393	26.2
Importance of written information for seniors	1328	88.5
Available telephone operator services	327	21.8
Importance of telephone operator services	1309	87.2
Available free access to computers	519	34.6
Importance-free access to computers	1321	88.0
Available information in different languages	717	47.8
Importance of information in different languages	1337	89.1

Missing values: Internet access=4 Available written information for seniors=8, Importance of written information for seniors=8, Available telephone operator services=7, Importance of telephone operator services=7, Available free access to computers=8, Importance-free access to computers=9, Available information in different languages=8, Importance of information in different languages=8

Internet access was reported by 93.8% of the respondents, while only 26.2% acknowledged the availability of written information specifically tailored for seniors, a service whose importance was recognised by 88.5% of respondents. Additionally, 21.8% of respondents reported the availability of telephone operator services designed for seniors, with 87.2% recognising their importance. Furthermore, 34.6% of respondents had free computer access, with 88.0% acknowledging its importance. Moreover, 47.8% indicated the availability of information in different languages, with 89.1% recognising the importance of providing such information to seniors from diverse linguistic backgrounds. Gender and age analysis revealed that females, particularly those residing in Timur Laut and within the age range of 61-70, were more inclined to report and prefer

features such as written information, telephone services, and the availability of information in multiple languages.

Table 7.2: Gender-wise perception of availability and importance of elder-friendly communication services

Category	Yes %		P-value
	Male	Female	
Internet access	37.9	55.9	NS
Available written information for seniors	17.5	8.7	<0.001
Importance of written information for seniors	35.9	52.6	NS
Available telephone operator services	15.4	6.4	<0.001
Importance of telephone operator services	35.3	51.9	NS
Available free access to computers	17.2	17.4	<0.001
Importance-free access to computers	34.7	53.3	NS
Available information in different languages	24.0	23.8	<0.001
Importance of information in different languages	35.8	53.3	NS

Missing values: Internet access= 4 Available written information for seniors=8, Importance of written information for seniors=8, Available telephone operator services=7, Importance of telephone operator services=7, Available free access to computers=8, Importance-free access to computers=9, Available information in different languages=8,Importance of information in different languages=8

Table 7.3: Age-wise perception of availability and importance of elder-friendly communication services

Category	Yes %					P-value
	<40	40-50	51-60	61-70	>70	
Internet access	20.1	14.0	22.5	27.1	10.1	<0.001
Available written information for seniors	4.5	2.9	5.4	9.3	4.1	<0.001
Importance of written information for seniors	18.8	12.3	20.8	25.4	11.1	NS
Available telephone operator services	3.6	2.2	4.4	7.9	3.7	<0.001
Importance of telephone operator services	18.3	11.7	20.3	25.5	11.4	NS
Available free access to computers	7.1	4.7	7.9	10.5	4.3	NS
Importance-free access to computers	18.7	11.9	20.6	25.6	11.3	NS
Available information in different languages	8.8	6.0	10.7	15.3	6.9	0.003
Importance of information in different languages	18.6	12.0	21.3	25.5	11.8	0.008

Missing values: Internet access= 4 Available written information for seniors=8, Importance of written information for seniors=8, Available telephone operator services=7, Importance of telephone operator services=7, Available free access to computers=8, Importance-free access to computers=9, Available information in different languages=8, Importance of information in different languages=8

8. Civic Engagement and Employment

This section explores the availability and importance of flexible employment opportunities for Penang residents, with a focus on part-time jobs designed to cater to the needs of the older population. Additionally, the survey examined their interest in further education and ongoing employment. The findings revealed that 21.8% of respondents acknowledged the availability of flexible job opportunities, with males aged 61-70 reporting a higher incidence of such opportunities. Furthermore, a significant majority, 88.1%, recognized the importance of these opportunities, as detailed in Tables 8.1, 8.2, and 8.3.

Table 8.1: Availability and importance of flexible job opportunities

Category	Yes	
	N	%
Availability of flexible job opportunities	327	21.8
Importance of flexible job opportunities	1323	88.1

Missing values: Availability of flexible job opportunities= 5 , Importance of flexible job opportunities =5

Table 8.2: Gender-wise perception of availability and importance of flexible job opportunities

Category	Yes %		P-value
	Male	Female	
Availability of flexible job opportunities	13.9	7.9	<0.001
Importance of flexible job opportunities	35.6	52.5	NS

Missing values: Availability of flexible job opportunities=5 , Importance of flexible job opportunities =5

Table 8.3: Age-wise perception of availability and importance of flexible job opportunities

Category	Yes %					P-value
	<40	40-50	51-60	61-70	>70	
Availability of flexible job opportunities	3.7	2.3	4.9	7.5	3.5	0.002
Importance of flexible job opportunities	18.5	11.8	20.5	25.8	11.5	0.054

Missing values: Availability of flexible job opportunities= 5 , Importance of flexible job opportunities =5

Almost (45.9%) half of respondents expressed their intention to continue their education, while 55.8% indicated their desire to continue working (Table 8.4). Respondents in the age group of 61-70 belonging to Timur Laut indicated a stronger inclination towards continuing education and employment, as demonstrated in Table 8.6.

Table 8.4: Preference for continuing education and employment

Category	Yes	
	N	%
Continue education	689	45.9
Continue working	837	55.8

Missing values: Continue education = 2, Continue working =3

Table 8.5: Gender-wise preference for continuing education and employment

Category	Yes %		P-value
	Male	Female	
Continue education	17.3	28.6	NS
Continue working	21.3	34.4	NS

Missing values: Continue education = 2, Continue working =3

Table 8.6: Age-wise preference for continuing education and employment

Category	Yes %					P-value
	<40	40-50	51-60	61-70	>70	
Continue education	10.6	8.3	11.7	11.9	3.5	<0.001
Continue working	14.0	9.0	13.9	14.4	4.5	<0.001

Missing values: Continue education = 2, Continue working = 3

9. Community and Health Services

This section provides insights into the availability of health and community services, encompassing health and wellness programs and classes, including nutrition, smoking cessation, and weight loss management classes. It also covers the accessibility of conveniently located health facilities, home visit services provided by healthcare professionals, nursing homes for older individuals, a diverse range of healthcare professionals, multilingual healthcare professionals, as well as respectful and supportive staff (Table 9.1)

The survey findings reveal that 36.2% of respondents reported the availability of health wellness programs, with 88.5% recognising the importance of these programs. Additionally, 60.3% of respondents indicated the availability of conveniently located health facilities, while 92.5% emphasised the importance of such accessibility. Furthermore, 27.1% of respondents reported the availability of home visits by healthcare workers (HCWs), with 89.6% acknowledging the importance of this service. Nursing homes were reported to be available to 71.6% of the respondents, and 93.0% recognised the importance of these facilities. Moreover, 71.8% of respondents indicated the availability of various healthcare worker (HCW) services, with 92.7% recognising the importance of this diversity.

Additionally, 69.4% of respondents reported the availability of healthcare workers who speak different languages, and 91.7% recognised the importance of this linguistic diversity. Lastly, 74.1% of respondents reported the availability of respectful healthcare workers, with 94.2% recognising the importance of this attribute. Gender and age-based analysis showed that males reported greater health and wellness programs availability than females (P value <0.001).

However, for conveniently located health facilities, home visits by health care workers (HCWs), and respectful HCWs, most respondents who preferred these services were females. Additionally, it's notable that most respondents providing these responses were from the Timur Laut region and belonged to the 61-70 age group, as shown in Tables 9.2 and 9.3. A higher percentage of people prefer public healthcare over private (61.1%), with 67.4% rating their health as average, especially females and those belonging to the age group 61-70 from Timur Laut (Figure 9.1) (Tables 9.4-9.8).

Table 9.1: Perception of availability and importance of health care services catered to the needs of the senior population of Penang Island

Category	Yes	
	N	%
Available health wellness programs	543	36.2
Importance of health wellness programs	1329	88.5
Available conveniently located health facilities	905	60.3
Importance of conveniently located health facilities	1389	92.5
Available HCW home visit	407	27.1
Importance of HCW home visit	1345	89.6
Available nursing homes	1075	71.6
Importance of nursing homes	1396	93.0
Availability of a variety of HCW/services	1077	71.8
Importance of a variety of HCW/services	1391	92.7
Available HCWs who speak different languages	1042	69.4
Importance of HCW that speak different languages	1377	91.7
Available HCWs that are respectful	1112	74.1
Importance of HCW that are respectful	1414	94.2

Available health wellness programs=5, Importance of health wellness programs=5 Available conveniently located health facilities=12, Importance of conveniently located health facilities=12, Available HCW home visit=6, Importance of HCW home visit=6, Available nursing homes=8, Importance of nursing homes=8, Availability of a variety of HCW/services =12, Importance of a variety of HCW/services =12, Available HCWs that speak different languages =13, Importance of HCW that speak different languages=13, Available HCWs that are respectful =8, Importance of HCW that are respectful =8

Table 9.2: Gender-wise perception of availability and importance of health care services catered to the needs of the senior population of Penang Island

Category	Yes %		P-value
	Male	Female	
Available health wellness programs	19.3	16.9	<0.001
Importance of health wellness programs	36.0	52.5	NS
Available conveniently located health facilities	27.0	33.3	<0.001
Importance of conveniently located health facilities	37.0	55.5	NS
Available HCW home visit	16.1	11.1	<0.001
Importance of HCW home visit	36.1	53.5	NS
Available nursing homes	29.1	42.6	NS
Importance of nursing homes	37.1	55.9	NS
Availability of a variety of HCW/services	29.1	42.6	NS
Importance of a variety of HCW/services	36.7	55.9	NS
Available HCWs who speak different languages	28.5	40.9	NS
Importance of HCW that speak different languages	36.8	55.0	NS
Available HCWs who are respectful	32.1	42.1	<0.001
Importance of HCW that are respectful	37.5	56.7	NS

Available health wellness programs=5, Importance of health wellness programs=5 Available conveniently located health facilities=12, Importance of conveniently located health facilities=12, Available HCW home visit=6, Importance of HCW home visit=6. Available nursing homes=8, Importance of nursing homes=8, Availability of a variety of HCW/services =12, Importance of a variety of HCW/services =12, Available HCWs that speak different languages =13, Importance of HCW that speak different languages=13, Available HCWs that are respectful =8, Importance of HCW that are respectful =8

Table 9.3: Age-wise perception of availability and importance of health care services catered to the needs of the senior population of Penang Island

Category	Yes %					P-value
	<40	40-50	51-60	61-70	>70	
Available health wellness programs	6.9	4.2	7.8	11.4	5.8	0.004
Importance of health wellness programs	18.9	12.1	20.5	25.6	11.3	NS
Available conveniently located health facilities	11.5	8.0	13.9	18.2	8.7	0.016
Importance of conveniently located health facilities	19.4	12.6	21.4	27.1	11.9	NS
Available HCW home visit	5.0	2.9	6.3	8.7	4.2	0.011
Importance of HCW home visit	18.8	12.2	21.0	25.7	11.8	NS
Available nursing homes	14.3	10.3	17.0	20.5	9.5	NS
Importance of nursing homes	19.8	12.9	21.7	26.7	12.0	NS
Availability of a variety of HCW/services	13.9	10.3	16.6	21.5	9.5	NS
Importance of a variety of HCW/services	19.3	13.0	21.7	26.8	11.9	NS
Available HCWs who speak different languages	13.4	9.9	15.2	20.9	9.9	0.007
Importance of HCW that speak different languages	18.8	12.5	21.3	27.1	11.9	0.030
Available HCWs who are respectful	14.9	10.3	15.7	22.6	10.5	<0.001
Importance of HCW that are respectful	19.7	13.1	22.0	27.3	12.1	NS

Available health wellness programs=5, Importance of health wellness programs=5 Available conveniently located health facilities=12, Importance of conveniently located health facilities=12, Available HCW home visit=6, Importance of HCW home visit=6, Available nursing homes=8, Importance of nursing homes=8, Availability of a variety of HCW/services =12, Importance of a variety of HCW/services =12, Available HCWs that speak different languages =13, Importance of HCW that speak different languages=13, Available HCWs that are respectful =8, Importance of HCW that are respectful =8

Table 9.4: Preferred type of healthcare

Category	Yes	
	N	%
Public Healthcare	919	61.1
Private Healthcare	751	50.0
Both public and private healthcare	542	36.2

Missing values: Public healthcare=33, Private healthcare=27, Both public and private=29

Table 9.5: Gender-wise preference type of healthcare

Category	Yes %		P-value
	Male	Female	
Public Healthcare	24.4	36.7	NS
Private Healthcare	18.2	31.8	0.009
Both public and private healthcare	13.4	22.7	NS

Missing values: Public healthcare=33, Private healthcare=27, Both public and private=29

Table 9.6 Age-wise preference of type of healthcare

Category	Yes %					P-value
	<40	40-50	51-60	61-70	>70	
Public Healthcare	12.0	7.4	13.7	19.8	8.1	<0.001
Private Healthcare	10.3	8.3	11.9	14.3	5.3	0.026
Both public and private healthcare	9.5	5.3	7.0	10.2	4.1	<0.001

Missing values: Public healthcare=33, Private healthcare=27, Both public and private=29

Figure 9.1: Perceived health status of the respondents

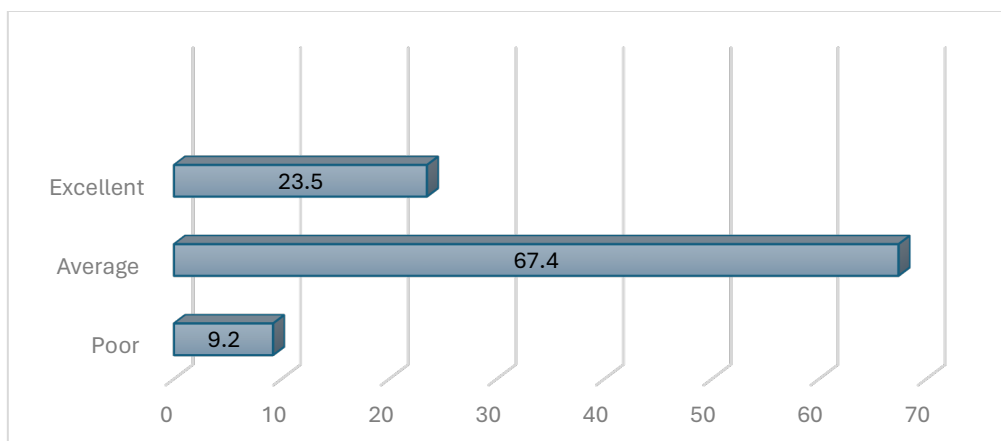


Table 9.7: Perceived health status of the male and female respondents

Category	Perceived Health Status			*P Value
	Poor	Average	Excellent	
Female	85	622	194	NS
Male	53	389	158	NS

*p value refers to the outcome of the statistical tests (i.e., the probability that a given difference in the distribution of cases across categories (in this case, age group) could occur by chance). P-values <0.05 are statistically significant. N.S. refers to non-significant (i.e., p greater than 0.05).

Table 9.8: Perceived health status of the male and female respondents

Category	Perceived Health Status			*P Value
	Poor	Average	Excellent	
<40	19	188	110	<0.001
40-50	18	136	62	<0.001
51-60	27	245	75	<0.001
61-70	49	308	74	<0.001
>70	25	134	31	<0.001

*p value refers to the outcome of the statistical tests (i.e., the probability that a given difference in the distribution of cases across categories (in this case, age group) could occur by chance). P-values <0.05 are statistically significant. N.S. refers to non-significant (i.e., p greater than 0.05).

In Figure 9.2, the "None" category encompasses individuals who do not exercise weekly, representing 12.3% of the sample. Secondly, the ">5" category includes individuals who exercise more than five times per week, constituting the largest proportion at 62.8%. Lastly, the "<5" category comprises individuals who exercise less than five times per week, representing 24.9% of the total sample. Females were reported to have higher activity levels; however, individuals under 40 reported mild exercise (less than 5 times a week), while those in the 61-70 age group reported the highest exercise activity of more than 5 times a week. (Table 9.9 and Table 9.10)

Figure 9.2: Exercise activity(times/week) of the respondents

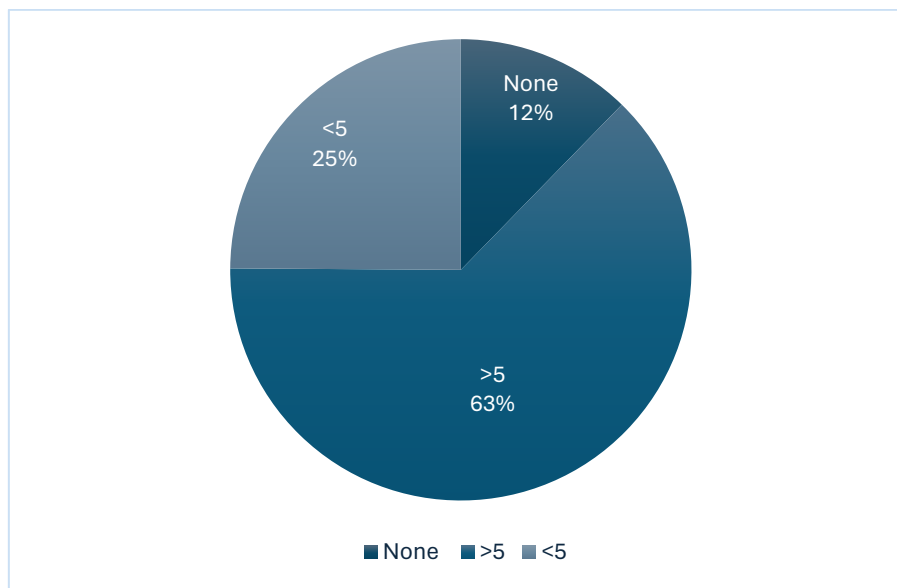


Table 9.9: Exercise activity(times/week) of the male and female respondents

Category	Exercise per Week N			*P Value
	None	<5 Times	>5 Times	
Female	114	575	212	NS
Male	71	367	162	NS

*p value refers to the outcome of the statistical tests (i.e., the probability that a given difference in the distribution of cases across categories (in this case, age group) could occur by chance). P-values <0.05 are statistically significant. N.S. refers to non-significant (i.e., p greater than 0.05).

Table 9.10: Exercise activity(times/week) of the respondents

Category	Exercise activity per Week N			*P Value
	None	<5	>5	
<40	40	240	37	<0.001
40-50	22	151	43	<0.001
51-60	31	231	85	<0.001
61-70	55	233	143	<0.001
>70	37	87	66	<0.001

*p value refers to the outcome of the statistical tests (i.e., the probability that a given difference in the distribution of cases across categories (in this case, age group) could occur by chance). P-values <0.05 are statistically significant. N.S. refers to non-significant (i.e., p greater than 0.05).

Summary points:

- The survey included 600 male and 901 female participants, with the majority falling within the 61-70 age group.
- The participants are primarily from the Timur Laut district division (68.2%), and the majority identified as Chinese (71.5%). 99.4% of respondents are permanent residents of Penang.
- Household composition varied, with a significant percentage living with their spouse (55.7%) and a notable proportion living alone (16.3%).
- The income distribution varied, with the highest percentage falling within the >RM 10,000 bracket (22.3%) followed by the RM 2,000 - RM 3,999 income bracket (20.4%),
- Most of the participants were employed (50.4%), with salary (47.3%) and pension (20.7%) being the primary income sources.
- The educational background varied, with the majority having attained tertiary education (51.7%).
- 28.2% lived in Penang for less than 30 years, 29.3% for 30-50 years, and 42.4% for over 50 years.
- Perception of Penang for older individuals: 9.7% rated it as poor, 40.7% as average, and 49.6% as excellent.
- 38.7 per cent agree that Penang is an age-friendly city, with the rest reporting otherwise.
- The housing section of the survey aimed to assess Penang residents' satisfaction with their current housing arrangements and identify the modifications they may need or want in their homes. The results reveal that many respondents recognise both the need for and importance of home fixtures, acknowledging their availability and highlighting their significance. Additionally, some respondents reported the availability of affordable housing options for seniors, emphasising their importance. Moreover, while a majority expressed the importance of financial assistance for home modifications, only a small percentage reported the availability of such support.
- The transportation section focused on the primary modes of transportation used by respondents for regular activities, including personal vehicles, taxis, public buses, bicycles, and trains. While a majority of respondents recognize the importance of features like audiovisual pedestrian crossings, priority parking, easy-to-read traffic signs, and accessible public transport, a smaller percentage believes that these features are currently available.

- The outdoor spaces section focused on the availability and significance of accessible parks, public buildings, restrooms, well-maintained parks, and neighbourhood watch programs.
- More than half (59.9%) of the respondents reported visiting recreational parks less than five times a week, with the 61-70 age group having the highest number of park visits.
- "Respondents' preferred modes of social interaction included phone, face-to-face interaction, social media, and email, with face-to-face interaction being the most commonly reported mode.
- 50.6% of respondents indicated the availability of senior entertainment, emphasising its importance at 90.4%.
- A significantly low percentage of male and female respondents reported the availability of decision-making bodies for the older population on Penang Island, emphasising the necessity and importance of such entities.
- A high proportion of respondents reported having Internet access, whereas a significantly smaller portion acknowledged the availability of written information tailored for the older population. Additionally, only a minority reported the availability of telephone operator services, though a significant majority recognized their importance. Furthermore, some respondents indicated they had free access to computers, a service deemed necessary by a large majority. Moreover, nearly half observed the availability of information in different languages, with a high level of recognition of its importance.
- 21.8% reported the availability of flexible job opportunities, recognised as necessary by 88.1%.
- 45.9% expressed their intention to continue their education, while 55.8% indicated their desire to continue working.
- 36.2% of respondents reported access to health wellness programs, 60.3% to conveniently located health facilities, and 27.1% to home visits by healthcare workers. Additionally, 71.6% had access to nursing homes, 71.8% to services provided by various healthcare workers (HCWs), and 69.4% to multilingual healthcare workers. Finally, 74.1% reported having access to respectful healthcare workers.

It is important to acknowledge certain limitations, such as the higher number of female respondents and those in the 61-70 age group, which may have biased some of the data in a specific direction. Despite the report's comprehensive efforts to analyze each domain by gender and age, considering the overall demographic profile remains crucial.

Appendix 1: Baseline Survey

Appendix 2: PowerPoint Summary of the baseline study.