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## FACTORS IN THE SELECTION OF HOUSES FOR THE DISABLED IN KEDAH

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### Abstract:

The number of people with disabilities is increasing worldwide every year. This means that individuals with disabilities now have access to a multitude of employment opportunities and can even own their own homes. However, it is crucial for government stakeholders and authorities to develop a plan to improve housing for people with disabilities to better prepare them for homeownership. To achieve this, the housing industry must be more adaptable to accommodate the unique needs of people with disabilities. Additionally, the government needs to create a housing policy that is suitable for all demographics, including individuals with disabilities. People with disabilities are primarily concerned with having access to housing that adheres to regulations and accommodates their needs, which ultimately improves their quality of life. This study focuses on the priorities of the disabled community in Kedah, specifically in terms of pricing, location, legality, and house design. Three respondents from the disabled population in Kedah participated in this study through in-depth, semi-structured interviews. The study focuses explicitly on physical disability. The results of this research highlight the importance of price, location, legislation, house design, and the challenges associated with homeownership for individuals with disabilities. Recommendations are made to improve the planning of residential properties for Kedah's disabled population, focusing on pricing, location, and design.

### Keywords:

Disabled Community, House Price, Location, Universal Design, Home Ownership, Preferences, Policy And Law

## Introduction

Disability is a matter of human rights. People with disabilities are exposed to a variety of rights breaches, such as acts of aggression, abuse, prejudice, and contempt, comparable to other types of discrimination based on age, gender, and other criteria. In addition to facing difficulties, stigmatisation, and discrimination while gaining access to health and health-related services and methods, people with disabilities also confront these obstacles. Disability is a development priority due to its greater prevalence in low-income nations and because disability and poverty reinforce and perpetuate one another. (World Health Organization, 1921). It is estimated that over 1 billion individuals around the world have a disability. This equates to almost 15% of the world's population, with up to 190 million (3.8% of the population aged 15 and over) facing considerable difficulty in functioning and frequently requiring healthcare services. Due to an increase in chronic health issues and an ageing population, the number of people with disabilities is on the rise. (World Health Organization, 1921).

587,608 persons with disabilities (OKU) are registered with the Department of Social Welfare (JKM) out of a projected 4.8 million people with disabilities (OKU) in the United States in 2021. The World Health Organization (WHO) estimates that by 2021, at least 15 percent of the population would be impacted by the disease. (Arifin, 2021). The Department of Community Welfare, Malaysia, estimates that there will be 581,265 registered disabled individuals in Malaysia by the year 2020. In Malaysia, 15 percent of the population is reportedly comprised of people with disabilities. Statistics from the Department of Social Welfare (JKM) as of June 2019 indicate that around two percent of the overall Malaysian population, or approximately 549,554 disabled individuals, have been registered (Berita Harian, 2019). Consequently, the number of people with impairments in Malaysia will increase from 2019 to 2021.

Senator Datuk Ras Adiba Radzi, the president of the Central Disabled Person's Association, recommended that the government allocate a high number of People's Housing Program (PPR) house ownership to the disabled (OKU). She stated that the addition is deemed significant in light of the needs of the country's crippled population, which has reached 600,000 individuals registered with the Department of Social Welfare. There are few designated properties for the disabled in Malaysia. The linked party must emphasise this type of property in order to prioritise the requirements of people with disabilities. (Zuhayati, 2022) This demonstrates the contrast between persons with disabilities in the past and today, as individuals with disabilities today have steady jobs and can afford to own homes, resulting in an increased demand for houses for people with disabilities.

## Literature Review

### *People with Disability*

According to the NSW Department of Infrastructure Planning and Natural Resources, a person of any age is considered disabled if he or she cannot engage in any type of labour, profession, or social activity due to a handicap of any kind (2003). Disability is categorised by sensory impairment, emotional health, physical health, and intellectual health (Battams & Baum, 2010). A number of disabilities include hearing, vision, cognition, ambulation, self-care, and independence in daily life (Hoffman & Livermore, 2012). Once again, society and culture are accountable for the disadvantage, since they fail to acknowledge the capacity of persons with disabilities to engage in society and give long-term solutions to their challenges (Coleridge, 2000). Priority is given on housing services and policies and basic physical necessities rather than health and well-being (Gibson et al., 2011).

Defects are associated with a person's physical, cultural, and political settings (Loeb et al., 2008). Functional constraints are to blame when a person is unable to use all of their physical functions despite receiving proper accommodations and help. It is typical for individuals with impairments to experience difficulties due to their physical and environmental constraints. People with disabilities require a safe and comfortable place to call home. They could profit from having a residence. The public assistance system's emphasis on housing has a major impact on the well-being and social integration of those with disabilities (SFELP, 2002; People & Stanhope, 2009). Consequently, social housing, amenities, and social assistance may be inadequate, ineffective, and failing for individuals with impairments. According to the research, adults with impairments who are of working age have a decreased possibility of getting a job.

Workers with impairments make less than 60% of the average family's income. Educational achievement disparities may be to blame (Hoffman & Livermore, 2012). This may have an impact on homeownership and the type of dwelling. For persons with disabilities, the number of rooms, square footage, amenities, and open spaces must all be the same. Affordability and accessibility are paramount to people with disabilities (Perl, 2008). It is utilised by several individuals (Connell et al., 1997). The Center for Universal Design (established in 1997) combines global experience and design concepts to provide more useable products and a healthier environment. Accessible design varies from universal design in that universal design integrates universal design concepts (2007). Parents, pregnant women, persons with impairments, and children can all benefit from universal design. All of these features constitute what is known as "universal design" in housing.

### ***Universal Design***

Universal design benefits all individuals and all circumstances. Excellent suggestions for increasing design alternatives without demanding modifications (NAHB Research Centre, 1996; Souza, 2004). 2006. Despite being a seemingly simple concept, universal design is challenging to explain. Traditionally, examples and an established test have been used to convey the concept of generalizability (Connell et al., 1997). Due to universal design, the number of homes having universal insertion features has expanded (Connell et al., 1997) Researchers, architects, engineers, and designers from the Centre for Universal Design analysed items, locations, and architectural features to discover which ones offered the best performance and atmosphere. Universal design is applicable in a vast number of circumstances. This notion can be utilised to evaluate design, guide the design process, and educate designers, developers, and customers. international standards (Burgstahler, 2012; Case, 2008; Duncan, 2007) Design concepts include: (a) allowing people of all abilities to use it equally; (b) allowing them to set their own priorities and skills; (c) keeping it simple, clear, and perceptible; (d) ensuring that the user can see the information clearly; (e) allowing for error tolerance to minimise danger and unpleasant accidents; and (f) making it simple for users to pick up and comprehend.

Housing accessibility is vital. To evaluate accessibility, the Universal Design Index considers connectivity (15%), accessibility (25%), usability (20%), security (20%), integrated design (10%), operation and maintenance (10%), and integrated design (10%). Minimum passing grade is 65 percent. According to Dalilah (2011), there is a relationship between each of the six. Access to the site, the building's location, landscaping, parking, the rooms, and the kitchens are all integrated (NSW Department of Infrastructure Planning, 2004). Include in the design a long, straight stairwell that connects all of the residence's rooms, circulation hubs, and

stairwells. (Verwer, 2012; 2002) East Metro Senior Citizens Agenda for Independent Living Park (2006) agrees that residential interior spaces should be both useful and safe.

**Table 1: Housing Design and Benefits**

Housing Design		Characteristics	Benefits
Main	Details		
Entrance	a Slope and a Step	<ul style="list-style-type: none"> <li>No-step stairway</li> <li>A maximum of 1:20 incline walks is permitted.</li> </ul>	<ul style="list-style-type: none"> <li>Less difficult to carry.</li> <li>More secure while it's raining.</li> <li>Maintaining and repairing it is much easier.</li> </ul>
	Height	<ul style="list-style-type: none"> <li>A minimum of 5'x5' of level free area is required both inside and outside the entrance.</li> <li>The doorbell has a light on it that can be seen from a reasonable distance away.</li> </ul>	<ul style="list-style-type: none"> <li>The ability to observe who is at the door before opening it is provided to all residents.</li> </ul>
Circulation	Nodes	<ul style="list-style-type: none"> <li>Circulation in the inside and up and down.</li> <li>Clear floor space of 30" x 48"</li> </ul>	<ul style="list-style-type: none"> <li>Increase circulation</li> <li>The location is very accessible.</li> <li>Wheelchair users can go about with ease.</li> </ul>
Bathrooms and toilet	Space	<ul style="list-style-type: none"> <li>Provide clear floor space</li> <li>Curb less shower</li> </ul>	<ul style="list-style-type: none"> <li>Space for transfers to/from toilet.</li> </ul>
	Handrail	<ul style="list-style-type: none"> <li>Provide handrails</li> </ul>	<ul style="list-style-type: none"> <li>Easy to grab and move.</li> </ul>
	Handle, faucet, control.	<ul style="list-style-type: none"> <li>Single lever handles</li> </ul>	<ul style="list-style-type: none"> <li>Easy to open.</li> </ul>
	Dimension	<ul style="list-style-type: none"> <li>36"x69" toilet with min 32" width door.</li> </ul>	<ul style="list-style-type: none"> <li>Accessible.</li> </ul>
Kitchen	Space	<ul style="list-style-type: none"> <li>Space between face of cabinets and walls.</li> <li>30"x48" clear floor space</li> </ul>	<ul style="list-style-type: none"> <li>Usable by children, shorter adults and disabled.</li> </ul>
	Height	<ul style="list-style-type: none"> <li>Clear knee space under table and sink.</li> <li>Adjustable height in wall cabinet.</li> <li>Max reach controls 24"x46"</li> </ul>	<ul style="list-style-type: none"> <li>Allow person to work while seat (e.g., wheelchair users).</li> </ul>
Switches and controls	Height	<ul style="list-style-type: none"> <li>Reachable height.</li> <li>15"-48"</li> </ul>	<ul style="list-style-type: none"> <li>Accessible to children and wheelchair users.</li> </ul>
	Type	<ul style="list-style-type: none"> <li>Easy-touch or hands-free switch</li> <li>Portable battery powered/ using remote control.</li> </ul>	<ul style="list-style-type: none"> <li>Easier to reach with hands full (e.g., with elbow).</li> <li>Usable.</li> </ul>
Windows	Height	<ul style="list-style-type: none"> <li>Windows for viewing, 36" max sill height</li> </ul>	<ul style="list-style-type: none"> <li>Can look out from seat.</li> <li>Reachable to open, close and lock.</li> </ul>
Doors	Width	<ul style="list-style-type: none"> <li>Clear opening. Open door should extend 2' min or more 90 degrees.</li> </ul>	<ul style="list-style-type: none"> <li>Accessible.</li> </ul>
	Handles	<ul style="list-style-type: none"> <li>Outside open-loop handles</li> <li>Latches operable without grasping</li> </ul>	<ul style="list-style-type: none"> <li>Easy to open</li> <li>Easier to reach with hands full (e.g., with elbow).</li> </ul>

		<ul style="list-style-type: none"> <li>• or twisting.</li> <li>• Max 48" height</li> </ul>	
	Sidelight	<ul style="list-style-type: none"> <li>• Sidelight or glass panel in door.</li> </ul>	<ul style="list-style-type: none"> <li>• Allow view of on-coming people.</li> </ul>
Floor	Type	<ul style="list-style-type: none"> <li>• Non-slip floor surface</li> <li>• 30"x48" clear floor space</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid slippery</li> <li>• Easy to move</li> </ul>
Stairs	Handrail	<ul style="list-style-type: none"> <li>• Provide handrails</li> </ul>	<ul style="list-style-type: none"> <li>• To grab and for barrier.</li> </ul>
	Ramp	<ul style="list-style-type: none"> <li>• Provide ramp, 1:2 max</li> </ul>	<ul style="list-style-type: none"> <li>• Accessible for all people.</li> </ul>
Ramp/curb	Height	<ul style="list-style-type: none"> <li>• Slope of 1:2 max</li> </ul>	<ul style="list-style-type: none"> <li>• Easy for mobility impairment and stroller.</li> </ul>

Source: City of Irvine, 2014; The Center for Universal Design College of Design (CUDC)

### Laws, Policies, And Regulations Regarding Disabilities

There has been no European Disability Policy since 1974, when vocational rehabilitation was the first measure. In 1980, global policy switched to disability stagnation (Waldschmidt, 2009). The year 1996 saw the transfer of vocational foundation recovery to equal rights, and discrimination-free practises were implemented internationally (Mansell & Brown, 2008; Waldschmidt, 2009). The Fair Housing Act prohibits housing discrimination based on handicap or incompetence, according to the Department of Housing and Urban Development (SFELP, 2002). The law also mandates landlords and homeowners to make reasonable renovations and offer appropriate accommodations for handicapped residents. To protect and defend the rights of disabled individuals, Housing and Urban Development permits the public to make complaints regarding alleged violations.

The Persons with Disabilities Act of 2008 in Malaysia addresses registration, protection, rehabilitation, health, and development. Under Act 685, disabled people enjoy the same rights and opportunities as everyone else. Under this Act, the public and private sectors as well as nongovernmental organisations (NGOs) must collaborate to promote and support accessible housing for individuals with disabilities (2008).

The Uniform Building by Law (UBBL) guidelines may be utilised by builders to construct conventional structures. This is the most effective method for preventing prejudice against those with disabilities. MS 1184: 2002 (SIRIM, 2009b) and MS 1331: 2003 (SIRIM, 2009b) are also standards or codes of behaviour for access to public buildings for people with disabilities in Malaysia. (2009) (SIRIM 2009a). All new ones should comply to these norms in the future. In Malaysia, there are housing rules. These rules, to be applied by the town and rural planning department, address how buildings are erected and the surrounding infrastructure (JPBD, 2013). The emphasis of these principles is on global advancement..

### *Housing Costs for the Disabled*

Everyone is aware of the numerous obstacles and associated hassles connected with house hunting. Housing that fulfils a person's need, affordability, and style preferences and is located in an area with easy access to public transportation, schools, work, and other services. Regardless of one's financial status, the purchasing price of a home is a crucial element. The value of the home has an additional influence on loan eligibility. In addition, financial facilities or funding will both encourage and discourage the donation of land (Wurtzebach, Cannon, & Miles, 1995). Currently, only conventional borrowers are eligible for home purchase consumer loans. People with disabilities are not eligible for any special mortgage loans. Because there aren't enough accessible homes in a variety of styles, pricing, and possibilities, it is almost

difficult for disabled persons to do the same search. They are frequently forced to protest uneven treatment, which exacerbates the problem.

In recent years, the independent living movement and current rules protecting the protection of the disabled in school, work, and transportation have significantly raised the demand for accessible housing. Increasing numbers of individuals with disabilities are employed. They raised their expenditures in the energy sector. Concurrently, the demand for housing that matches their needs has increased. Most people are hopeful about the available housing since they lack the financial resources to purchase a home.

### ***Location of House for the Disabled***

The importance of location in shaping the residential land property market cannot be overstated. Intelligent features, a strategic location, and the infrastructure for modern and comfortable accommodations are attractive to purchasers. A site that is directly tied to the expansion of infrastructure, accessibility, and environmental amenities is also an important factor. When purchasing a home, location is crucial for those with disabilities.

The residence should be positioned close to facilities that are easily accessible and allow individuals with disabilities to move with minimum supervision. According to Weintraub (2017), the residence's placement should be in close proximity to: i. work/school; ii. local amenities; iii. the health centre; iv. entertainment and shopping areas; and v. public transportation lines.

### **Methodology**

For the purpose of establishing a framework for future investigations, qualitative interviews are conducted to validate facts that may be utilised to construct a framework. According to Patrik, multi-method qualitative analysis necessitates an interpretive and naturalistic approach to its subject matter (2019). In contrast, qualitative analysts study issues in their environments in an effort to comprehend or predict variations in the meanings that individuals have established for themselves. In addition, it provides insight into the topic or facilitates the development of additional hypotheses for quantitative research. Using a qualitative method, a researcher may conduct an interview with a single individual who plays a key role in the topic of the study. According to the title, the individual hopes to provide additional knowledge and skills that will aid in the inclusion of more substantial and comprehensive details. By conducting an interview, the researcher will be able to gain additional information about the topic and unknowingly learn more about it.

Consequently, the researcher will conduct interviews with the persons whose information will be used in this study. Due to the researchers' belief that a great deal of information can be gathered from conversations with those involved, data gathering is concentrated on dialogue. The validity of the information obtained from other relevant sources may also be enhanced by conducting an interview, resulting in more reliable and accurate data collection.

Compared to written surveys, qualitative interviews have the advantage of being interactive and permitting unanticipated themes to arise and be pursued by the researcher. This can also assist in overcoming a provider- or researcher-centred bias that is frequently present in written surveys, which by their very nature can only measure what is already known or expected to be relevant to the researcher. Interviews can be audio- or video-recorded, but it is sometimes impossible or inappropriate for the interviewer to do so.

The researcher discovered that the number of people with disabilities in Kedah is increasing annually. These boosts work opportunities and the potential to own a home for those with impairments. In addition, there is an organisation in Kedah, Malaysia that cares for the welfare of the disabled. The disability welfare organisation in Kedah has also assisted disabled individuals in finding employment so that they may continue to live as disabled individuals. The demographic details of the interviewees in this research are shown in the following Table 2.

**Table 2: Demographic Table for Interviewees**

Interviewee	Background
Respondent 1 (R1)	Age: 35 years old Job: Director of the OKU center in the northern zone, Kedah Income: RM 12,000 per month Disability: physical
Respondent 2 (R2)	Age: 29 years old Job: Financial administrative assistant Income: RM 2,800 per month Disability: Physical
Respondent 3 (R3)	Age: 57 years old Job: Entrepreneur Income: > RM 10,000 per month Disability: Physical

## Discussion

Based on these interviews, there are various factors that disabled people choose when choosing a house, and there are also challenges and issues they face when buying a house. The researcher interviewed 3 respondents to discuss and listen to their views on the factors they consider before choosing a house. The main factor are cost, Universal Design, Location, Laws and policies.

### Cost Factor

*(R1) said the cost and method of purchasing a house are the same as for other people, but disabled people must add more costs to the purchase because they are a group at risk in terms of their health. This causes the cost of buying a house to increase. There are also low-cost houses under state government jurisdiction, and buyers receive a discount based on the state government. This can reduce the cost of buying a house for people with disabilities.*

Interviewees said the cost of house payments between ordinary people and disabled people is the same, and there is no discount for disabled people, but they have to pay more because of health insurance.

*(R2) states that the government does not focus on special houses for the disabled in Malaysia. (R2) says that the government focuses more on housing for normal and able-bodied people in the purchase of houses at the present time. The government also focuses more on housing for people who do not own a house. (R2) said there is no special place to apply for housing assistance even if there is no extensive exposure given by the government to people with disabilities because many OKU people do not know how to buy a house.*

Interviewees explained that most houses in Malaysia no longer have special houses for people with disabilities. The government is more focused on housing for ordinary and normal people only. In addition, people with disabilities lack exposure to or help with buying a house.

*(R3) said that the cost and method of purchase are the same as for ordinary people because the government does not enforce special housing for the disabled. This is a big challenge for disabled people, especially nowadays because the cost of living in Malaysia is increasing. In addition, people with disabilities currently lack exposure to the assistance provided by the government, especially home purchase assistance. (R3) said the local or state government pays less attention to this group in helping them buy affordable homes and low-cost housing at the present time.*

Interviewees said that the cost to buy a house is the same according to the price of the house itself and no help is given to people with disabilities in buying a house. Meanwhile, for people with disabilities buying a house is very difficult because they have to work or do business to earn money and make savings to buy a house.

### ***Universal Design Factor***

*(R1) said that the design of a house suitable for people with disabilities is low and does not have a floor that is too high, does not have stairs, and there is no part of the floor that is high, especially in the toilet. This house design is suitable for people with disabilities who are in wheelchairs and are blind because they embrace the wide space of the house, which allows them to move more easily, especially in the toilet area. The design of a suitable house for the disabled is such that there is no need for many items in the house because this will make it difficult for them to move. The design of the house for the disabled is simple and good for them to live in. In addition, the kitchen is not high, and the area outside the house has many drains to prevent bad things from happening there.*

Interviewee also highlighted the design of the floor of the house should be low and not have stairs. In addition, the design of the toilet should be suitable not too high and easy to get in and out of the toilet. In addition, the kitchen should not be too high to make it easier for them to cook and so on. Finally, the design of the house should not have a lot of drains because there are many types of disabled people especially wheelchair disabled people.

*(R2) said that the design of his house is suitable because all parts of it are close to each other, such as the bed, television, kitchen, and toilet. (R2) said that the design of the house that is suitable is not too big because it is difficult for them to move from one place to another. If disabled people live in apartment buildings, special elevators should be provided for them. In*



*addition, there should be plenty of special parking spaces for disabled people in residential areas*

Interviewees describe the house's design for the disabled: small and easy access to all areas. Apart from that, the design of the house should have many facilities provided around the house area.

*(R3) said that the design of the house for the disabled is comfortable and safe. The design that does not inconvenience the disabled, such as the sofa in the house, does not need a lot and only needs daily-use tools to give them comfort. In addition, the design of the house does not have stairs because it is difficult for them to move. The toilet is also important for them to have a wide space to move in and out. The design of the house needs to be easy and convenient for them to move into.*

Interviewees highlighted the design to be safe and comfortable. Home design does not need a lot of furniture and beauty; it is enough to be comfortable and safe for people with disabilities to live in.

#### **Location Factor**

*(R1) said the ideal location for a home for the disabled is close to a health centre and not far from people to ensure their safety.*

Interviewees consider the house's location in relation to health care facilities such as hospitals and clinics. In addition, it is favourable if the house's location is not far from the public, and there should be neighbours to ask for help if something bad happens.

*(R2) said that most places in Malaysia are not disabled-friendly. (R2) chose a house based on the facilities available in that place, such as a hospital, a supermarket, and transportation. (R2) said there is a lack of parking lots for disabled people in the area.*

A suitable location for people with disabilities has many facilities, such as transportation, supermarkets, and hospitals.

*(R3) said that the ideal location for people with disabilities to own a house is close to hospitals and transportation facilities. The location of the house must be close to the neighbourhood to help monitor people with disabilities and prevent any bad things from happening, such as theft. In addition, the house must be safe from any disaster, especially floods.*

The interviewee has said that the most crucial home location for people with disabilities is a hospital for safety and being free from disasters.

#### **Policies and Laws Factor**

*(R1) said that the law for disabled people exists, but enforcement is one of the issues because the enforcement of housing for disabled people is not taken seriously because the housing policy for disabled people is not mandatory and cannot be done for special construction. home for disabled people with disabilities. It is also an issue in home buying because they have to pay more because of health insurance.*

The interviewee has elaborated on the policies and laws related to the disabled in Malaysia, not only in terms of housing but also the basic rights of the disabled. He stated that policies and laws for the disabled exist, but the government's implementation of the law to assist people with disabilities, particularly in housing, is slow.

*(R2) stated that there are few policies and laws in Malaysia pertaining to the disabled, particularly those pertaining to housing. Most of the assistance is given to disabled people who do not work. The assistance provided by the government is also not much. In addition, the policies and laws are very strict in giving aid to the disabled and require strict procedures because the disabled who are eligible to receive assistance are those with an income of less than RM 1,200 who are only eligible to receive assistance from government in Malaysia.*

Interviewees explained that the policies and laws implemented by the government are very strict, and assistance is only given to disabled people who are not working. It is good to prevent people from misusing the assistance provided, but the government's policies and laws for special homes for disabled people have not yet been fully implemented in Malaysia.

*(R3) According to the policy and law in place to assist disabled people in purchasing a home, no assistance is provided to disabled people in particular. Most of the help is given to disabled people who are not working, and there is also some help given to disabled people who want to start a business, but not much. People with disabilities must obtain a bank loan to purchase a home, so the policy and laws are the same as for everyone else. As a result, the government should take this matter seriously, despite the fact that they are a small group in Malaysia that provides assistance, particularly in the purchase of a home.*

Interviewees explained the policies and laws for people with disabilities, mostly focusing on the basic rights of people with disabilities and helping them become successful and able to work. Many state governments especially help this group by providing training and skills such as how to start a business and many other forms of assistance, but related policies and laws related to housing are limited, and there is not much disclosure related to housing assistance for the disabled.

### **Issues and Challenges**

*(R1) say that the first issue is financial problems is the same as saying that ordinary people who are experiencing financial difficulties want to buy a house. In addition, getting housing loan assistance from the government is very strict, and low-cost houses are not provided by the government. These disabled people are just like ordinary people, who may have less ability, and the poor can be helped by the government.*

Cost is the biggest challenge and issue faced by people with disabilities because the job opportunities given to this group provide a low level of income, making it difficult for them to buy a house. In addition, low-cost houses are very difficult for the government to provide and have to compete with people who have enough physical and health.

*(R2) say among the issues and challenges faced, a lot of help is provided by the work to help people with disabilities own a house. Many of the houses built in Malaysia are not OKU-friendly because many problems are faced, such as the fact that special parking spaces for OKU people are not provided by the government, especially in urban areas. This problem*

*causes people with disabilities to park their cars further away from where they should be, such as shopping places, restaurants, parks, and so on.*

Infrastructural facilities for the disabled are not well maintained, especially the limited parking area for the disabled.

*(R3) stating that these disabled people do not get special help and that getting help is very difficult because it is necessary to prepare many letters and follow very strict procedures. Furthermore, because they do not have good physical condition, disabled people must work harder than normal people in order to be successful and afford to buy a house.*

As said, the government does not provide special assistance because there is a lot of bureaucracy set up by the government to provide assistance to selected disabled people only. This causes disabled people to find employment opportunities provided by the government or other companies to improve their standard of living.

### **Template Analysis**

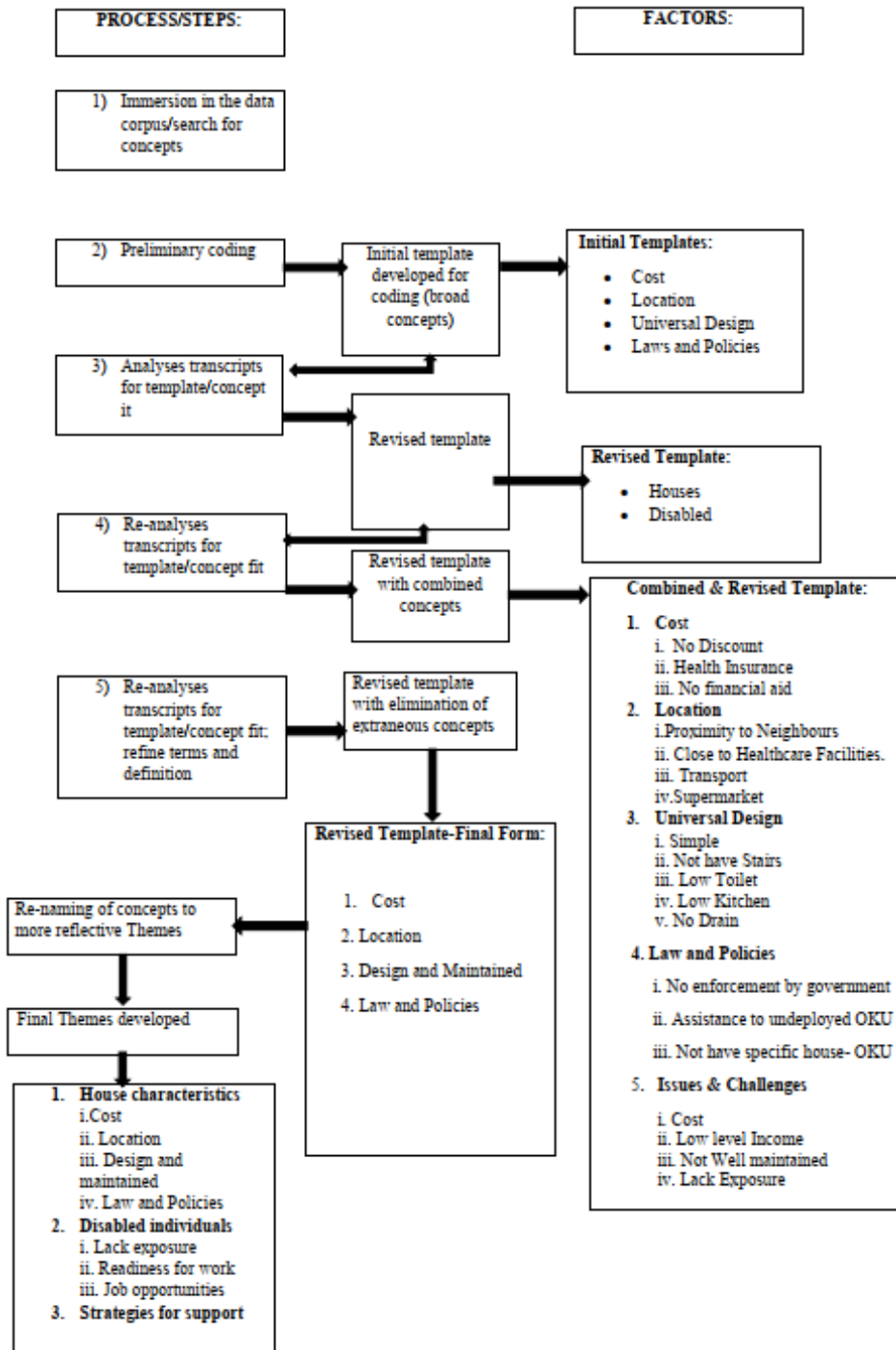
A type of theme analysis called "template analysis" places a focus on the use of hierarchical coding while balancing a reasonably high level of organisation in the analysis of textual material with the freedom to customise it to the requirements of a given research project. The core of the approach is the creation of a coding template, often based on a portion of data, which is then used to code further data, reviewed, and improved. Regarding the design and structure of the template, the approach is customizable. Contrary to various other thematic methods of data categorization, it does not offer a predetermined order for the coding levels. Instead, it motivates the analyst to expand on themes where the most insightful data in connection to the study question are located. Additionally, Template Analysis does not insist on a certain place for each type of theme in the coding structure or on an explicit separation between descriptive and interpretative themes. Typically, interview transcripts are used as the data source for template analysis investigations (e.g., Goldschmidt et al. 2006). For this research, the themes collected in the semi-structured interviews are placed in the template and the process following the template analysis were then employed. The data were evaluated through 5 steps in the template analysis as follows;

1. Immersion in the data corpus / search for concepts
2. Preliminary coding
3. Analyses transcripts for template / concept fit
4. Re-analyse transcripts for template / concept fit
5. Re-analyse transcripts for template / concept fit and refine terms and definition

The template analysis for this research is as shown in Diagram 1. From this analysis, the researcher has identified 3 final themes from the data and they are categorized as below;

1. Housing characteristics
  - a. Cost
  - b. Location
  - c. Design and maintenance
  - d. Law and policies
2. Disabled individuals
  - a. Lack of exposure

- b. Readiness for work
- c. Job opportunities
- 3. Strategies for support



**Figure 1: Template Analysis for This Research**

## Recommendations

Due to the exorbitant costs that are disproportionate to their income, the majority of people with disabilities cannot afford to own a home. As a result, some recommendations are made to solve this problem.

- 1) Make a "Rent to Have Housing Program" available. The "Rent to Own Housing Program" should be offered and carried out by federal and state governments with affiliated housing agencies, giving handicapped people the opportunity to rent certain properties under Malaysia's affordable housing programme for a set period of time, such as five to ten years. Later, if the disabled people have a good track record of on-time rent payments and satisfy other standards, the real home can be given to them without further action.
- 2) A "Help to Buy: Shared Ownership" topic should be presented. This programme is designed for handicapped people who lack the financial means to purchase the house by themselves. It is believed that ownership of the home will be divided between the handicapped people and, consequently, the local government.

One of the projects to provide handicapped individuals a chance to purchase a home is this plan. It is recommended that both patient (disabled people) and native authorities participate in this program. The applicant may pay rent on the remaining portion of the home while purchasing a portion of it (between 25% and 75% of the home's worth). They may eventually purchase larger shares until they own the entire house. To apply for the "Help to Buy" programme, the handicapped person must first determine the type of housing that they intend to purchase. The share should be limited to a few years, and some rules and restrictions, particularly those pertaining to the minimum income, should be passed. Once every number of years, if the applicant is unable to acquire the remaining portion, The local government will have the option to reclaim the property and sell it to the competing applicant.

Another result was that the current housing situation does not satisfy the needs of those with disabilities. To overcome this problem, it is suggested that two more recommendations be made.

- 1) Overall, provide the bare essentials of a universal-style housing unit. The elements of universal design don't seem to be solely selected for the disabled but also for the ageing population. As a result, there is a desire for each future housing unit to implement at least the minimum requirement or elements of universal design. The government has to make this requirement mandatory for all or any housing developers and efficiently implement its enforcement. It is to suggest that the house should have patent-sized doors with a minimum width of 850mm or 900mm, ramp access into the house, and rest rooms with person with disabilities facilities: an appropriate seat, a folding grabrail, and freelance installation beside the toilet seat and wash basin at a suitable height for a chair user.
- 2) House alteration plan. Every day, people with disabilities discover that their homes need to be modified to make them more accessible. These improvements enable people to remain at home and pursue a freelancing career. Home improvements come in many shapes and sizes, with prices varying from one manufacturer or contractor to the next. The concept of this recommendation is intended for handicapped people who already own a home but need modifications to meet their needs and the types of house alterations that may be provided are:

- i) Making toilet and bathroom renovations accessible to people with disabilities;
- ii) Making the room accessible to those with disabilities;
- iii) The installation of handrails, grab bars, and ramps;
- iv) Increase the width of the entrance; and lower the floor

## Conclusion

When planning accessible housing developments, the main consideration should be eliminating any potential access barriers. Since the disabled are more likely to select low-cost housing that encourages minimal physical effort, this finding has important implications. The most widely used features of accessible house design are emphasised. The proper government or housing organisations must be informed of the successes and failures in other nations to satisfy the needs of handicapped individuals by creating appropriate housing policies for the impaired. There has been prior study and analysis into accessible housing choices for people with disabilities. Disabled people want the same things and have the same rights as everyone else. Suitable home design for the disabled can be achieved by employing the universal design principle during the construction process. In addition, numerous nations have started using the international benchmark. Accessible housing is an important concept, and governments, communities, families, and individuals all need direction, aid, and support in implementing the concept and requirements. More and more measures are taken to promote universal design, including the introduction of new legislation and regulations. Every housing development needs management, administration, and maintenance to ensure it is up to code. It is important to raise awareness about the needs of the disabled so that everyone may work together to meet those needs.

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