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## **PROCEEDING** OF **3rd INTERNATIONAL CONFERENCE** ON REBUILDING PLACE (ICRP) 2018

Towards Safe Cities & Resilient Communities

### 13 & 14 SEPTEMBER 2018 **IMPIANA HOTEL, IPOH, PERAK**

### **ORGANIZED BY:**





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京都工芸繊維大学

GRESAFE\_CITIES Malaysian Institute of Planners

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### ICRP2018 3rd International Conference on Rebuilding Place

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### ISBN 978-967-5741-62-3 eISBN 978-967-5741-63-0 INTERIOR FLOOR FINISHES PREFERENCES OF RESIDENTS IN KLANG VALLEY: A PRELIMINARY SURVEY

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Abstract - Residential is a place where human being built and live in and the resident is a person who lives in that place. It can be classified into three levels namely house, home and shelter. Whether it is called house or home or shelter, they play significant role for the human being who live inside them. Therefore, Malaysian construction member especially interior designers should consider the residents' preferences on interior floor finishes. These preferences are very important to assist the residents to rebuild, recreate and reshape their living environment according to their pleasure, necessities and wishes. This paper discussed the preliminary survey that was conducted to 142 respondents who have renovated their interior spaces. The aims were to detect key features to be addressed in this research, to verify issue and research gap before the research being performed to prove that this research can be done valid and significant as well as to answer the research objectives of the research. There are two objectives of this preliminary survey which are to explore the most chosen types of interior floor finishes towards interior spaces such as living area, dining area, kitchen area, bedroom and restroom. The second objective is to discover the most popular interior floor finishes chosen by the respondents towards the selection criteria of beauty by the respondents in Klang Valley area. This study tested on selected criteria which are beauty, hygienic, durable and comfort. Nevertheless, this research only selected criteria of beauty towards interior floor finishes such as tiles, timber floor board, carpet, mosaic, marble, vinyl and others were discussed. As a conclusion, the residents do renovation with the purpose of rebuilding, recreate and reshape their living environment particularly their interior surrounding to fulfil their satisfaction, needs and desires. Therefore, all the construction members should work hand in hand to accomplish the residents' living environment.

Keywords - residents, preferences, interior floor finishes, living environment, selection criteria.

### **1** INTRODUCTION

The interior elements that exist in interior spaces are floor, wall and ceiling. One of the most important elements in interior spaces is floor because the residents keep their body contact with interior floor finishes most of their time compared to wall and ceiling. Preferences as defined by Zinas Bako (2013) are lifetime phenomena and residents choose their life's undertaking alternatives within the framework that they live in and work with. Preferences refer to certain characteristics any residents expected to get from their house to make it preferable to them. The examples of expectations could be the level of happiness, degree of satisfaction, utility from the house and so on. To minimize the wastage of natural sources, construction materials, time, energy and money due to renovation works with the purpose of rebuilding, recreate and reshape their interior surrounding to fulfil their satisfaction, needs and desires. By knowing the residents' preferred interior floor finishes and the selection criteria then only the renovation works can be minimized to sustain residents' living environment for future generations (Siti Norlizaiha Harun, 2005). The construction members such as interior designers, architects, town and regional planners, developers, contractors and others can also solve the construction issues especially on the residents' interior spaces.

### 2 SELECTION CRITERIA OF INTERIOR FLOOR FINISHES

Selection criteria are known as to identify and define particular knowledge, attributes and experiences of residents with the purpose to carry out the task efficiently. It can be divided into two categories which are visually and physically; and psychologically. Visual and physical means in a way relate to seeing or appearance and tangible. The preferred interior floor finishes are being observed according to the beauty factors, hygienic factors and durable factors. Psychological is the study of mind and behaviour in relation to a related field of knowledge or activity which affects the residents or respondents' feelings and emotions and intangible. The factor involved in psychology is comfort. Nevertheless, for this paper the researcher only discussed one selection criteria which is beauty.

### 2.1 Types of Interior Floor Finishes

There are many types of materials used for floor, wall and ceiling in Malaysia market. Materials can be divided into timber, MDF (medium density fibreboard), plasterboard, plywood, steel, aluminium, glass and acrylic (Drew Plunkett, 2010) but not all materials are suitable for interior floor finishes. For this study, the researchers only focus on the common interior floor finishes that are suitable for interior floor finishes for interior spaces of a residential for instance living area, dining area, kitchen area, bedroom and restroom. The researcher has selected common types of interior floor finishes in Malaysia which are tiles, timber floor board, carpet, mosaic, marble and vinyl.

Interior	Advantages	Disadvantages	
Floor Finishes			
Tiles	Timeless appeal, durable, cost-effective, no frequent cleaning, easy to clean and versatile in term of style.	Slippery with presence of dirt, grease and water; bright reflective character would be distracting; does not dampen the sound; and no insulation properties.	
Timber floor board	Most versatile building material, easy to work with, wide range of aesthetic options and durable.	Tend to split and warp over time and prone to attack by insects such as termites if not treated with chemicals.	
Carpet	Lots of colour choices and variety of textures; very comfortable; feel warms to the touch; visually warms expression of interior spaces; and flexible on styles.	Not stain resistance; the joints can easily be seen if not properly install; tends to show worn out pattern if install in heavy traffic; and not resistant to moisture and odour absorption.	
Mosaic	Visually beautiful; versatile and flexible in designs; wide range of material categories, patterns and colours; can be custom-made; very durable; easy maintenance; easy to clean; resistant to chemicals; does not form mold or mild dew at all.	Translucent therefore, adhesives easily be seen; slippery when wet, greasy and dirty.	
Marble	Instantly elevate the overall appearance of interior spaces; many options of colours and multicolours mixes; wide choices of decorative schemes; can be custom-made; can be cut into any shapes; every single floor is one of a kind; enable to take a very high polish, silky smooth and shimmering; sophisticated and glamour style; and great heat conductor that gives cosy and warm feeling.	Easily scratched, crack and chipped; reacts with acidic chemical; prone to water penetration and staining from colourful liquid agents; and slippery when getting wet, greasy and dirty.	

Table 1 Advantages and Disadvantages of Interior Floor Finishes

Vinyl	Very low maintenance, water resistance, comfort underfoot, highly durable, stain resistance and very easy to clean.	Not sustainable, resistant to stains but is susceptible to discoloration when it contacts with rubber, low quality vinyl will yellow with age and
		fade the colour, and dirt can become trapped beneath a wax layer.

### **3 RESEARCH APPROACH**

Rossman and Wilson (1985) posit that instead of focusing on methods, researcher emphasizes on all approaches available to understand the research problem. According to Creswell (2014), research approach can be divided into three which are quantitative, qualitative and mixed methods. On the other hand, Bryman (2001) posits that traditionally, there are only two research approaches, namely, quantitative and qualitative research that provide the necessary steps and procedures to answer the research questions. For this study, the researcher applied mono method for research choice as the purist (Ayer, 1959; Maxwell & Delaney, 2004; Popper, 1959; Schrag, 1992) believed that quantitative and qualitative approaches cannot be mixed for the reason that both are based on the differences of what is important to know and how the world is observed. As suggested by Saunders et al., (2000) and Creswell (2014), the researcher executed quantitative research by using closed-ended questionnaires and have been distributed to the residential area in Klang Valley.

### 4 PRELIMINARY SURVEY

The aim of undergoing preliminary survey was to detect key features to be addressed in the research, to verify issue and research gap before the research was performed and to prove that this research can be done, valid and significant as well as to answer the research objectives. The total number of respondents for survey method as suggested by Isaac and Michael (1995) and Hill (1998) is between 10 to 30 participants. Nonetheless, the researcher selected 142 respondents from Klang Valley residential areas.

### 4.1 Research Objective

There are two objectives of this preliminary survey. The first objective was to explore the most chosen types of interior floor finishes towards interior spaces namely, living area, dining area, kitchen area, bedroom and restroom. The second objective was to discover the most popular interior floor finishes chosen by the respondents towards the selection criteria of beauty by the respondents in Klang Valley area.

The interior spaces for this study are living area, dining area, kitchen area, bedroom and restroom. The distributed survey forms are included with Likert Scale which ranging from 1 until 6. Scale 1 represents 'very strongly disagree', scale 2 represents 'strongly disagree', scale 3 represents 'disagree', scale 4 represents 'agree', scale 5 represents 'strongly agree' and scale 6 represents 'very strongly agree' to measure the satisfaction on selection criteria of beauty.

### 4.2 Findings of Pilot Survey

The researcher chose 142 respondents from Klang Valley residential areas to see the pattern and the reliability of this study because the pilot survey findings were very important as a guidance to be implemented in main survey and main case study.

### 4.2.1 Respondents' Background

24.6% of the respondents were at the age of 41-50 and male. 116 respondents were married with 4-5 total numbers of household. 35.2% of 142 respondents with total household income RM4,001-6,000 and 36.6% lived in double storey terrace houses (refer to Table 3).

Table 2 Respondents' Background				
Respondents' Age	Total Nos (n)	Percentage (%)		
18-30	30	21.1		
31-40	22	15.5		
41-50	35	24.6		
51-60	25	17.6		
61-70	21	14.8		
71-80	8	5.6		
More Than 81	1	0.7		
Respondents' Gender	Total Nos (n)	Percentage (%)		
Male	76	53.5		
Female	66	46.5		
<b>Respondents' Marriage Status</b>	Total Nos (n)	Percentage (%)		
Single	26	18.3		
Married	116	81.7		
<b>Respondents' Household No.</b>	Total Nos (n)	Percentage (%)		
1	7	4.9		
2-3	36	25.4		
4-5	64	45.1		
More than 6	35	24.6		
<b>Respondents' Household Income</b>	Total Nos (n)	Percentage (%)		
Below RM2,000	2	1.4		
RM 2,001-4,000	32	22.5		
RM 4,001-6000	50	35.2		
RM 6,001-8,000	22	15.5		
RM 8,001-10,000	7	4.9		
RM 10,001-12,000	23	16.2		
More Than RM 12,000	6	4.2		
<b>Respondents'</b> Types of House	Total Nos (n)	Percentage (%)		
Flat	13	9.2		
Apartment	17	12.0		
Condominium	2	1.4		
Single storey Terrace	15	10.6		
Double storey Terrace	52	36.6		
Semi-Detached Single storey	6	4.2		
Semi-Detached Double storey	8	5.6		
Single storey bungalow	15	10.6		
Double storey bungalow	10	7.0		
Others	4	2.8		

Table 2 Respondents' Background

4.2.2 Relationship between Interior spaces and Interior Floor Finishes

Most of the respondents chose interior floor finishes before and after renovation for living area was tiles. On the other hand, for dining area most of the respondents installed marble. Tiles were the most popular interior floor finishes for kitchen area as 47 respondents selected them before and after renovation. For bedroom, 14 respondents installed tiles as well as in restroom (10 respondents). As a conclusion, the most popular interior floor finishes for all the interior spaces in respondents' residential units were tiles.

Table 3 Crosstabulation Between Interior Spaces Towards Interior Floor Finishes After Renovation
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Interior Space: Living Area					
Interior floor finishes	Before renovation (respondents nos.)	After renovation (respondents nos.)	Total		
Tiles	21	11	32		
Timber Floor Board	3	16	19		

Carpet	3	3	6		
Mosaic	10	4	14		
Marble	4	11	15		
Vinyl	2	0	2		
Others	5	2	7		
	Interior Space: Dir	ning Area			
Tiles	2	1	3		
Timber Floor Board	2	2	4		
Carpet	0	0	0		
Mosaic	3	2	5		
Marble	3	5	8		
Vinyl	1	0	1		
Others	0	1	1		
	Interior Space: Kite	chen Area			
Tiles	23	24	47		
Timber Floor Board	4	4	8		
Carpet	1	0	1		
Mosaic	18	7	25		
Marble	1	15	16		
Vinyl	5	5	10		
Others	2	0	2		
	Interior Space: B	edroom			
Tiles	8	6	14		
Timber Floor Board	3	6	9		
Carpet	2	3	5		
Mosaic	2	1	3		
Marble	1	2	3		
Vinyl	0	0	0		
Others	3	1	4		
Interior Space: Restroom					
Tiles	6	4	10		
Timber Floor Board	0	0	0		
Carpet	0	0	0		
Mosaic	3	3	6		
Marble	1	2	3		
Vinyl	0	0	0		
Others	0	1	1		

4.2.3 Relationship between Interior Floor Finishes Before Renovation and Selection Criteria of Beauty

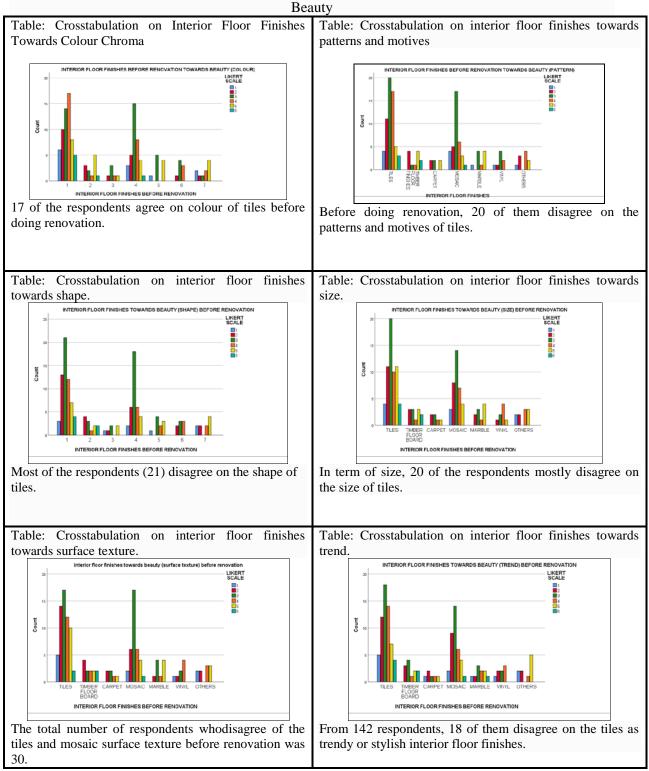
Beauty can be defined as the quality floor finishes as being physically attractive and the quality that gives pleasure to the senses or pleasurably exalts the mind or spirit. The factors that influence beauty are colour chroma, patterns and motives, shapes, trend, sizes and surface textures of the interior floor finishes and were considered by the residents when choosing the desired interior floor finishes for their interior spaces.

### 5 CONCLUSION

As a conclusion, the most popular interior floor finishes before and after renovation for living area were tiles. For dining area most of the respondents installed marble. Tiles were the most popular interior floor finishes for kitchen area as 47 respondents selected them before and after renovation. For bedroom, 14 respondents installed tiles as well as in restroom (10 respondents). Overall, the most popular interior floor finishes for all the interior spaces in respondents' residential units were tiles. The findings of the study can assist and guide the residents to choose the suitable interior floor

finishes based on body of knowledge, help the residents to purchase interior floor finishes according to their affordability (cost), the appropriate usage of interior floor finishes with the interior spaces and the types of houses that they live in. The respondents' preferences have no other reason than to rebuild, recreate and reshape their living environment mainly the interior surrounding to fulfil their satisfaction, needs and desires. Therefore, to achieve desired living environment all the construction members should sit together and work together to make an earth a place to live on.

Table 4 Relationship Between Interior Floor Finishes Before Renovation and Selection Criteria of



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