

An Investigation on Public Opinion on the Use of an Interior Design System that Incorporates Elements of Feng Shui

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ABSTRACT

This paper presents the outcomes of a survey pertaining to interest among Malaysians to use a computer-aided interior design system that incorporates elements of feng shui and their views on the functions that the system should provide. Data were collected via a questionnaire survey from 110 respondents from the three major ethnic groups in Malaysia (Malay, Chinese and Indian) with ages ranging from 8 years to 51 years and above. Results show that the majority of Malaysians are aware of the importance of feng shui in their daily life; feng shui in interior design is relatively new to the respondents; ethnic background affects the users' requirements; and there is a demand for a computer-aided interior design system that incorporates elements of feng shui.

Key words: Opinion, Feng Shui, Interior design, Computer-aided system, Malaysians

INTRODUCTION

Feng shui is applicable to everyone, regardless of race and religion, as an approach to create an ideal living environment. One of the areas in which feng shui is widely applied is in home decoration (interior design) (What is Feng Shui? 2002). Although the philosophy of feng shui is simple, its practice requires an understanding of its fundamentals, access to its various formulae, and sufficient experiences that allow for meaningful and correct interpretations of its guidelines and practices (Too, 1997). These had created a barrier to enthusiasts in the practice of feng shui. For example, to prevent the energy in the home from getting stale, it might be necessary to rearrange the furniture or to renovate the house every year (Too, 2000). Renovating a house is not an easy job because there is no room for trial-and-error, besides needing much time, money as well as energy. The use of a computer-aided system would allow feng shui practitioners to pre-design their home 'virtually' – in a 3D design environment incorporating their design according to feng shui recommendations.

SURVEY METHODOLOGY

To assess the demand for a computer-aided interior design system that incorporates feng shui practices (in short CA-IDFSP) in Malaysia, it would be necessary to investigate the opinions of Malaysians regarding the functionalities in the system which are most pertinent. Hence, a survey was conducted to collect data from the general public. The survey was conducted from 10-24 August 2004 (two weeks) on Malaysians with ages ranging from

8 years to 51 years and above from all states in Malaysia. This study, conducted as a final year project for the software engineering course, was aimed at understanding and applying the concepts and principles of software engineering in developing a system, besides gaining a real-life experience in conducting a questionnaire survey. Two weeks were allocated for the questionnaire survey as the researchers were required to allocate time for other tasks such as the questionnaire design, questionnaire screening, data entry, data analysis and project tracking and reporting.

Surveys can be conducted using the questionnaires or through interviews. Questionnaires are usually paper-and-pencil instruments that the respondent completes, while interviews are completed by the interviewer, based on what the respondent says. There are different ways of conducting a questionnaire survey. These include mail survey, group-administered questionnaire, online survey using a Website and telephone survey (American Statistical Association, 2004; Trochim, 2004). The advantages and disadvantages of using these various options were carefully studied and analysed. The group-administered survey, using hardcopy questionnaires, was chosen. This allows the questionnaires to be conducted in a group and collected on the spot. It saves time, is inexpensive and easy to conduct. Other types of survey such as the online survey do not present such advantages, and also, the data collected may not be reliable. Mail survey and telephone survey are tedious, time-consuming and costly to conduct (Fink and Kosecoff, 1985; Salant and Dillman, 1994).

Survey Sampling Technique

Before the survey was carried out, a sampling technique must first be determined to define a subset of the survey population. There are a few sampling techniques, namely, randomisation, stratification, cluster sampling and model-based sampling (Cochran, 1977; Garson, 2004). In this study, the randomisation sampling technique was selected and the questionnaires were distributed to respondents without predetermined pattern or plan. The results of the sample survey from 110 respondents were used to make inferences. This sample size was decided in view of the constraints of the survey duration (two weeks) and the availability of manpower (three people) to conduct the survey. The reason for taking a random sample is to maximise the probability that the sample is representative of the population from which it is drawn.

Design of Questionnaire

In a questionnaire survey, the results of analysis are highly dependent on a well-designed questionnaire. Thus, during the design of the questionnaire, issues pertaining to the type of question and question content were considered.

Determine the Type of Question

The survey questions can be divided into two broad types – structured (fixed-format question) and unstructured (free-format question). The questionnaire used in this study collects two types of information, namely, respondents' details and respondents' opinions regarding the importance and the applicability of CA-IDFSP in Malaysia. The latter type comprised nineteen structured questions and one unstructured question which allows the respondents to write down their opinions or comments freely. Of the nineteen structured questions, four questions are of dichotomous type, that is, the questions ask for a yes/no response. Fifteen questions are of multiple-option format, of which eleven questions require the respondents

to select only one among the options provided, and four questions where the respondents can select more than one of the options provided. There was no scale-based question in the questionnaire (Trochim, 2004). A sample of the questionnaire is included in Appendix I.

Determine the Question Content

The questions asked in the questionnaire elicit information relevant for analysis. The questions have been made simple and easy to understand to avoid confusion and misunderstanding. The questionnaire is limited to within two pages, as a lengthy questionnaire which exceeds four pages could decrease the response rate (Trochim, 2004). The questions focus on getting people's opinions about CA-IDFSP, its functionalities, as well as their acceptance of feng shui. Prior to the actual survey, a pilot test was conducted. From the test, weaknesses found in the questionnaire such as unnecessary questions were dropped; grammatical mistakes, typing mistakes and ambiguous questions were corrected and re-phrased.

Types of Error

As in any survey, opinion surveys are subject to various types of error. Consequently, the survey results may incorrectly reflect the sample population. Errors in opinion surveys arise from two main sources: sampling and measurement (response) difficulties. There are four main types of sampling and measurement problems (Salant and Dillman, 1994; Som, 1996; Garson, 2004).

a. Coverage Error

Depending on the survey mode, contacting some members of the sample population might be impossible. The deviation between the sampling frame (those for whom surveyors have contact information) and the sample population causes coverage error. In this study, this error is difficult to overcome as it is not possible for three people to conduct surveys which cover all the fourteen states in Malaysia within two weeks. Hence, the data collected merely represent the opinions of the respondents surveyed from the public whose hometown is from any of the fourteen states of Malaysia but stayed in Kuala Lumpur when the survey was conducted.

b. Sampling Error

Survey data will always be subject to some errors as only a small subset from the whole population is drawn. This error can be controlled by increasing the sample size. In this survey, however, it was difficult to increase the sample size to include respondents from all the fourteen states due to time constraints as the project team members were given only two weeks to conduct the survey.

c. Non-response Error

In addition, because some people refuse to participate, it is unlikely to get enough of a wider spectrum of views from the response to certain questions in the questionnaire. This problem was overcome by asking the respondents to answer the questionnaires on the spot, thus ensuring that all the questions are answered.

d. Measurement Error

Of the respondents who participated, some might not answer the survey questions accurately or completely. This can give rise to measurement error. In this study, this error was eliminated by designing a simple, easy-to-understand and easy-to-answer questionnaire. As the questions are unbiased and related to respondents' opinions about feng shui and

CA-IDFSP, it is unlikely that measurement error will arise.

ANALYSIS OF SURVEY OUTCOMES

In this survey, altogether 110 sets of questionnaires were collected and used for analysis. Before analysis was carried out, the questionnaires were checked to ensure that all the questions were answered. Of the 110 respondents, 47 (42.7%) are male and 63 (57.3%) are female, as shown in Figure 1. The respondents comprised 15 Malays (13.6%), 85 Chinese (77.3%) and 10 Indians (9.1%), as shown in Figure 2.

There are 28 (25.5%), 46 (41.8%), 12 (10.9%), 13 (11.8%) and 11 (10.0%) respondents from the age groups of 8-17 years, 18-30 years, 31-40 years, 41-50 years, and above 50 years, respectively, as shown in Figure 3.

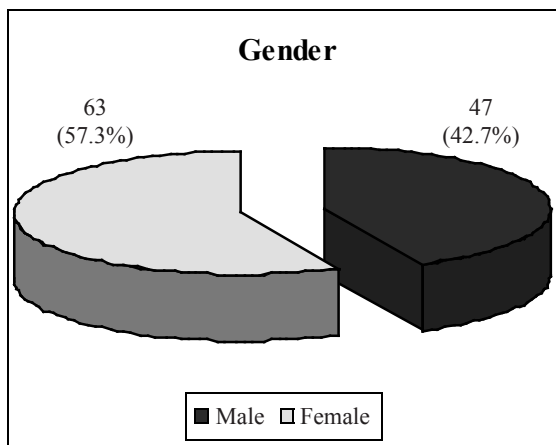


Figure 1. Gender of Respondents.

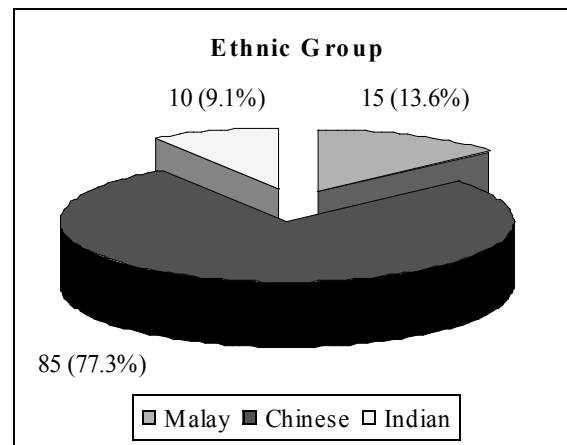


Figure 2. Ethnic Groups of Respondents.

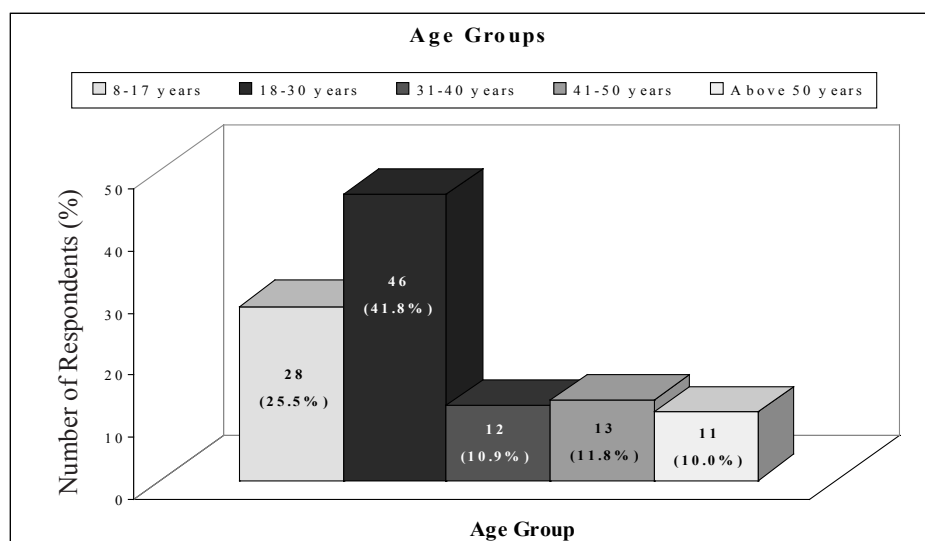


Figure 3. Age Groups of Respondents.

Use of Existing Systems

Amongst the 110 respondents, 99 (90.0%) of them have never used: (a) interior design software that incorporates feng shui (ID+FS), (b) interior design software (ID), and (c) feng shui software (FS), while 11 (10.0%) of them have used the above software, as shown in Table 1.

From the group of 11 respondents who had used the above-mentioned software, 9 (81.8%) respondents have used the ID software. In addition, 4 (36.4%) respondents have used FS software. This shows that ID software is more popular than FS software. None of the respondents have ever tried an ID+FS software. This shows that interior design incorporating feng shui is new to them; implying that there is a potential market for CA-IDFSP.

The respondents can be divided into four types based on their IT knowledge – None, User, Literate and Expert (see Appendix I for further details). It is clear that none of the IT experts are interested in these products. Most buyers are from the User group; 5 (55.6%) out of 9 use ID software and 2 (50%) out of 4 use FS software. Hence, the target users of CA-IDFSP are the first three types of users, comprising those without IT knowledge, and with minimum IT knowledge (user and literate).

Table 1. Use of Existing Systems According to IT Knowledge.

		Interior design software that incorporates feng shui	Interior design software	Feng shui software	None of the above
Level of IT knowledge	None	0	1	1	15
	User	0	5	2	36
	Literate	0	3	1	38
	Expert	0	0	0	10
Total		0	9	4	99

Note: In this crosstabulation analysis, the respondents are allowed to choose more than one options.

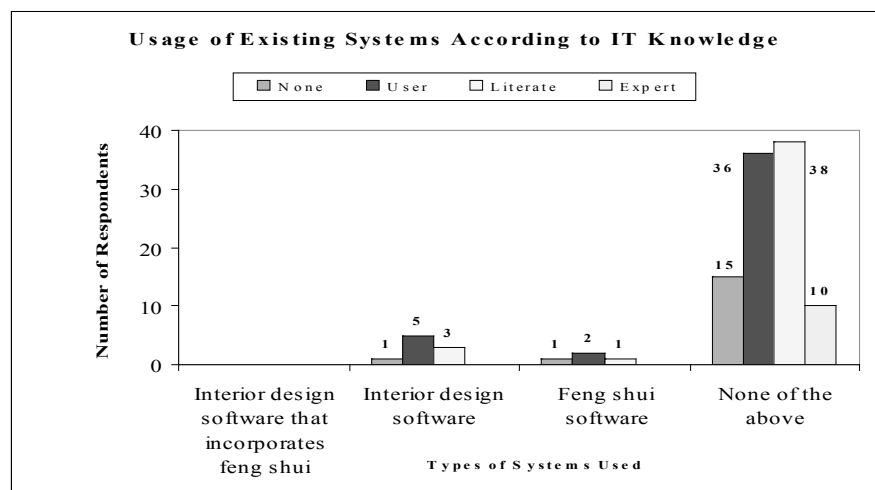


Figure 4. Use of Existing Systems According to IT Knowledge.

User Requirements

All the respondents from different ethnic groups were invited for their comments (Figure 5). The Malays considered feng shui analysis and placement of furniture more important than others (7 or 46.7% out of 15 respondents, respectively). The Indians also considered placement of furniture as mandatory, as shown by 8 (80%) out of 10 respondents. Since feng shui has its root in ancient China, the Chinese considered customised interior design as more important than others, as stated by 49 (57.6%) out of 85 respondents. Basically, different ethnic groups with different cultural background and religions, hold different points of view. Obviously, the three ethnic groups have different requirements of an CA-IDFSP.

Besides, as shown in Table 2, there are 58 (52.7%) out of 110 respondents who considered customised interior design features as essential, while 57 (51.8%) of them considered placement of furniture and 56 (50.9%) think feng shui analysis is necessary. This small difference for each choice signifies that these features have equal weight among the respondents. Nevertheless, there are 10 (9.1%) respondents who wish to have other functions in CA-IDFSP. It can be concluded that these three functions must be included in CA-IDFSP.

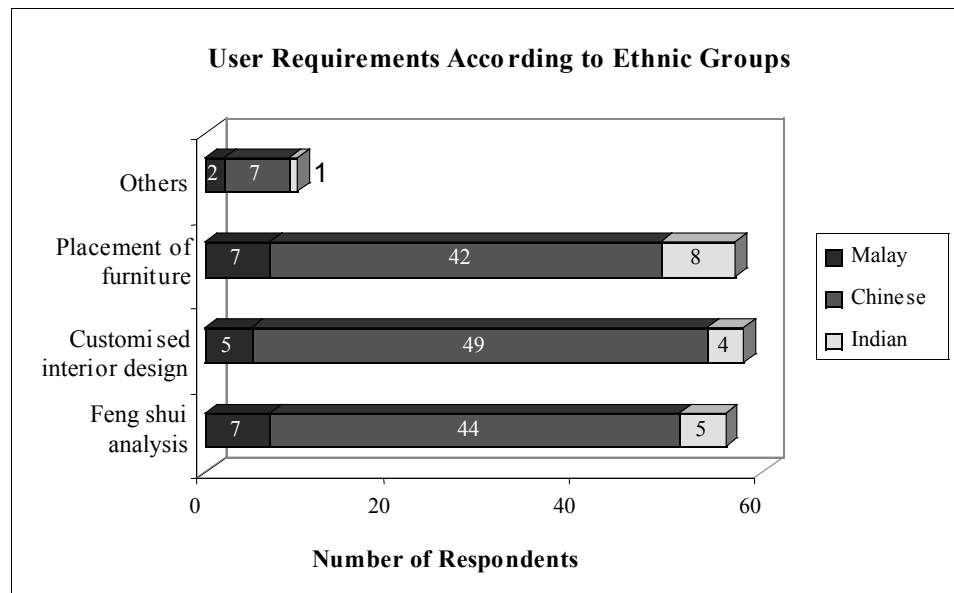


Figure 5. User Requirements According to Ethnic Groups.

Table 2. User Requirements According to Ethnic Groups.

		Feng shui analysis	Customised interior design	Placement of furniture	Others
Ethnic Group	Malay	7	5	7	2
	Chinese	44	49	42	7
	Indian	5	4	8	1
Total		56	58	57	10

Interest in Using CA-IDFSP According to Respondents' Background

As indicated in Table 3 and Figure 6, from the 85 (77.3%) out of 110 respondents who would like to use CA-IDFSP, 47 (55.3%) of those 85 respondents agreed that feng shui is important in daily life, while 29 (34.1%) respondents have applied interior design in their living environment. In this case, respondents with feng shui background are more willing to use a computer-aided interior design system. It also implies that the demand for CA-IDFSP is affected by the belief in feng shui. In contrast, 13 (15.3%) out of 85 respondents do not find feng shui important in daily life and have never applied feng shui concepts in interior design, but still would like to use such system, thus, showing their curiosity and interest.

There are 25 (22.7%) respondents who are not aware of the importance of CA-IDFSP. Three (12.0%) out of 25 respondents who agreed on the importance of feng shui and have applied it in interior design, do not seem to be interested in CA-IDFSP. Respondents were invited to comment on why they are not willing to use an interior design system that incorporates feng shui. Their responses are summarised as follow:

- Not interested or does not believe in feng shui.
- Only if software is affordable and not troublesome to use.
- No system can be considered perfect until now. Thus, a system must be always up-to-date.
- Want a multi-language system.

The respondents' comments were taken into consideration when designing the system. The system has an Administrator module which allows for updating of data, provides help function and user manual to guide the users. However, at present, the system is available in English only as most people can understand the language.

Table 3. Interest to Use CA-IDFSP According to Respondents' Background.

If there is an interior design system incorporating feng shui, would you use it?			Do you think feng shui is important in our daily life?		Total
			Yes	No	
Yes	Do you apply feng shui concepts in interior design to your home?	Yes	16	13	29
		No	31	25	56
	Total		47	38	85
No	Do you apply feng shui concepts in interior design to your home?	Yes	3	4	7
		No	11	7	18
	Total		14	11	25

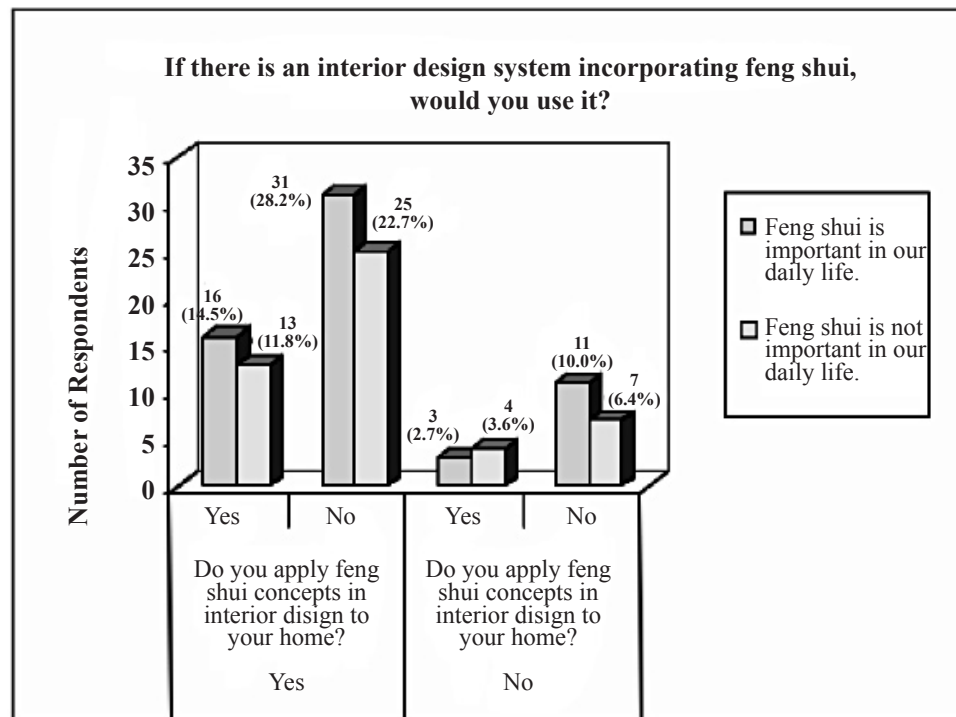


Figure 6. Feasibility of CA-IDFSP According to Respondents' Background

Acceptance of CA-IDFSP

This section discusses the acceptance of CA-IDFSP based on the frequency of checking feng shui; acceptance of interior design that incorporates feng shui and the demand for CA-IDFSP. Combining the frequency of checking feng shui and believing in feng shui reveals the respondents' attitude. If the users believe in feng shui but have no time to practise, CA-IDFSP could be a fantastic solution to them. Additionally, we may discover whether the concept of combining interior design with feng shui works. These findings can determine the demand for CA-IDFSP.

With reference to Table 4 and Figure 7, 85 (77.3%) out of 110 respondents expressed interest in CA-IDFSP, 61 (71.8%) out of 85 respondents supported the idea of incorporating feng shui into interior design to bring good fortune, good health, prosperity and happiness to the practitioner. However, 24 (28.2%) respondents disagreed that feng shui can bring abundance, but they are still willing to try the system. These outcomes imply that there is a demand for CA-IDFSP.

Interestingly, 40 (65.6%) out of 61 respondents who have never paid attention to feng shui, but believe in the reward of feng shui, would like to use CA-IDFSP. According to Too (1997), practice of feng shui requires sufficient experience that allows for meaningful and correct interpretations of its guidelines and practices. Obviously, their trust in CA-IDFSP can help them in making feng shui analysis – technically, easily and timely. With the assistance of such system, it is believed that more people would check feng shui once a day, once a month or at least once a year. Considering the 25 (22.7%) out of 110 respondents who are not interested in CA-IDFSP, 18 (72.0%) of them do not really pay attention to feng shui, irrespective of whether they believe in it or not. Hence, it really needs time for them to accept feng shui, as well as CA-IDFSP. However, CA-IDFSP is accepted by the majority of respondents

and seems to have great potential in Malaysia.

Table 4. Relationships between the Frequency of Checking FS, Acceptance of ID Incorporating FS and Demand for CA-IDFSP

If there is an interior design system incorporating feng shui, would you use it?			Do you agree that interior design that incorporates feng shui will bring good fortune, good health, prosperity and happiness to the practitioner after it is applied?		Total
			Yes	No	
Yes	How often do you check feng shui?	Once a day	1	0	1
		Once a year	0	1	1
		Whenever I feel I need to	20	2	22
		I don't really pay attention to it	40	21	61
	Total		61	24	85
No	How often do you check feng shui?	At least once a month	1	0	1
		Whenever I feel I need to	5	1	6
		I don't really pay attention to it	14	4	18
	Total		20	5	25

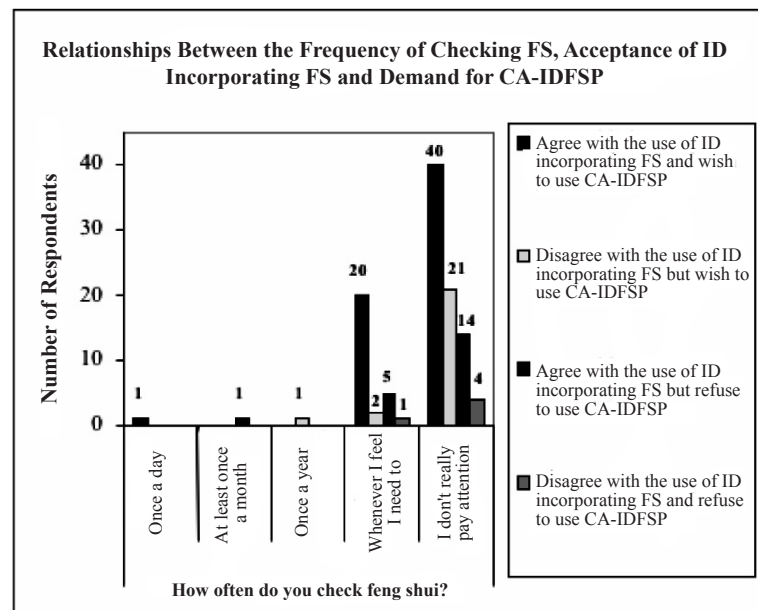


Figure 7. Relationships between the Frequency of Checking FS, Recognition of ID Incorporates FS and the Demand for CA-IDFSP.

DISCUSSION AND CONCLUSION

The outcomes of the questionnaire survey reveal some of the important opinions of the Malaysian public which are very useful to the design and development of an interior design system that incorporates feng shui practices as well as feng shui or interior design software systems. The survey analyses give an overview of the opinions of Malaysians from the three major ethnic groups (Malay, Chinese and Indian) from five age groups ranging from 8 years to 51 years and above. Findings from the survey would give an idea of the demand and market needs for CA-IDFSP. Such a system can help feng shui masters and practitioners, home owners and interior designers to apply feng shui in interior design to create a harmonious living environment.

The questionnaire in this study has been designed to achieve an unbiased survey feedback. The 110 respondents answered all the structured questions and gave comments for the unstructured (open-ended) questions. The comments and constructive recommendations were useful to produce a high-quality software system.

In addition, besides the aspects surveyed, there are also other interesting issues to be investigated. These include problems that might be encountered by feng shui practitioners or masters, home owners and interior designers when incorporating feng shui practices into interior design. These include limited knowledge, conflicts and inconsistencies, just to name a few. The scope of the survey can also be extended to include people from other countries to gather different opinions. Undoubtedly, the outcomes from such investigations would be very useful and crucial to the feng shui practitioners or masters, home owners and interior designers as a means to further improve services, and to enhance their knowledge of the related fields, respectively.

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REFERENCES

- Cochran, W.G. 1977. Sampling techniques. John Wiley & Sons, Inc., New York.
- Fink, A., and J. Kosecoff. 1985. How to conduct surveys. SAGE Publications, Inc., Newbury Park, California.
- Salant, P., and D. A. Dillman. 1994. How to conduct your own survey. John Wiley & Sons, Inc., New York.
- Garson, D. Sampling. 2004. <http://www2.chass.ncsu.edu/garson/pa765/sampling.htm>. Date Accessed: 28 October 2004.
- Section on survey research methods: what is a survey? <http://www.amstat.org/sections/srms/brochures/survwhat.html>. American Statistical Association. Date Accessed: 28 October 2004.
- Som, R. K. 1996. Practical sampling techniques. M. Dekker, New York.
- Too, L. 1997. Basic feng shui: an illustrated reference manual. Konsep Books, Kuala Lumpur.

- Too, L. 2000. Feng shui for interiors: 168 ways to protect, cleanse, energize and empower the chi of your home. Konsep Books, Kuala Lumpur.
- Too, L. 2004. FengShui world: feng shui poll. January/ February 2004: 7.
- Too, L. 2004. FengShui world: feng shui poll. March/ April, 2004: 7.
- Too, L. 2004. FengShui world: feng shui poll. May/ June, 2004: 7.
- Too, L. 2004. FengShui world: feng shui poll. November/ December, 2004: 7.
- Trochim, W. M. K. Types of surveys. 2004. <http://www.socialresearchmethods.net/kb/survtype.htm>, Last Revised: 16 August 2004. Date Accessed: 28 October 2004.
- What is feng shui? 2002. <http://www.168fengshui.com/Articles/whatis.htm>. Last Updated: 3 October, 2002. 168 Feng Shui Advisors. Date Accessed: 28 October 2004.

Appendix I

Survey on Feng Shui and Interior Design

Purpose:

This survey aims to collect opinions from the public on issues pertaining to: the application of interior design concepts in decorating one's home, the impact and application of feng shui in interior design, and the interest of the public to use a computer-aided system for interior design that incorporates feng shui practices. The feedback would be treated with strict confidentiality. Upon completion of analysis, all the questionnaires collected would be duly destroyed.

Instructions:

Please indicate your choice by ticking (✓) the appropriate box or specify otherwise.

Section A: Respondent's Profile

1. Gender

☐ Male ☐ Female

2. Ethnic Group

☐ Malay ☐ Chinese ☐ Indian ☐ Others (please specify): _____

3. Age Group

☐ 8-17 years ☐ 18-30 years ☐ 31-40 years ☐ 41-50 years ☐ Above 50 years

4. Residential State

<input type="checkbox"/> Federal Territories (Kuala Lumpur, Labuan, Putrajaya, Cyberjaya)			<input type="checkbox"/> Selangor
<input type="checkbox"/> Kedah	<input type="checkbox"/> Kelantan	<input type="checkbox"/> Terengganu	
<input type="checkbox"/> Malacca	<input type="checkbox"/> Negeri Sembilan	<input type="checkbox"/> Pahang	
<input type="checkbox"/> Perak	<input type="checkbox"/> Perlis	<input type="checkbox"/> Pulau Pinang	
<input type="checkbox"/> Johor	<input type="checkbox"/> Sabah	<input type="checkbox"/> Sarawak	

5. Present Occupation

<input type="checkbox"/> Student	<input type="checkbox"/> Housewife
<input type="checkbox"/> IT Personnel	<input type="checkbox"/> Engineer (Electrical, Mechanical, Civil, etc)
<input type="checkbox"/> Management Personnel (CEO, COO, etc)	<input type="checkbox"/> Interior Designer
<input type="checkbox"/> Feng Shui Master	<input type="checkbox"/> Teacher
<input type="checkbox"/> Others (please specify): _____	

6. Educational Level

☐ Primary ☐ Secondary
☐ Tertiary ☐ Others (please specify): _____

7. Level of IT Knowledge

- ☐ None
☐ Computer User – able to use simple program (word processor, paint, game, etc.)
☐ Computer Literate – manage to install program, etc.
☐ Computer Expert – can configure system, network, etc.

Section B: Opinions on Issues Pertaining to Feng Shui and Interior Design

1. What is the most important aspect in your life?

- ☐ Career ☐ Family ☐ Health
☐ Marriage ☐ Money ☐ Romance
☐ Personal Status ☐ Others (please specify): _____

2. Do you think feng shui is important in our daily life?

- ☐ Yes ☐ No

3. Where do you learn feng shui from? (You may select more than one option.)

- ☐ Not Applicable ☐ Feng shui masters ☐ Feng shui practitioners
☐ Magazines ☐ Books ☐ Newspaper
☐ Internet ☐ Friends ☐ Family Members
☐ Others (please specify): _____

4. Where do you use or discuss feng shui the most?

- ☐ Do not apply feng shui at all ☐ Home
☐ Office ☐ Consultation for clients
☐ Helping Friends ☐ Topic of Conversation
☐ Others (please specify): _____

5. How often do you check feng shui?

- ☐ Once a day ☐ Once a month
☐ Once a year ☐ Whenever I feel I need to
☐ I don't really pay attention to it

6. What steps have you taken to change your energy for Period 8 (20 years starting from 4th February 2004)? (You may select more than one option.)

- ☐ No idea ☐ Changed the floor
☐ Changed the roof ☐ Changed the main door
☐ Thrown a party ☐ Others (please specify): _____

7. Do you apply interior design concept to your home?

- ☐ Yes ☐ No

8. Where do you learn interior design? (You may select more than one option.)
☐ Not Applicable ☐ Magazines
☐ Books ☐ Newspaper
☐ Internet ☐ Friends
☐ Television / Movie ☐ Others (please specify): _____
9. Do you think feng shui should be incorporated in interior design (home decoration)?
☐ Yes ☐ No
10. Do you agree an interior design that incorporates feng shui practices will bring good fortune, good health, prosperity and happiness to the practitioners?
☐ Yes ☐ No
11. Have you ever used the following system? (Please select whichever applicable to you.)
☐ Interior design system ☐ Interior design system that incorporates feng shui
☐ Feng shui system ☐ None of the above
12. What functions would you like to have in the interior design system that incorporates feng shui? (You may select more than one option.)
☐ Feng shui analysis ☐ Customised interior design
☐ Placement of furniture ☐ Others (please specify): _____
13. Would you use an interior design system that incorporates feng shui in your home decoration?
☐ Yes ☐ No
- If **no**, please give your reason(s): _____

Thank you very much for your participation in this survey.