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The objective of the journal is to promote advancements in the fields of anthropology, business studies, communications, economics, education, extension studies, psychology, sociology and the humanities. Previously unpublished original, theoretical or empirical papers, analytical reviews, book reviews and readers critical reactions may be submitted for consideration. Articles may be in English or Bahasa Melayu.

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Measuring Customers' Perceived Service Quality in Hotel Industry

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Keywords: Perceived service quality, hotel, SERVQUAL

ABSTRACT
This research attempts to study customer’s perceived service quality in the hotel industry. This paper aims to discover what customers think of the quality of service as can be found in the hotel industry by looking into factors influential on this perception such as personal service, technological innovations and quality of food served. The method employed to gather the research resources was adopted from SERVQUAL which is a popular method in measuring perceived service quality. The descriptive and inferential methods were also used in testing and analysing the hypotheses. Data were analysed by using the SPSS package. The research findings indicated that generally, customers were dissatisfied with the service quality provided by the hotel management. From the research, it was also discovered that personal services technology innovation and quality of food served were vital in improving customers’ outlook on the service quality. Therefore, the hotelier should try to meet or exceed the customers’ expectations, in order to ensure the customers are satisfied. It is very important for the hotelier to take an effort in comprehending and understanding customers’ expectations in order to deliver good service, in which if the perceived service equal or exceeded the expected service, they perceived that there is a quality in the service.
INTRODUCTION

Although services have been increasingly important for the last decades, the interest in service quality is of recent origin. This is because service quality is a matter of knowing your customers, designing services to meet customers' needs, and finally managing the service production and delivery process to customers' satisfaction. Studies have shown that customers are often willing to pay higher prices for what they perceive to be of better quality. The Strategic Planning Institute of Cambridge has found that market share, return on investment, and asset turnover are all highly linked to the perceived quality of the company's goods and services. They found that, the most important single factor affecting a business unit's performance is the quality of its goods and services, relative to those of competitors.

Quality has become the 1990's byword of businesspeople, government officials, and business and economics scholar, consequently, consumers, employees, management, and also boards emphasise on quality. While quality and quality control measures have long existed for tangible goods, few such measures have traditionally existed for services. This occurs because quality is difficult to define, describe, and measure in services. In essence, quality is determined by imprecise individual factors: perceptions, expectations and experiences of customers and the hotelier itself. Robert E. Allen, Chairman of the Board of AT & T said in Fortune magazine in 1988, "Quality does all. It saves all. It sells. It satisfies." While nearly everyone recognises the pervasive impact of quality, at the same time, everyone seems to be having difficulty in grasping its many dimensions.

Development of Hotel Industry in Malaysia

Malaysia's hotel room supply has grown at a rapid rate over the years. Since 1981, 28,432 rooms were available. However, the end of 1998 the number of hotel rooms exceeded the 100,000 mark (107,791). Viewing the trends over the years, the number of hotel rooms in the country took roughly 10 years to double from 28,432 rooms in 1981 to 55,866 rooms in 1992. Due to the rapid rate of growth, it took six years for the number of hotel rooms to double up to approximately 110,000 rooms in 1998. In recent times, during the three year period, beginning from 1991 to the end 1993, prior to Visit Malaysia Year '94, a total of 15,973 rooms came in stream, giving a total of 61,005 rooms as at end 1993. In 1994, as the country set to reap the success of the Visit Malaysia Year '94 promotional campaign, the industry added 4,902 lettable rooms to welcome her visitors. At the end of 1994, the number of lettable rooms stood at 65,907 rooms or an increase of 43.8% from the previous year.

International events have been a driving force in the growth of rooms, domestic tourism have played an equally important part towards the overall growth. There is an increasing interest in building more, and with the provision of larger budget and mid-priced hotels in the coming years. Domestic tourism fueled by a buoyant economy, and the completion of the North-South Expressway, have to a large extent improved the average hotel occupancy rates by 4.0% to 65.5% in the 1995 period as compared to the previous year. However, due to the economic slow down, the average occupancy rate of hotels in Malaysia decreased by 8.1% from 58.0% in 1997 to 49.9% in 1998. (Annual Tourism Statistical Report 1998).

The Problem

It is clear that the hotel market is highly competitive, and like any other industry that markets a product in a highly competitive market, competing for the consumer's disposable income, it has to be aware of the quality issues. This is especially important to the hotel situation in which there is less obvious competition on price, but centers more on issues of facilities, image, service and the quality of that provision. Hotels have therefore, improved their service quality in order to stay competitive.

The management of quality is a key issue in the management of any hotel property. It has been described as one of three key areas underpinning corporate success in the hospitality field. The profitability of the operation is seen as being supported by the quality of hospitality services, management and the market. Hotel companies are increasingly aware of the importance of quality and clearly use it in their advertisement and promotion to customers and in the standards of performance set for their employees. There is still, however, some misunderstanding in perceiving the service quality between the hotel companies and customers, in which research has shown that many service organisations develop their own
perceptions of what customers want, which often differ from what the customers really want.

Since these intangible aspects are not easy to measure, it is difficult to know whether the customer is satisfied. Current marketing techniques provide knowledge about the customer, his needs and expectations, but the professionals, who in this study are the hotel operators, remain relatively helpless in perceiving what it is that the customer wants or does not want and what he is ready to accept. In addition, hotels quite properly proclaimed themselves as leaders in the service industry but has been lacking in training applied to the actual techniques of service itself. They trained in kitchen crafts, computer skills, accounting procedures, sales training, management development - the list is endless - but there is an obvious lack of documentation on the fusing of guest contact skills and service techniques, the social needs of the hotel guest, his sensitivity threshold and the use of body language and speech skills in service interactions. The hotel operator must, therefore, make a start on training programs, which are now usually referred to as front line staff in service and performance improvements.

In conclusion, an analysis pertaining the customer's perception on the hotel service quality and their satisfaction is needed in order to establish strategies and to ascertain steps to be taken in maximising consumer's satisfaction which, hopefully, can form a positive image of the hotel industry in Malaysia.

Objectives of Study
The general objectives of this research are to measure the customers' perceptions on the service quality they received from the hotel and to verify their satisfaction with the service rendered. The specific objectives are:
1. To determine aspects of services which are important to customers.
2. To analyse whether customers evaluation of services by comparing service received (perceptions) with service desired (expectations).
3. To fill the gaps in the knowledge of the organisation regarding their own perceptions of what the customer wants and what the customers actually perceived on the service quality they received or expect to receive.

Review of Past Research
According to research done by Parasuraman, A., Berry, L.L., and Zeithaml, V.A. (1985,1988), a key to providing superior service is understanding and responding to a customer’s expectations. In which, the customers expect service companies to do what they are supposed to do. They expect fundamentals, not fanciness; performance, not empty promises. In short, customers are paying good money, and the company should provide good service in exchange. At the point of service creation and delivery, all the resources and knowledge of the provider of the service must come together in exactly the right way to ensure an excellent service encounter for the customer. It is at this point that the customers compare their expectations with actual service delivery system performance and ultimately arrive at their perceptions of service quality. According to Collier (1987), by managing these moments of truth well, we can actually manage the customer’s perception of service quality.

Parasuraman, Zeithaml, and Berry (1990) suggested that customers’ service expectations have two levels: desired and adequate. The desired service level is the service the customer hopes to receive. It is a blend of what the customer believes “can be” and “should be”. While the adequate service level is that which the customers find acceptable. It is in part based on the customer’s assessment of what the service “will be”, that is, the customer’s “predicted service”, both of which can change over time and from one service encounter to the next for the same customer.

From their findings (1991), The Zone of Tolerance is developed; a zone that separates desired service level from the adequate service level, as shown in Fig. 1.

This zone is likely to differ for the outcome dimension of reliability and the process
dimensions of tangibles, responsiveness, assurance, and empathy. Hence, Fig. 2 reinforces graphically this research earlier conclusion that the opportunity for firms to exceed customer expectations is greater with the process dimensions than with the outcome dimension.

![Fig. 2](image)

**Tolerance zones for outcome and process dimensions of service**

The customer's quality perception depends on the degree to which quality expectations are confirmed or disconfirmed by experience. Based on Gronroos’s perceived service quality model (1982), the quality of a service, as perceived by the customer, is the result of a comparison between the expectations of the customer and his real-life experiences. If the experiences exceed the expectations, the perceived service quality is positive. If the experiences do not reach the level of expectations, the perceived quality is low (Fig. 3).

In detail, conceptually, this confirmation/disconfirmation (gap) concept has an important impact on people’s thinking about quality. It implies that quality is not an objective phenomenon that can be engineered beforehand. But with proper preparation prior to the service encounter, good quality may be achieved. We already know that customers perceive quality in a subjective manner. Depending on the level of expectations, the same level of quality, as measured in some objective sense, will be perceived in a different way. Thus, what perceived as good quality for one person may be less acceptable for another. If expectations are raised too high - owing to an advertising campaign, for example - the quality of a given service may be disappointing, if only because the customers had unrealistic expectations.

As stated by Gronroos (1993), regardless of the content of the interface, what happens in the simultaneous part of the production and consumption processes is always of critical importance to the customer’s perception of the service. If the service encounter is perceived negatively, the customer is often less than pleased, although most of the efforts to produce the service are beyond the line of visibility from the customer’s point of view and may have been properly taken care of. Hence, how customers perceive the service encounter - or in other words, how customers perceive the quality of the service delivered in the service encounter - has a crucial marketing impact. According to their very nature, services are processes in which the
customer in most cases gets involved. If the processes are perceived to function well, this has a positive impact on the perception of the quality of the service, and vice-versa.

Swan and Combs (1976) suggested that the perceived performance of a service can be divided into two sub-processes; namely, *instrumental performance* and *expressive performance*. The instrumental performance of a service is the technical result of a service production process. It is, so to speak, what the customer is left with, when the production process is finished. Whereas, expressive performance is related to "psychological" level of performance, in a service context, it would be related to the customer-service producer interactions, i.e., to the contacts the consumer has with various resources and activities of the service firm during the service production process when the technical outcome, the instrumental performance, is created. As an example, we may think of a hotel customer's contacts with the employees of the hotel, physical and technical resources, such as in-checking desks, the hotel itself, rooms, food available and the customer's contact with other customers. The customer's interactions with such human and non-human resources during their stay will certainly have an effect on his or her evaluations of the service he or she perceives he has received.

There is evidence, however, that customers do not evaluate the quality of their stay in a hotel on the tangible physical aspects of the provision. According to Nightingale (1985), the customers are more likely to consider such factors as the availability of a service; the smoothness or speed of the response to a request; ease of use; comfortable, pleasant and relaxing surroundings and value for money.

Sasser, Olsen, and Wyckoff (1978) had discussed three different dimensions of service performance: level of material, facilities, and personnel. Implied in this trichotomy is the notion that service quality involves more than outcome, in which it also includes the manner in which the service is delivered.

In a broad sense, "personalised service" refers to any behaviours occurring in the interaction intended to contribute to the individualisation of the customer (Suprenant and Solomon 1987). This definition highlights the centrality of the service encounter to the customer's ultimate satisfaction with a particular service. The service encounter is the dyadic interaction between a customer and a service provider. The nature of this interaction has been recognised to be a critical determinant of satisfaction with the service. Though the service provider or in this case is known as front-liner (i.e., receptionist, housekeeping staff, food and beverage staff) is typically the very last link in the chain of production and is, ironically, often the least-valued member of the service organisation in terms of pay and status, this person is invested with enormous responsibility for conveying the "personality" of the service offering to the customer.

Michael Nightingale (1986) has looked into a few studies on the quality of service in the various organisations in the United Kingdom at the end of 1970's. The study came up with a few different perceptions between the consumer and supplier or service producer, between suppliers and between the departments in the organisations. From this survey, it has help to see the perception of the customers, the management, and the employees on the characteristics of the services that are needed. These perceptions have been put into their respective ranking. In seeing the relative importance of different service transactions in the hotel, it was found out that there are a few aspects whereby the customers and the management's perception in the use of service transaction clashes. Among them are:

1. The Use of Telephone
2. Enjoying their drinks
3. Making reservation
4. Working in their room

The services above are seen as among the important factors to the consumers but to the management, it has no importance. And it was also found out that the management perceptions pertaining the service transaction like breakfast and snacks are not important but to the customer it does.

The perception on the service transaction is important because, when the management and customer perceptions are almost the same, the customers are satisfied and this gives the customer a perception that the services of an organisation is excellent. Table 1 shows a ranking on the importance of perception on the service transactions by the management and customers. Apart from that, this survey has found out about
the perception needed pertaining the characteristic of the services by the customer and the management. There are distinctive differences in the customers' and management's perceptions whereby, the customers assessed that the availability, comfort, and efficiency are needed in the hotel services but the management did not acknowledge the customers needs. Moreover the employee perceived that the accreditation and friendliness are not important to the customers. Table 2 shows the differences of perceptions by the customers and the management regarding the service quality.

**Theoretical Framework**

The theoretical framework of this study is based on a model developed by Parasuraman A., Zeithaml V.A. , Berry L.L. (1990). This model identifies five gaps or points where service production might falter. This study will only concentrate on Gap 5, which is customer's perception of service quality. Since the difference between customers expectation of service and the actual performance by the organisation represent the service quality perceived by the customer, a conceptual model is developed for further explanations. (Fig. 4).

**TABLE 1**

The differences of perceptions on the importance of service transactions by the customers and management

<table>
<thead>
<tr>
<th>Customers</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Night Staying</td>
<td>Bathe</td>
</tr>
<tr>
<td>Snack Treats</td>
<td>Swimming</td>
</tr>
<tr>
<td>Breakfast</td>
<td>Information Receivable</td>
</tr>
<tr>
<td>The Use of the Telephone</td>
<td>Movies</td>
</tr>
<tr>
<td>Bathe</td>
<td>A Night Staying</td>
</tr>
<tr>
<td>Dinner</td>
<td>Arrival in Hotel</td>
</tr>
<tr>
<td>Making Reservation</td>
<td>Dinner</td>
</tr>
<tr>
<td>Doing Business Affairs in Their Rooms</td>
<td>Breakfast</td>
</tr>
</tbody>
</table>

Notes: The categories above have been arranged according to their degree of importance.


**TABLE 2**

The different perceptions pertaining the service quality by the customers, management and employees

<table>
<thead>
<tr>
<th>Customers</th>
<th>Management</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td>Value For Money</td>
<td>Recognition By The Customers</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Efficiency</td>
<td></td>
</tr>
<tr>
<td>Comfort</td>
<td>Peaceful and Relaxing</td>
<td>Friendliness</td>
</tr>
<tr>
<td>Peaceful and Relaxing</td>
<td>Comfort</td>
<td>Efficiency</td>
</tr>
<tr>
<td>Value For Money</td>
<td>Guest Controls</td>
<td>Communications</td>
</tr>
<tr>
<td>Adequate Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spacious</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Three hypotheses are derived to test this model. (Hypothesis 1 (H1)):

- Customers' perception of personal service rendered is affected by SERVQUAL's dimensions — tangible, reliability, responsiveness, assurance, and empathy.

Hypothesis 2 (H2):
The higher the technological innovations provided, the better the customers' evaluation of service quality.

Hypothesis 3 (H3):
The higher the quality of food available, the better the customers' perceptions of service quality.

In addition to these hypotheses, a fourth hypothesis was developed to test the different SERVQUAL dimensions.

Hypothesis 4 (H4):
There are differences in SERVQUAL dimensions perceived by the customers in assessing overall service quality.

**METHODOLOGY**

This study was carried out through a survey done in several hotels in Kuala Lumpur. The primary data collected consist of the customer's perception of the service quality rendered by the particular hotel that they are staying in. The selected respondents consisted of hotel customers in a few chosen five star hotels in Kuala Lumpur.

In this study, a sample of 150 hotel customers were chosen in order to determine the customers' perceived service quality in hotel industry. The sample framework was inclusive of all the hotel customers in a few selected five star
hotels in Kuala Lumpur, Malaysia. The sampling unit was individual (foreign and local), who was given a set of questionnaires.

SERVQUAL (Parasuraman, Berry and Zeithaml (1988)) measurement was used to measure consumer perceptions of service quality. These measurements were subjected to reliability tests and were found to be highly reliable (Cronbach alpha ranging from .78 to .90)

DISCUSSION

Table 3 revealed that the majority of the respondents were female (57.1%). About 77 percent of the respondents were Malaysian and only 23% of them were non-Malaysian.

About 34.1 percent of the respondents were Christians, followed by Muslim (28.6%), Buddhist (15.9%), Hindu (14.3%) and other religions (7.1%). In terms of their educational level, about 35.7 percent of the respondents were degree holders, 27.0 percent were diploma holders, 18.3 percent had Masters and 6.3 percent had Ph.D. Most of the respondents earned about RM16,000 -36,000 per annum. There were 72 respondents who are not married and 54 who were married.

Sources of Information Used in Choice of Hotel

Table 4 shows that, when asked to rank different sources of information as to their importance in choice of hotel, the majority of the respondents indicated that members of immediate family were the most important sources (mean = 4.103) but friends (72.3%) (mean = 3.984) and business associate (69.9%) (mean = 3.825) were also important to the respondents when selecting a hotel. Table 2 also indicates that travel agency (mean = 3.238) and advertisements in TV, newspaper and magazine (mean = 3.341) were used frequently in collecting various aspects of information on hotel choices.

Hotel Location Preferences

Table 5 indicated the hotel location preferences among respondents. Most of the respondents preferred down town/central location (69.8%), followed by recreation sites (58.7%), suburban location (49.2%), just out-side town location (46.8%), and rural location (32.6%)

Number of Days and Money Spent

Table 6 and Table 7 indicated about 76.2 percent of the respondents spent 2 - 5 days at the hotel

| TABLE 3 | Demographic characteristics of the respondents |
|---------------------------------|---------------------------------|---------------------------------|
| Demographics | Variable | Number | Percentage (%) |
|---------------------------------|---------------------------------|---------------------------------|
| Gender | Male | 54 | 42.9 |
| | Female | 72 | 57.1 |
| | Total | 126 | 100.0 |
| Age | < 25years | 40 | 31.7 |
| | 26 - 35 | 51 | 40.5 |
| | 36 - 45 | 33 | 26.2 |
| | 46 - 55 | 2 | 1.6 |
| | Total | 126 | 100.0 |
| Nationality | Malaysian | 97 | 77.0 |
| | Non Malaysian | 9 | 23.0 |
| | Total | 126 | 100.0 |
| Ethnicity | Muslim | 36 | 28.6 |
| | Hindu | 18 | 14.3 |
| | Buddha | 20 | 15.9 |
| | Christians | 43 | 34.1 |
| | Others | 9 | 7.1 |
| | Total | 126 | 100.0 |
| Education Level | Diploma | 34 | |
| | Degree | 45 | 35.7 |
| | Masters | 23 | 18.3 |
| | Ph.D | 8 | 6.3 |
| | Others | 16 | 12.7 |
| | Total | 126 | 100.0 |
| Income | <RM16,000 | 5 | 4.0 |
| | RM16,000 - 24,000 | 33 | 26.2 |
| | RM24,001 - 36,000 | 32 | 25.4 |
| | RM36,001 - 48,000 | 20 | 15.9 |
| | RM48,001 - 64,000 | 20 | 15.9 |
| | >RM64,001 | 16 | 12.7 |
| | Total | 126 | 100.0 |
| Status | Single | 72 | 57.1 |
| | Married | 54 | 42.9 |
| | Total | 126 | 100.0 |

Source: Survey
TABLE 4
The importance of sources of information (n=126)

<table>
<thead>
<tr>
<th>Sources</th>
<th>1</th>
<th>3</th>
<th>5</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Associates</td>
<td>11.9%</td>
<td>18.3%</td>
<td>69.9%</td>
<td>3.825</td>
</tr>
<tr>
<td>Friends</td>
<td>2.4</td>
<td>25.4</td>
<td>72.3</td>
<td>3.984</td>
</tr>
<tr>
<td>Member of Immediate Family</td>
<td>4.8</td>
<td>17.5</td>
<td>77.8</td>
<td>4.103</td>
</tr>
<tr>
<td>Travel Agency</td>
<td>20.7</td>
<td>38.1</td>
<td>41.2</td>
<td>3.238</td>
</tr>
<tr>
<td>TV, Newspaper, Magazine</td>
<td>15.8</td>
<td>39.7</td>
<td>44.4</td>
<td>3.341</td>
</tr>
</tbody>
</table>

Source: Survey
1 = Not at all important
3 = Neutral
5 = Very Important

TABLE 5
Hotel location preferences (n=126)

<table>
<thead>
<tr>
<th>Location</th>
<th>1</th>
<th>3</th>
<th>5</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown/Central</td>
<td>13.5%</td>
<td>16.7%</td>
<td>69.8%</td>
<td>3.905</td>
</tr>
<tr>
<td>Just Outside City</td>
<td>15.1</td>
<td>38.1</td>
<td>46.8</td>
<td>3.333</td>
</tr>
<tr>
<td>Rural Location</td>
<td>33.3</td>
<td>34.1</td>
<td>32.6</td>
<td>2.881</td>
</tr>
<tr>
<td>Recreation Site</td>
<td>14.2</td>
<td>27.0</td>
<td>58.7</td>
<td>3.635</td>
</tr>
<tr>
<td>Suburban Location</td>
<td>21.5</td>
<td>29.4</td>
<td>49.2</td>
<td>3.317</td>
</tr>
</tbody>
</table>

Source: Survey
1 = Least Preferred
3 = Neutral
5 = Most Preferred

TABLE 6
Number of days spent (n=126)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 - 5 days</td>
<td>76.2</td>
</tr>
<tr>
<td>6 - 10</td>
<td>21.4</td>
</tr>
<tr>
<td>11 - 15</td>
<td>-</td>
</tr>
<tr>
<td>16 - 20</td>
<td>1.6</td>
</tr>
<tr>
<td>&gt; 21</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Source: Survey

and most of them spent about RM1,001 - 3,000 (46.8%) while staying there.

Purpose of Staying
About 65.9% of the respondents stayed for the purpose of pleasure, while 20.6% and 12.7% came for convention and business purpose (Table 8).

Reasons in Choosing the Particular Hotel Compared to Other Hotels
Deciding on the reasons in choosing the particular hotel, most of the respondents came because of their past experiences with that hotel (33.3%), 30.2 percent came because the hotel was convenient for them, followed by suggestions

TABLE 7
Money spent (n=126)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;RM1,000</td>
<td>34.9</td>
</tr>
<tr>
<td>RM1,001 - 3,000</td>
<td>46.8</td>
</tr>
<tr>
<td>RM3,001 - 5,000</td>
<td>15.1</td>
</tr>
<tr>
<td>&gt;RM5,001</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Source: Survey

TABLE 8
Purpose of staying (n=126)

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasure</td>
<td>88</td>
<td>65.9</td>
</tr>
<tr>
<td>Convention</td>
<td>26</td>
<td>20.6</td>
</tr>
<tr>
<td>Business</td>
<td>16</td>
<td>12.7</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Source: Survey
from friends (22.2%), unintentional (9.5%) and lastly for other reasons (4.8%) such as, it was fixed by their company, and seminar they have attended which required them to stay at that particular hotel (Table 9).

**TABLE 9**
Factors in choosing hotel (n=126)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past Experience</td>
<td>42</td>
<td>33.3</td>
</tr>
<tr>
<td>Convenience</td>
<td>38</td>
<td>30.2</td>
</tr>
<tr>
<td>Suggestions from Friends</td>
<td>28</td>
<td>22.2</td>
</tr>
<tr>
<td>Unintentional</td>
<td>12</td>
<td>9.5</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Source: Survey

**Rating of Hotel on Overall Basis**
The respondents did not at all rate the hotel as fair or poor. Instead most of the respondents rate the hotel on overall basis as good (71.4%). Table 10 also indicated that 14.3 percent of the respondents rate the hotel they stayed as excellent.

**TABLE 10**
Rate on Overall Basis (n=126)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>18</td>
<td>14.3</td>
</tr>
<tr>
<td>Good</td>
<td>90</td>
<td>71.4</td>
</tr>
<tr>
<td>Excellent</td>
<td>18</td>
<td>14.3</td>
</tr>
</tbody>
</table>

Source: Survey

**Stay at the Same Hotel in the Future**
Earlier on, it was reported that respondents came to the hotel because of their past experience and it might be because of the good service they received. Table 11 shows that 90.5 percent of the respondents will stay at the same hotel in the future if they were to be in that area. Only 7.9 percent will not stay at the same hotel in the future, while 1.6 percent were undecided whether to stay or not in the future.

**Hypotheses 1**
H1: Customers’ perception of personal service rendered is affected by SERVQUAL’s 5 Dimensions - Assurance, Empathy, Reliability, Responsiveness, and Tangibility.

\[
Y = \text{Personal service rendered (PS)}
\]

\[
X_1 = \text{Assurance (SQLASS)}
\]

\[
X_2 = \text{Empathy (SQLEMP)}
\]

\[
X_3 = \text{Reliability (SQLREL)}
\]

\[
X_4 = \text{Responsiveness (SQLRESP)}
\]

\[
X_5 = \text{Tangibility (SILTGB)}
\]

From the regression analysis conducted, the following regression equation is the result of the analysis,

\[
y = 62.153 + 1.027x_1 - 0.024x_2 + 0.269x_3 + 0.478x_4 + 0.134x_5
\]

The inclusion of the five independent variables correlates well with personal service rendered by the employee (R = 0.687). The R² of 0.472 indicates that about 47 percent of the variation in personal service rendered for this sample of 126 respondents is explained by the above independent variables. The regression equation above indicates that personal service are positively related to \(X_1\), \(X_2\), \(X_3\), and \(X_4\) and negatively related to \(X_5\). This equation is statistically significant and there does appear to be an association between the dependent variable (personal service) and the independent variable. Thus, H1 was supported. T-value shows that only \(X_3\) (Assurance) is significant with a value of 5.270 at the 0.05 level of statistical significance.

**Hypotheses 2**

H₂ = Technological innovations provided is positively correlated with customers’ evaluation of service quality.

From Table 12, the analysis of correlation showed that all the 5 dimensions have a significant correlation towards technological innovations. This indicates that SERVQUAL has a very significant correlation with technological innovations. Thus H₂ was supported.
TABLE 12

Pearson’s correlation coefficients between SERVQUAL dimensions and technological innovations

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Technological Innovations</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangible</td>
<td>0.6038</td>
<td>0.000*</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.4573</td>
<td>0.000*</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>0.2115</td>
<td>0.017*</td>
</tr>
<tr>
<td>Assurance</td>
<td>0.4697</td>
<td>0.000*</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.5720</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

Source: Survey
* Significant at p <0.05

**Hypotheses 3**

H₃ = Quality of food available is positively correlated with customers’ perceptions of service quality.

From Table 13, the analysis of correlation showed that all the 5 dimensions have a significant correlation towards the quality of food available at the hotel. This indicates that SERVQUAL has a very significant correlation with the quality of food available. Thus H₃ was supported.

TABLE 13

Pearson’s correlation coefficients between SERVQUAL dimensions and quality of food available

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Quality of Food Available</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangible</td>
<td>0.6257</td>
<td>0.000*</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.2851</td>
<td>0.000*</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>0.1576</td>
<td>0.078*</td>
</tr>
<tr>
<td>Assurance</td>
<td>0.5073</td>
<td>0.000*</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.4711</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

Source: Survey
* Significant at p <0.05

Table 14 indicates that SERVQUAL has the correlation coefficient of 0.6245. Thus, it shows that service quality has a strong positive correlation with hotel’s technological innovations. The table also indicates that SERVQUAL has the correlation coefficient of 0.578, showing that SERVQUAL has a strong positive correlation with quality of food available at the hotel.

**Hypotheses 4**

H₄ = There are differences in SERVQUAL dimensions perceived by the customers in assessing overall service quality.

Table 15 indicates the ANOVA in determining the SERVQUAL dimensions perceived by the customers in assessing overall service quality. Significant ANOVA results were investigated further using Duncan’s multiple range test to identify significant differences across the Overall Q categories. The results of these analyses are summarised in Table 15 and Table 16.

Table 15 indicates that the analysis of variance in determining the differences of SERVQUAL dimensions perceived to be important by the customers in assessing overall service quality. The F-value for all dimensions (Empathy = 20.456, Assurance = 11.678, Reliability = 8.806, Responsiveness = 12.155 and Tangible = 13.609) indicated significant differences at level p<0.05 for all the dimensions. Thus, hypothesis 4 was supported.

While, the numbers reported in Table 15 are average SERVQUAL scores within each Overall category, measured on a -6 to +6 scale on which the higher (less negative) the category. Most of the combined mean values are negative, implying that customers’ perceptions fall short of expectations.score, the higher is the level of perceived service quality. In the sample, the combined SERVQUAL score for those in “excellent” category is significantly higher (less negative) than for those in the “good” category. Furthermore, respondents in the “good” category have a significantly higher combined SERVQUAL score than those in the “average”.

TABLE 14

Correlation coefficients between technological innovations and quality of food available with SERVQUAL score

<table>
<thead>
<tr>
<th>Technological Innovation</th>
<th>Quality of Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td>0.6245</td>
</tr>
<tr>
<td>p = 0.000*</td>
<td>p = 0.000*</td>
</tr>
</tbody>
</table>

Source: Survey
* Significant at p <0.05
TABLE 15
Differences in SERVQUAL dimensions perceived to be important by the customers in assessing overall service quality

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Source</th>
<th>D.F.</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>Between Groups</td>
<td>2</td>
<td>20.456</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assurance</td>
<td>Between Groups</td>
<td>2</td>
<td>11.678</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability</td>
<td>Between Groups</td>
<td>2</td>
<td>8.806</td>
<td>0.003*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Between Groups</td>
<td>2</td>
<td>12.155</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangibility</td>
<td>Between Groups</td>
<td>2</td>
<td>13.609</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>125</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Survey

a significant at p <0.05

TABLE 16
Significant differences in mean scale values for respondents - segmented according to the variables overall quality

<table>
<thead>
<tr>
<th>Individual Scale Dimensions</th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>-1.444</td>
<td>-1.611</td>
<td>-6.333</td>
</tr>
<tr>
<td>Assurance</td>
<td>-2.656</td>
<td>-3.389</td>
<td>-7.944</td>
</tr>
<tr>
<td>Reliability</td>
<td>-0.778</td>
<td>-2.611</td>
<td>-4.500</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>0.111</td>
<td>-1.689</td>
<td>-3.333</td>
</tr>
<tr>
<td>Tangible</td>
<td>-2.444</td>
<td>-3.111</td>
<td>8.667</td>
</tr>
<tr>
<td>Combined Scale</td>
<td>-1.442</td>
<td>-2.482</td>
<td>-6.155</td>
</tr>
<tr>
<td>Sample Size</td>
<td>18</td>
<td>90</td>
<td>18</td>
</tr>
</tbody>
</table>

*Numbers are mean values on a scale ranging from -6 to +6, on which zero implies that consumer perceptions and expectations coincide, negative values imply that perceptions fall short of expectations, and positive values imply that perceptions exceed expectations.

Table 17
Customers' mean perceptions and expectations on SERVQUAL dimensions (N = 126)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Perceptions (P)</th>
<th>Expectations (E)</th>
<th>Serqual (P - E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangible</td>
<td>5.31</td>
<td>5.99</td>
<td>-0.68</td>
</tr>
<tr>
<td>Reliability</td>
<td>5.20</td>
<td>6.08</td>
<td>-0.88</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>5.12</td>
<td>5.96</td>
<td>-0.84</td>
</tr>
<tr>
<td>Assurance</td>
<td>5.13</td>
<td>6.01</td>
<td>-0.88</td>
</tr>
<tr>
<td>Empathy</td>
<td>5.23</td>
<td>5.97</td>
<td>-0.74</td>
</tr>
<tr>
<td>Total</td>
<td>5.20</td>
<td>6.00</td>
<td>-0.80</td>
</tr>
</tbody>
</table>

*Source: Survey
Customers' Evaluation of SERVQUAL

The mean of -0.80 for the SERVQUAL measure implies that on average respondents' perceptions felt short of their expectations. It was very clear from Table 17, the perception's mean values (5.20) for every dimension is lower compared to mean values of expectation (6.00).

CONCLUSIONS

Implications

Perhaps the clearest implications from this study for hotelier are by meeting or exceeding the customers' expectations. Whatever promises made to the customers through promotional campaign must be delivered once the customer walks in the door. Since, hotels engaged in rendering personal services deal directly with individuals every day. Therefore, they have to be highly sensitive to customer's wishes, desires, attitudes and taste. The customer, on the other hand, is sensitive not only to the quality of the service rendered but, even more important, to the employees who are rendering the service (Wright, Handbook of Tourism). First impressions, personal likes and dislikes, the tone of the voice and the expression of co-operation and courtesy are very important.

Contemporary trends indicate that the battle for the hearts and minds of guests in the 1990s will be fought in the service areas of the hotel. The weapons will be the social skills of the employees, creating a memorable experience for the guest, and the performance techniques which infuse the staff with confident knowledge and a happy sense of job satisfaction. Specifically PZB's found out that although reliability is the most important dimensions in meeting customer expectations, the process dimensions (especially assurance, responsiveness, and empathy) are most important in exceeding customer expectations.

These process dimensions clearly involved the interactions between employees and the customer, therefore, the hotel operator must, make a start on training what are now usually referred to as front line staff in service and performance improvements. The target areas and job functions for performance and service training should be front office and uniformed staff, food and beverage service personnel, reservations and financial services staff, housekeeping and valeting functions - indeed all those having direct contact with guests. Every employee in each contact department should be singled out for service training.

Guest perceptions must be regularly monitored through the use of focus groups, personal interviews, guest questionnaires, external qualitative assessments, return visit records and any other means by which the hotel can keep its finger on the pulse of its client market. Each evaluation should be assigned in statistical value to demonstrate improvements. One method that hotel operators can use in monitoring customers perceptions is SERVQUAL (the method used in this present study).

As noted earlier, SERVQUAL is a concise multiple-item scale with good reliability and validity that retailers can use to better understand the service expectations and perceptions of customers and, as a result, improve service. A hotel operator, for example, would learn a great deal about its service quality and what needs to be done to improve it by administering both SERVQUAL and an employee survey, three or four times a year, plus systematically soliciting and analysing customer suggestions and complaints. The employee survey should include questions concerning perceived impedents to better service, e.g., what is the biggest problem you face to deliver high-quality service to the customers?

The previous research done by Parasuraman, Zeithaml and Berry (PZB) has shown that:

1. Customers evaluate service quality by comparing their perceptions of the service with their expectations.
2. The content of customers' expectations is basic, but the structure is complex, characterised by both desired and adequate service levels that seem to change in response to a variety of factors.

While in the present study, we sought to learn more about the nature and sources of customers' expectations given the crucial role in service quality assessments. Below are a few suggestions for managing customers' expectations and raising their perceptions.

- Be reliable - one way for the firm to keep customers' expectations from rising is to perform the service properly the first time (PZB 1990). It is imperative to be a reliable service provider that can deliver consistently
competitive performance (de Roulet 1992). Hotel may identify fail points in service processes which are most vulnerable to mishap by soliciting inputs from employees, by analysing customer complaints, and by mapping the service process itself - blueprinting. Such points should include not only customer contact points, but also places where one functional unit is dependent upon another functional unit for processing (Riddle 1991).

- Manage Promises - Because hotel operators influence customers' expectation levels by the explicit and implicit service promises they make, a key approach to managing expectations is to manage the promises. That is not to overpromising or under-promising. Overpromising raises customers' expectations beyond the capacity of the firm to meet them; while underpromising potentially reduces the competitive appeal of the offer. Thus, hotel operators have a better chance of meeting customer expectations when their promises reflect the service actually delivered rather than an idealised version of the service (PZB 1991). For example, a brochure photograph of a beautifully appointed hotel room may entice the consumer to make a reservation, but it is the room itself that contributes to the customer's positive or negative assessment of the hotel's service quality.

**Future Direction**

While the present study does add to the present perceived service quality literature dealing with the customers' satisfaction, it must be seen as a catalyst for further research as an end in itself. The study must be replicated with a larger sample before the results can be stated definitely. Larger coverage in major cities in Malaysia such as in Penang and Johor Bahru may induce different results.

Preferably, the methodology would be interviewing respondents, so the researcher has controlled over the proportion of respondents. This method can be cost effective as more sets of questionnaires will be filled accordingly. Further, it will reduce biasness in term of literacy.

Furthermore, the study should focus on the expected service - a critical component of perceived service quality - in addition to being influenced by the customers' personal needs, shaped by word-of-mouth communications, and past experience. Research focusing on the relative impact of these factors on consumers' service expectations, within service categories, will have useful managerial implications.

**Limitation of the Study**

Notably, the limitation of the study was lack of control of sample. The researcher had no control on the respondents' background such as age, etc., in order to get a well-proportioned sample. Besides that, customers have different standards depending upon their occupation, standard of living, income, and expectations, and a host of other factors.

The researcher also could not control the quality of the answers as it was highly dependent on the sincerity and willingness of the respondents to answer the given questionnaire. Many of the questionnaires were not answered properly.

**CONCLUSION**

We can conclude that customers' perceptions fall short of expectations. This is because hotels in general, however, have been slow to respond to changes in customer expectations in both personal and physical needs. In addition, there has also been a recent growth in 'consumerism' generally which has resulted in customers expecting to receive products and services of a higher minimum acceptable level. People have also travelled more widely than ever before, due to package holidays and cheaper transportation, returning with new ideas and new standards regarding hotel provision. In fact, one factor that may cause expected service level to rise is customer experience. According to research done by PZB (1991), the more experienced customers were more likely to have higher service expectations, and to be "squeaky wheels" when they were not satisfied.

Consumers will make a decision and taking an action based on their perceptions. Therefore it is very important for the organisation or hotel industry to take an effort in comprehending and understanding customer's expectation in order to deliver good services. Good service here infers the customer's perception of a service presented by the employee, in which if the perceived service equal to the expected service, they perceived that there is a quality in the service.
Measuring Customers' Perceived Service Quality in Hotel Industry

On the whole, the customer always wants more and his perception of quality is different from that which the hotel operator can offer him. Only experience, listening and attention at every instant may let one have a more or less true idea. If courtesy and care is the silent language of service, it is one that is understood across every international boundary. The service challenge of the 1990s will be to capture control of this language so that the hotel operator may speak directly to the guest of their concern for his welfare.

Putting the service back into the service industry will require the same dedication and skill that has been applied to the development of product and functional excellence in the 1980s. It is difficult, if not impossible, to calculate its benefits with any precision, but the value of outstanding, consistent services illuminates the profit and loss account and balance sheet alike. The investment in effort will be handsomely repaid.

REFERENCES


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Tahap Tekanan Akademik dan Kerisauan Pelajar Mempelajari Komponen Teras Kemahiran Hidup

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Keywords: Kemahiran Hidup, Kemahiran Manipulatif, stres, komponen teras

ABSTRAK
Kajian ini bertujuan untuk mengenal pasti tahap tekanan dan kerisauan pelajar dalam mempelajari komponen teras mata pelajaran Kemahiran Hidup. Seramai 146 responden menjadi subjek kajian. Kebanyakannya atau 76.7% merupakan pelajar sekolah menengah, selebihnya merupakan pelajar pendidikan guru dalam bidang pendidikan vokasional. Stres diukur dengan menggunakan item yang telah dibentuk sendiri oleh pengkaji dengan nilai alpha 0.68. Pelajar didapati paling stres apabila merasa bersalah kerana gagal mencapai apa yang diharapkan, dan merasa resah apabila menunggu keputusan ujian Kemahiran Hidup. Beberapa dapatan berbentuk kualitatif berkaitan dengan faktor yang menyebabkan stres dan kerisauan dibincangkan. Penyelidik telah menyenaraikan beberapa cadangan yang praktikal untuk menangani tekanan akademik pelajar Kemahiran Hidup. Proses pengajaran-pembelajaran komponen Kemahiran Manipulatif dan Perdagangan dan Keusahawanan perlu diperbaiki untuk mengurangkan stres pelajar.

ABSTRACT
The purpose of this study was to identify stress and anxiety level of students in learning the core component of the Living Skills (Kemahiran Hidup) subject. Most of the subjects (76.7%) were secondary school students, the others were university student teachers majoring in vocational education. Stress was measured by using items developed by the researchers. Students felt most stressed when they felt guilty because they failed to achieve what was expected of them, and felt uneasy while waiting for the living skills examination results. Several qualitative research findings related to factors contributing to stress and anxiety were discussed. The researchers had listed several practical recommendations to handle students academic stress in learning the living skills subject. The teaching and learning process for manipulative skills as well as the commerce and entrepreneurship components need to be improved to reduce students' stress.

LATAR BELAKANG
Kemahiran Hidup merupakan satu mata pelajaran teras dalam Kurikulum Bersepadu Sekolah Menengah (KBSM). Mata pelajaran ini bertujuan membebekan pelajar dengan kemahiran asas untuk membolehkannya mengendalikan hidup secara produktif dalam dunia teknologi dan perdagangan yang kompleks dan sentiasa berubah. Mata pelajaran ini dirancang untuk mencapai hasrat Falsafah Pendidikan Negara iaitu untuk mewujudkan insan yang seimbang dan harmonis dari segi intelek, rohani, emosi dan jasmani.


Sejak diperkenalkan, bahagian teras Kemahiran Hidup merangkumi aspek Kemahiran

"Kurikulum Reka cipta menekankan pemikiran analitikal, kritikal, lateral dan inventif ke arah menghasilkan sesuatu reka cipta yang berguna dalam bentuk konkrit dan berfungsi"

(1996)

Berikut diterangkan penjelasan terperinci 3 lagi komponen teras Kemahiran Hidup. Ketiga-tiga teras ini merupakan fokus kajian ini.

Kemahiran Manipulatif

Perdagangan dan Keusahawanan
Perdagangan dan Keusahawanan membekalkan pelajar dengan pengetahuan dan kemahiran asas perniagaan dan keusahawanan yang menekankan amalan perniagaan termasuk aspek kewangan dan simpan kira, pengurusan perniagaan, etika dalam perniagaan, dan pengeluaran. Pelajar juga dibekalkan dengan pengetahuan dan kemahiran mengenai konsumerisme. Tujuannya adalah untuk memupuk sikap berdikari, yakin diri, semangat ingin tahu, ingin mencuba dan tidak berputus asa, meningkatkan inisiatif, daya mereka cipta serta berkeupayaan mengenal pasti peluang perniagaan, menggunakan peluang perniagaan dengan bijaksana dan bertindak sebagai pengguna dan pengeluar yang bertanggungjawab.

Kekeluargaan
Komponen Kekeluargaan membekalkan pelajar dengan kemahiran interaksi antara individu dengan keluarganya dan masyarakat. Bagi membolehkan pelajar melakukan interaksi ini ia terlebih dahulu perlu mengetahui dan memahami pelbagai aspek dirinya sendiri. Melalui perkembangan diri, ia dapat wujud dan mengukuhkan perhubungan mesra dengan keluarganya serta masyarakat sekelilingnya. Oleh yang demikian Komponen Kekeluargaan dibahagikan kepada tiga aspek iaitu Peningkatan Kendiri, Kesejahteraan Keluarga, dan Keharmonian Hidup Bermasyarakat. Kemahiran yang dibekalkan adalah untuk membantu pelajar menguruskan hal-hal peribadinya dengan berkesan, mengamalkan sikap yang bertanggungjawab dan mesra serta berinteraksi secara bersopan santun dengan orang lain seperti ahli keluarga, rakan sebaya, dan guru, sesuai dengan nilai masyarakat.

Memandangkan komponen Kemahiran Hidup begitu terasing antara satu dengan lain dan juga diajar secara berasingan maka satu kajian yang dapat mengenai pasti tahap kerisauan dan tekanan pelajar semasa mengikuti mata pelajaran ini dianggap wajar dijalankan. Setakat ini belum ada lagi kajian yang dijalankan untuk meninjau tahap kerisauan dan tekanan pelajar terhadap mata pelajaran Kemahiran Hidup, walaupun ianya telah diperkenalkan sejak 10 tahun lalu. Menurut Russel dan Hattie (1991) terdapat banyak literatur berkaitan dengan tekanan yang dialami remaja berpujian daripada pihak sekolah. Sekolah sebagai penyumbang utama rasa tertekan pelajar perlu diberi perhatian memandangkan kembalinya masa seorang pelajar diulang untuk mengikuti pelajaran berbentuk akademik. Antara faktor dalam aspek sekolah termasuklah guru. Guru mengalami stres kerana bebanan kerja dan berhadapan dengan pelajar yang agresif (Hui dan Chan 1996) dan apabila guru dikehendaki mengajar pelbagai komponen dalam Kemahiran Hidup yang sebahagiannya asing bagi guru itu, secara tidak langsung mungkin akan mempengaruhi tahap keupayaan pelajar untuk belajar mata
Tahap Tekanan Akademik dan Kerisauan Pelajar Mempelajari Komponen Teras Kemahiran Hidup

pelajaran Kemahiran Hidup. Jadi adalah membimbangkan sekiranya perasaan tekanan ini betul-betul wujud disebabkan faktor berkaitan dengan tekanan akademik. 


Tujuan kajian ini ialah untuk mengenal pasti tahap tekanan dan kerisauan pelajar dalam mempelajari semua komponen teras dalam Kemahiran Hidup.

Kajian ini cuba menjawab soalan penyelidikan berikut:

a. Apakah tahap stres pelajar sekolah dan universiti dalam mempelajari Kemahiran Hidup?
b. Adakah terdapat perbezaan tahap stres mengikut kategori pelajar?
c. Apakah tahap kerisauan pelajar mengikut komponen Kemahiran Hidup tertentu?
d. Apakah faktor yang menyumbang kepada kerisauan dalam mempelajari Kemahiran Hidup?

METODOLOGI

Kajian ini adalah berbentuk tinjauan yang menggunakan soal sedikit yang terbahagi kepada 3 bahagian, iaitu, pertama mengandungi maklumat peribadi pelajar; kedua, soal sedikit untuk mengukur stres dengan nilai kepercayaan 0.68 dan ketiga, soal sedikit mengukur tahap kerisauan akademik pelajar. Empat belas item dibina untuk mengukur stres dan bagi setiap item, responden diberi 4 pilihan iaitu, “tidak pernah”, “kadang-kadang”, “selalu” dan “amat selalu”. Skor 1 diberi untuk “tidak pernah”, skor 2 untuk “kadang-kadang”, skor 3 untuk “selalu” dan skor 4 untuk “amat selalu”. Prosedur skor ini digunakan untuk menentukan tahap stres iaitu skor tinggi untuk tahap stres yang tinggi dan skor rendah untuk tahap sebaliknya. Untuk mengukur tahap kerisauan, pelajar diminta menyatakan sejauh mana ‘kerisauan’ telah mereka alami dalam mempelajari setiap komponen KH secara spesifik. Skala berikut digunakan untuk mengukur kerisauan, iaitu skor 1 untuk sangat “tidak merisaukan”, skor 2 untuk “tidak merisaukan”, skor 3 untuk “merisaukan” dan skor 4 untuk “sangat merisaukan”.

Daripada 14 item yang dibentuk untuk mengukur tahap stres, nilai Cronbach Alpha menunjukkan tiga item adalah berbeza berbanding sebelas item yang lain untuk mengukur stres. Dengan mengeluarakan tiga item itu, nilai alpha yang pada mulanya ialah 0.57 meningkat kepada 0.68. Akhirnya untuk analisis pengukuran stres, sebelas item sahaja digunakan. KH merupakan salah satu mata pelajaran baru yang diperkenalkan dalam KBKS dan bebanan mempelajari komponen yang pelbagai dalam satu pelajaran mungkin menimbulkan tahap kerisauan yang tinggi dan seterusnya melibatkan tekanan (Benjamin & Walz 1987). Oleh kerana itu, kajian ini mendapati kedua-dua instrumen (stres dan kerisauan) amat relevan untuk mengukur kedua-dua pembolehubah itu dalam mempelajari KH.

Skala Likert digunakan untuk mengukur stres dan tahap kerisauan akademik. Item dalam soal selidik digubal berdasarkan konstruk umum untuk mengukur stres dan kerisauan. Soal sedikit ini dibina sendiri oleh pengkaji khusus untuk KH. Seterusnya item ini dikaikan dengan mata pelajaran KH untuk mengukur tahap stres dan kerisauan mempelajari mata pelajaran tersebut.

Dari segi sampelan, jumlah pelajar sekolah yang menjadi responden ialah 110 orang dan 36 yang lain merupakan pelajar-pelajar pendidikan vokasional, sebuah universiti tempatan. Dua kumpulan pelajar ini dipilih untuk menjelaskan sama ada kedua-dua kumpulan ini secara berasingan mengalami kerisauan dan stres apabila mengikut pelajaran KH. Fokus kajian ini hanyalah untuk meninjau sama ada wujud perasaan risau dan stres apabila mengikut mata pelajaran KH, dan sampel pelajar universiti yang dipilih merupakan bakal guru yang akan mengajar mata pelajaran KH di sekolah.

Data dikumpul dengan menggunakan pembantu penyelidik yang pergi ke sembilan sekolah di kawasan Hulu Langat. Sekolah dipilih
sehingga rawak. Data dianalisis dengan menggunakan pengaturcaraan statistical package for the Social Science (SPSS), statistik deskriptif (min, peratus dan sisihan lazim) digunakan untuk menginterpretasi data.

**DAPATAN KAJIAN**


**STRES DAN KATEGORI PELAJAR**

Apabila dianalisis mengikut kategori pelajar, kedua-dua kumpulan dari aspek persepsi skor stres menunjukkan tidak ada perbezaan signifikan terhadap stres dalam mempelajari KH. Skor min untuk pelajar pendidikan guru universiti ialah 23.82 dan pelajar sekolah menengah ialah 24.00.

**KERISAUAN DALAM KOMPONEN KEMAHIRAN HIDUP**


| Jadual 1 |
| Statistik deskriptif tentang item stres |
|---|---|---|---|---|
| Item | Tidak pernah | Kadang-kadang | Kerap (dalam peratus) | Paling Kerap |
| 1. Saya selalu berasa kecewa. | 12.3 | 69.9 | 15.1 | 2.1 |
| 2. Saya rasa tertekan kerana jangkaan prestasi terlalu tinggi. | 17.8 | 58.2 | 21.2 | 2.1 |
| 3. Saya rasa bersalah kerana tidak mencapai apa yang dijangkakan. | 9.6 | 38.4 | 41.8 | 9.6 |
| 4. Saya rasa ibu bapa mengharapkan A sahaja. | 19.9 | 31.5 | 29.5 | 18.5 |
| 5. Saya sentiasa berasa letih dari segi fizikal. | 19.9 | 64.4 | 12.3 | 2.7 |
| 6. Saya sentiasa berasa letih dari segi mental. | 24.7 | 63.0 | 11.0 | 0.7 |
| 7. Saya sentiasa rasa cepat naik darah. | 19.2 | 63.7 | 12.3 | 4.1 |
| 8. Saya sering lupa walaupun untuk perkara biasa. | 6.8 | 69.9 | 19.2 | 2.7 |
| 9. Saya berasa gelisah apabila menunggu keputusan ujian KH. | 17.8 | 31.5 | 36.3 | 13.0 |
| 10. Saya rasa terganggu apabila melakukan sesuatu kerja KH dalam satu masa. | 11.6 | 42.5 | 28.1 | 17.1 |
| 11. Saya berasa gelisah apabila memikirkan apakah yang akan dilakukan seterusnya dalam KH. | 36.3 | 44.5 | 15.3 | 2.7 |

Peringatan: Peratus tidak menunjukkan 100% sebab “missing value”.

Rahil Hj. Mahyuddin, Zaidatol Akmaliah Lope Pihie & Noran Fauziah Yaacob
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JADUAL 2
Statistik deskriptif kerisauan untuk mempelajari komponen Kemahiran Hidup

<table>
<thead>
<tr>
<th>Komponen</th>
<th>Sangat risau</th>
<th>Risau</th>
<th>Tidak risau</th>
<th>Sangat tidak risau</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kemahiran Manipulatif</td>
<td>10.4%</td>
<td>56.9%</td>
<td>27.1%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Perdagangan &amp; Keusahawanan</td>
<td>23.4%</td>
<td>42.8%</td>
<td>29.0%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Ekonomi Rumah Tangga</td>
<td>4.8%</td>
<td>38.6%</td>
<td>44.1%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Kekeluargaan</td>
<td>4.1%</td>
<td>26.9%</td>
<td>53.1%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Sains Pertanian</td>
<td>0.7%</td>
<td>11.0%</td>
<td>42.1%</td>
<td>41.4%</td>
</tr>
</tbody>
</table>


Dalam mempelajari komponen Perdagangan dan Keusahawanan, kandungan silabus adalah luas. Aspek yang dipelajari termasuk asas perniagaan, simpan kira dan kemahiran keusahawanan yang banyak memerlukan kefahaman konsep dan fakta yang boleh mengelirukan pelajar, terutama bagi mereka yang pertama kali mengikuti komponen ini di sekolah dan juga di universiti.

Bagi komponen lain, apa yang dipelajari adalah berkaitan dengan pengalaman dalam kehidupan sehari-hari, seperti yang terdapat dalam komponen Kekeluargaan di mana perhubungan sesama insan, peningkatan kondisi, kesejahteraan keluarga dan keharmonian hidup bermasyarakat.

Responden juga ditanya tentang sebab-sebab mereka suka atau tidak suka mempelajari mata pelajaran Kemahiran Hidup. Kebanyakan responden (95%) memberi sebab yang kebanyakkannya berkaitan dengan perasaan risau. Faktor-faktor yang menyebabkan risau diutarakan dalam bahagian perbincangan berikut.

PERBINCANGAN


Mengikut Benjamin dan Walz (1987), apabila pelajar itu terlalu risau, ia menimbulkan keadaan stres. Antara yang ditekankan sebagai punca risau ialah kandungan kurus akademik. Dalam kajian ini, didapati bahawa komponen kursus Kemahiran Hidup yang menimbulkan kerisauan ialah Kemahiran Manipulatif dan diikuti dengan Perdagangan dan Keusahawanan,
Ekonomi Rumah Tangga, Sains Pertanian dan Kekeluargaan. Antara sebab pelajar sekolah risau ialah mereka tidak berminat (30%) dalam mata pelajaran Kemahiran Hidup terutama sekali dalam komponen Menjahit dan Pertukangan. Dua puluh lima peratus mendapati sukar mengikut pengajaran guru sebab cara penyampaian amat membosankan. Disebabkan sukar memahami pengajaran, terdapat 23% menyatakan mata pelajaran Kemahiran Hidup adalah sukar. Lapan belas peratus menyatakan terlalu banyak fakta yang harus diingati dan membosankan.

Sebab-sebab lain yang membuatkan mereka risau ialah ketidakupayaan mengingat apa yang dipelajari. Dapat ini adalah konsisten dengan datatan yang diutarakan oleh Jegede (1996). Sebab kerisauan yang lain termasuklah ketidaketeranganan emosi kerana persekitaran rumah yang bising, tidak cukup masa, tidak boleh menumpukan perhatian, lemah, tidak cukup tidur, kabur serta tidak menguasai kemahiran asas dalam mata pelajaran.

Bagi pelajar pendidikan guru pula, kerisauan dalam Kursus Kemahiran Hidup boleh dikaitkan dengan kurang pengetahuan asas dan juga dibebankan dengan ujian yang kerap dan ini membuatkan mereka merasa terlalu banyak bahan yang hendak dipelajari dan selalu berasa kurang yakin pada diri sendiri.

Walaupun begitu sebahagian kecil pelajar memberi maklum balas yang positif seperti mengatakan mata pelajaran/kursus Kemahiran Hidup adalah senang, menyenonokkan dan relevan dalam hidup sehari-hari. Mereka sukaan aspek praktikal sebab mencabar kreativiti mereka. Bagi pelajar pendidikan guru pula kursus universiti dapat membentuk keyakinan diri.

Walaupun begitu sebahagian kecil pelajar memberi maklum balas yang positif seperti mengatakan mata pelajaran/kursus Kemahiran Hidup adalah senang, menyenonokkan dan relevan dalam hidup sehari-hari. Mereka sukaan aspek praktikal sebab mencabar kreativiti mereka. Bagi pelajar pendidikan guru pula kursus universiti dapat membentuk keyakinan diri.

Walaupun begitu, kerisauan dan stres di kalangan pelajar ini mungkin berkesan. Oleh itu beberapa strategi untuk mengatasi stres ini harus difikirkan.

**CADANGAN**

Antara cadangan untuk mengurangkan stres dan kerisauan ialah:


c. Guru perlu membina kemahiran mendengar untuk meningkatkan pembicaraan, dengan mengadakan aktiviti untuk mengurangkan stres seperti menulis esei, membincangkan tentang isu yang berkaitan dengan perasaan dan perhubungan serta mengajar bagaimana memberi respons dengan tenang. Untuk tujuan itu, guru hendaklah lebih terbuka dengan memberi maklumat tentang apa yang dijanggakan. Guru juga perlu memberi maklumat balas tentang apa yang harus dilakukan untuk meningkat prestasi.

d. Mewujudkan inokulasi stres iaitu memberitahu pelajar terlebih dahulu tentang kesukaran yang mereka akan temui dan alami. Pelajar harus menguruskan kaunseling rakan sebaya dan mewujudkan kumpulan membantu diri sendiri untuk mempelajari Kemahiran Hidup.

e. Pihak Kementerian perlu merancang kurikulum Kemahiran Hidup yang lebih mantap, supaya wujud fleksibiliti dalam pemilihan komponen Kemahiran Hidup dan menentukan apa yang harus menjadi teras di sekolah tertentu. Daripada tujuh bidang komponen, pihak sekolah tentukan apakah bidang teras mengikut kemampuan sekolah. Pihak sekolah perlu menentukan kombinasi komponen yang lebih sesuai untuk pelajar mereka. Didandangkan adakan penilaian yang dibentuk oleh pihak sekolah dan bukan penilaian umum. Ini mungkin dapat mengurangkan stres. Sekolah perlu
mengadakan penilaian berterusan mengikut komponen Kemahiran Hidup yang spesifik supaya pelajar faham tentang iklim pengajaran-pembelajaran Kemahiran Hidup tersebut.


Dengan perancangan rapi strategi pengajaran-pembelajaran tersebut, pelajar mungkin boleh mempunyai perasaan yang mereka ada kawalan tentang pendidikan mereka sendiri.

**RUJUKAN**


Diterima: 14 Februari 2000
Stres di Kalangan Guru Wanita yang Mengajar Mata Pelajaran Kemahiran Hidup

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Keywords: Stres, Kemahiran Hidup, Sindrom Adaptasi Umum, analisis regresi

ABSTRAK

Satu kajian telah dijalankan ke atas guru wanita yang mengajar mata pelajaran Kemahiran Hidup dari daerah Hulu Langat, Selangor Darul Ehsan. Objektif kajian ialah (a) untuk menentukan tahap stres di kalangan guru-guru tersebut dan (b) untuk menerangkan stres dari dua pembolehubah bebas, iaitu beban kerja dan faktor pelajar. Data telah diperoleh melalui soal selidik yang telah dibentuk khas untuk mengukur stres, beban kerja dan faktor pelajar. Selain itu, melalui soalan terbuka, kajian ini juga cuba mendapatkan maklumat tentang faktor-faktor lain yang menyebabkan stres. Dapatan kajian menunjukkan 50% daripada responden berada dalam kategori tidak stres dan yang 50% lagi berada dalam keadaan stres. Apabila analisis regresi dibuat ke atas stres, didapati sebanyak 72 peratus daripada varian stres adalah disebabkan oleh kedua-dua faktor iaitu beban kerja dan pelajar. Dapatan kajian mempunyai beberapa implikasi tentang bagaimana hendak mengatasi stres di kalangan guru secara umum.

ABSTRACT

A study was conducted on women teachers from the Hulu Langat District, Selangor Darul Ehsan, who were teaching the Living Skills subject. The objectives of the study were a) to determine the stress level of the teachers and b) to explain stress in terms of the independent variables, work load and the student factor. Through the open ended questions, other factors that might cause stress were looked into. The findings showed that 50% of the respondents belonged to the non stress category while the other 50% were stressful. By utilizing the regression analysis, it was found that 72% of the variance was due to work load and the student factor. The results of this study had several implications on how to overcome stress in general among teachers.

PENGENALAN


Stres yang keterlaluan dinamakan Sindrom Adaptasi Umum (General Adaptation Syndrome) yang mempunyai tiga peringkat, iaitu reaksi kejutan (alarm reaction), ketahanan (resistance) dan keletihan (exhaustion). Petanda-petanda pada peringkat pertama adalah pertambahan kadardenyutan jantung dan pernafasan,
Noran Fauziah, Zaidatol Akmaliah Lope Pihie & Rahil Mahyuddin


Konsep stres telah digunakan dalam pelbagai bidang termasuklah sosologi, psikologi, perubatan dan pendidikan. Jika dilihat kepada penggunaan konsep stres yang meluas ini, maka tidak hairanlah sekiranya ia telah menghasilkan pelbagai definisi, teori dan model.


Stres dalam konteks kerja diaturkan sebagai respons penyesuaian kepada persekitaran yang disebabkan oleh perbezaan individu. Cara penyesuaian kepada persekitaran, situasi atau kejadian mungkin menimbulkan kesan psikologi atau fizikal secara berlebihan. Apabila wujud gejala stres tempat kerja, maka timbul beberapa gejala stres. Stres yang disebabkan oleh peristiwa yang positif dan “distress” ialah stres yang mengecewakan disebabkan oleh peristiwa yang negatif.


Antara faktor yang didapati berkaitan dengan stres di kalangan guru ialah tingkah laku pelajar, motivasi rendah di kalangan pelajar, beban kerja, konflik peranan, keadaan tempat kerja yang tidak sesuai, perhubungan staf yang kurang baik, pengurusan pentadbiran sekolah, kritikan daripada pihak luar dan perhubungan dengan ibu bapa.


Petanda stres dapat dilihat secara psikologi seperti mudah marah, risau, mudah kecewa dan tidak boleh memberi tumpuan. Ia juga dapat dilihat secara fizikal seperti sakit kepala, sakit belakang, susah tidur dan darah tinggi.

Sejak Kurikulum Bersepadu Sekolah Menengah dilaksanakan di Malaysia pada tahun 1988, beberapa mata pelajaran baru turut diperkenalkan. Salah satu mata pelajaran tersebut ialah Kemahiran Hidup (KH). Mata pelajaran KH adalah satu mata pelajaran pravokasional yang digubal bagi membantu pelajar yang tidak mempunyai dasar keahlian dalam pelajaran Seni Perusahaan, Perdagangan dan Keusahawanan, Sains Rumah Tangga dan Sains Pertanian di peringkat sekolah menengah.
Stres di Kalangan Guru Wanita yang Mengajar Mata Pelajaran Kemahiran Hidup

Bidang pilihan pula terdapat tiga komponen, iaitu Kemahiran Manipulatif Tambahan, Ekonomi Rumah Tangga dan Sains Pertanian. Bahagian terpisah wajib dipelajari oleh semua murid, manakala bahagian pilihan murid hanya dikehendaki memilih satu daripada tiga pilihan.

Pengkhususan guru KH yang berbeza dan kemudian diminta mengajar empat bidang yang berlakuan secara serentak mungkin menyumbang kepada stres kerja mereka. Persoalan yang wujud, adakah guru KH di peringkat sekolah menengah di Kawasan Hulu Langat merasa stres dengan kerja mereka? Kepastian jawapan terhadap persoalan ini sangat diperlukan bagi membolehkan usaha memperbaiki keadaan dan kualiti pekerjaan dan seterusnya membantu mengurangkan stres guru KH dalam usaha mencapai kesejahteraan diri mereka.

Objektif kajian ini ialah untuk menentukan tahap stres di kalangan guru Kemahiran Hidup yang mengajar di sekolah-sekolah menengah daerah Hulu Langat, Selangor. Selain itu, kajian ini juga cuba menerangkan stres guru KH dalam usaha mencapai kesejahteraan diri mereka.

KAEDAH

Kajian ini berbentuk tinjauan deskriptif yang bertujuan menerangkan stres dan kerisauan di kalangan guru wanita yang mengajar mata pelajaran KH. Subjek kajian terdiri daripada 47 guru wanita yang mengajar di sekolah-sekolah menengah daerah Hulu Langat, Selangor. Selain itu, kajian ini juga cuba menerangkan stres guru KH dalam usaha mencapai kesejahteraan diri mereka.

Instrumentasi


DAPATAN

Profil Responden

Subjek kajian terdiri daripada 47 orang guru wanita yang mengajar KH di lapan buah sekolah di sekitar daerah Hulu Langat, Selangor. Dari segi usia, mereka berada dalam laluan umur 23 hingga 46 tahun, dengan min umur 32.74 tahun. Majoriti (59.6% atau 27 orang) berada dalam kategori umur antara 30 hingga 39 tahun, 29.8% atau 14 orang berumur kurang daripada 30 tahun dan lima orang berumur lebih daripada 40 tahun. Majoriti (70%) daripada mereka adalah guru siswazah dan daripada jumlah tersebut enam orang adalah lepasan luar negeri, iaitu dari USA, Kanada, Australia dan New Zealand. Majoriti responden (75%) mengajar Tingkatan Satu, Dua dan Tiga.

Beban Kerja

Seperti yang telah dinyatakan, beberapa item telah digunakan untuk mengukur beban kerja guru KH. Nilai kebolehpercayaan bagi item-item yang mengukur beban kerja adalah 0.81. Taburan kekerapan bagi pemboleh ubah ini adalah antara 5 hingga 20, dengan skor min sebanyak 10.29, yang berada dalam kategori beban sederhana dan sisihan piawai sebanyak 3.59. Berdasarkan kriteria pemilihan skor, 44.7% daripada responden berada dalam kategori beban sederhana dan 34.7% dalam kategori beban sederhana. Lima orang responden (10.6%) tergolong dalam kategori beban yang berat.

Faktor Pelajar

Beberapa item telah digunakan untuk mengukur faktor pelajar. Nilai kebolehpercayaan item-item tersebut dengan menggunakan Cronbach alpha adalah 0.72. Taburan kekerapan bagi Pertanika J. Soc. Sci. & Hum. Vol. 9 No. 2 2001 97
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pemboleh ubah ini adalah antara 3 hingga 9, dengan skor min sebanyak 5.04 dan sisihan piawai 1.81. Berdasarkan kriteria pemberian skor, 63.8% daripada responden merasakan faktor pelajar tidak mendatangkan stres manakala 36.2% lagi merasakan sebaliknya. Berdasarkan kriteria pemberian skor, skor yang rendah menandakan kurang stres, manakala skor yang tinggi mencadangkan sebaliknya.

Taburan kekerapan kepada 14 item stres adalah antara 15 hingga 43, skor min sebanyak 24.36 dan sisihan piawai sebanyak 7.05. Berdasarkan kriteria pemberian skor, skor min berada dalam kategori stres sederhana. Selain itu, dapatkan kajian menunjukkan 51.1% guru berada dalam kategori stres rendah, 29.6% dalam kategori stres sederhana dan 19.3% (9 orang) dalam kategori stres tinggi. Jadual 1 menunjukkan taburan respons bagi item-item stres dan Jadual 2 menunjukkan statistik deskriptif bagi tiga pemboleh ubah utama dalam kajian ini, iaitu stres, beban kerja dan faktor pelajar. Apabila dilihat kepada respons terhadap setiap item bagi mengukur stres, terdapat pola tentang keadaan guru KH dalam kajian ini. Pertama, sebilangan besar (72.3%) daripada mereka tidak merasa terasing mengajar KH; kedua, hampir dua-pertiga daripada mereka masih berminat mengajar KH dan peratusan yang sama juga menunjukkan guru KH tidak merasa kekosongan emosi selepas mengajar KH. Dapatan seperti ini menggambarkan keadaan yang positif. Akan tetapi, lebih daripada satu perempat responden (29.8%) kadang-kadang merasa penat secara emosi bila mengajar KH. Peratusan yang sama juga (25%) menunjukkan guru kadang-kadang merasa tercabar mendapati pelajar pintar dalam kelas mereka dan kira-kira 23% pula kadang-kadang merasa stres kerana mengajar KH dan merasakan mengajar KH menghabiskan tenaga emosi mereka.

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Tidak Pernah</th>
<th>Jarang</th>
<th>Kadang-kadang</th>
<th>Selalu</th>
<th>Sangat Kerap</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Saya berasa kecewa mengajar KH</td>
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<td>17.0</td>
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<td>43.0</td>
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<tr>
<td>2.</td>
<td>Saya sudah tidak bermindaan mengajar KH</td>
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<td>14.9</td>
<td>2.1</td>
<td>0.00</td>
</tr>
<tr>
<td>3.</td>
<td>Saya rasa tercabar jika saya dpati pelajar saya seorang yang pintar</td>
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<td>27.7</td>
<td>25.5</td>
<td>43.0</td>
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<td>4.</td>
<td>Saya rasa terasing apabila mengajar KH</td>
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<td>2.1</td>
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<td>Hidup saya amat stres kerana mengajar KH</td>
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<td>6.</td>
<td>Saya tidak dapat tangan tekanan emosi mengajar KH</td>
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<td>0.00</td>
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<td>8.</td>
<td>Ingat tentang mengajar KH, saya merasa lelah</td>
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<td>Saya berasa kerja saya amat memenatkan secara emosi</td>
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<td>Saya sukar menerima teguran kerana saya seorang yang sensitif</td>
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<td>19.1</td>
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<td>0.00</td>
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<tr>
<td>11.</td>
<td>Jika saya tidak asingkan diri saya dari mengajar KH, saya akan meletup</td>
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<tr>
<td>12.</td>
<td>Saya tidak kisah lagi tentang kualiti kerja mengajar KH</td>
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<td>13.</td>
<td>Secara umum saya rasa penat mengajar KH</td>
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<td>21.3</td>
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<tr>
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<td>Mengajar KH menghabiskan tenaga emosi saya.</td>
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<td>44.7</td>
<td>23.4</td>
<td>6.4</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Stres di Kalangan Guru Wanita yang Mengajar Mata Pelajaran Kemahiran Hidup

Analisis korelasi telah dilakukan ke atas skor stres secara keseluruhan dengan skor beban kerja dan faktor pelajar. Keputusan analisis menunjukkan terdapat korelasi yang positif dan signifikan bagi kedua-dua pembolehubah utama bebas untuk menerangkan stres, $r = 0.70$ bagi beban kerja dan $r = 0.57$ bagi faktor pelajar. Seterusnya, analisis regresi telah dijalankan untuk menerangkan stres dari segi beban kerja dan faktor pelajar secara serentak. Keputusan regresi linear memberi nilai R Ganda Terselaras sebanyak 0.72, mencadangkan bahawa 72% daripada varians dalam skor stres adalah disebabkan oleh beban kerja dan faktor pelajar. Apabila regresi 'stepwise' digunakan, didapati 68% daripada varians skor stres adalah disebabkan oleh faktor pelajar dan yang baki 9% disebabkan oleh beban kerja (Jadual 3).

Cadangan Bagaimana Mengurangkan Stres

Responden yang menyatakan mereka stres juga memberi cadangan bagaimana mengurangkan stres. Cadangan positif lagi profesional adalah mengadakan kursus tentang bagaimana hendak menggunakan alat elektrik dan elektronik. Selain itu, terdapat juga cadangan supaya diadakan jawatan Pembantu Makmal yang masih tentunya dapat membantu guru dari segi persediaan pengajaran. Guru juga merasakan perlunya mengikuti kursus dalam perkhidmatan dari segi kemahiran mengajar supaya mereka lebih yakin berhadapan dengan kelas. Bagi mereka yang mengatakan mempunyai beban kerja yang berat, cadangannya ialah supaya waktu mengajar dikurangkan, ataupun dikurangkan beban tugas yang lain. Terdapat juga cadangan supaya komponen yang sedia ada dalam KH dikurangkan. Ini memberi implikasi sama ada guru kurang mampu untuk mengajar semua komponen dalam mata pelajaran KH ataupun terlalu banyak isi kandungan yang perlu diajar dalam masa yang ditetapkan. Akhir sekali ialah cadangan supaya pelajar lelaki diajar oleh guru lelaki. Cadangan yang terakhir ini membayangkan kegagalan guru wanita untuk mengawal pelajar lelaki dalam kelas KH.

Komponen yang Menyebabkan Stres

Memandangkan KH merangkumi lima komponen yang berbeza-beza, iaitu ekonomi rumah tangga, sains pertanian, kemahiran manipulatif, kekeluargaan, serta perdagangan dan keusahawanan, maka adalah dijangkakan guru akan menghadapi kesukaran tentang mana-mana satu daripada komponen tersebut. Keputusan kajian menunjukkan sepuluh daripada responden menghadapi masalah dalam komponen kemahiran manipulatif, diikuti oleh perdagangan dan keusahawanan.
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Implikasi seterusnya daripada dapatan kajian ini ialah perlunya dimasukkan ke dalam kurikulum pendidikan pergunuran tentang bagaimana cara mengatasi stres. Dengan cara ini, bakal guru akan dapat mengenal pasti petanda-petanda yang menimbulkan stres dan juga boleh menangani stres melalui beberapa teknik seperti senaman, mendengar muzik klasik ataupun belajar bagaimana hendak mengurus masa dengan efektif.

Pelajar lelaki pada peringkat awal remaja lebih memerlukan guru lelaki untuk mengajar mereka kerana guru lelaki akan menjadi model yang baik bagi perkembangan psikologi mereka. Terdapat beberapa guru perempuan yang mengakui kegagalan mereka mendisiplin pelajar lelaki, terutama di kalangan guru muda. Mereka berpendapat pelajar lelaki patut diajar oleh guru lelaki. Dapatan ini mempunyai implikasi tentang perlunya guru untuk memperoleh dan mempertingkat kemahiran dalam mendisiplin dan memotivasi pelajar.

Dapatan kajian juga menunjukkan ada guru yang mengajar KH tidak mengkhusus dalam manu-mana komponen KH semasa dalam latihan pergunuran mereka. Terdapat beberapa guru perempuan yang mengakui kegagalan mereka mendisiplin pelajar lelaki, terutama di kalangan guru muda. Mereka berpendapat pelajar lelaki patut diajar oleh guru lelaki. Dapatan ini mempunyai implikasi tentang pelajaran guru untuk memperoleh dan mempertingkat kemahiran dalam mendisiplin dan memotivasi pelajar.

Dapatan kajian juga menunjukkan ada guru yang mengajar KH tidak mengkhusus dalam manu-mana komponen KH semasa dalam latihan pergunuran mereka. Pertama ini tidaklah memerlukan kerana guru-guru ini sudah pasti merasa kurang akan atau kurang keberkesanan kendiri disebabkan terpaksa mengajar KH. Gejala guru yang mengkhusus dalam satu mata pelajaran seolah tetapi semula mengajar mata pelajaran lain bukanlah perbua baru. Kadangkala pengetua terpaksa mengambil keputusan dan mengambil keputusan untuk mengkhusus dalam mengajar KH. Gejala guru yang mengkhusus dalam satu mata pelajaran seolah tetapi semula mengajar mata pelajaran lain bukanlah perkara baru. Kadangkala pengetua terpaksa mengambil keputusan untuk mengkhusus dalam mengajar KH.

Guru juga ada menyatakan mereka tidak mempunyai masa yang mencukupi untuk membuat persediaan mengajar KH. Ini disebabkan mereka juga mempunyai beban tugas yang lain. Memandangkan guru terpaksa membuat banyak persediaan untuk kelas amali, implikasinya di sini ialah mereka perluakan seorang pembantu untuk menolong mereka menyediakan peralatan di makmal. Kajian yang dibuat oleh Noran Fauziah, Habibah Elias dan Soong Ling Ling (1997) tentang kepuasan kerja guru KH di negeri Selangor juga mendapat cadangan yang sama daripada mereka.


Satu hakikat yang perlu dihadihapi ialah perasaan stres yang tinggi di kalangan guru akan menyebabkan mereka merasa 'cynical' dan tidak akan memberi tumpuan yang sepenuhnya kepada pelajar dan pengajaran mereka. Pada tahap yang lebih serius lagi ialah mereka akan mengambil keputusan untuk meninggalkan profesi pergunuran. Dari perspektif kesan stres kepada kesihatan psikologi, ia memberi banyak kesan negatif seperti tekanan darah tinggi atau lupa daya ingatan. Sebagai kesimpulan, bolehlah dikatakan bahawa stres adalah isu yang sangat relevan di kalangan para pendidik, pendidik guru dan pihak pengurusan dalam organisasi pendidikan.

**RUJUKAN**


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Privatizing the Rehabilitation of Idle Agriculture Land in Malaysia:
Feedback from the Malay Folks

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Keywords: Extent and causes of idle land, rural Malays’ powerlessness, performance of government agencies in developing idle land, rationale for policy shift, privatization of rehabilitation of idle land

INTRODUCTION

Idle agricultural land was a Malaysian phenomenon in the 1980s. It still is. At the height of the official awareness of its prevalence in the late 1970s and early 1980s the Task Force for the Rehabilitation of Idle Land established by the Ministry of Agriculture in 1980 estimated that 880,000 hectares (2.2 million acres) of agricultural land in the country had been left idle or abandoned (see Sahak 1987; Chamhuri 1988). This represented some 20 per cent of all land allocated for agriculture in Peninsular Malaysia. Although by the middle of 1988, the Deputy Prime Minister was reported to have had put the latest figures on idle agricultural land at one half of those of 1981 (Mingguan Malaysia 25 September 1988) it needs little convincing that one million acres, by any standard of resource utilization, were still a staggering amount of waste.

Revised government estimates reduced the national totals from 1.55 million hectares in 1980 to 725,000 hectares in 1986 (National Agricultural Policy 1986) to reflect successful subsequent attempts at rehabilitation. However, more radical figures - such as the 3 million hectares estimated in 1995 by the director-general of Forest Research Institute of Malaysia (New Straits Times 3 January 1995) - should not be regarded as unrealistic. For not only is this more in tune with the current pace of development and the rapidity of agricultural land conversion to other uses that it implies, but also with the fact that parcels of rehabilitated
idle land are prone to be abandoned time and again (Amriah et al. 1988-1990).

The most recent estimate of idle land in the country is the figure of 300,000 hectares stated by the current Minister of Agriculture in June 2000 (Utusan Express 26-06-2000). This is 25 per cent less than the 400,000 hectares declared by his Ministry in February 1999 (Third National Agricultural Policy (1998-2010) 1999, p.9). Such discrepancy, does not, however, necessarily mean that the country has been successful in reducing the extent of its idle agriculture land by rehabilitating it. For example, in Malacca alone, and as recent as October 1999, out of a total of 9,000 ha of padi land in the state, only 760 ha are still under cultivation while the rest of 8240 ha or 91.6 per cent of the total padi land still remain idle (Utusan Express 18-10-1999).

Furthermore, as of January 2000, there is still some 1.5 million hectares of idle land in Sarawak, an area bigger than any state in the Peninsula (Utusan Express 11-1-2000). If this figure of 1.5 million ha for Sarawak is true, then the figure of 400,000 ha for the whole country published in the Third National Agricultural Policy (1998-2010) is false as is the figure of 300,000 ha for the whole nation quoted in June 2000 by the press above.

In other words, very little progress has been achieved in the way of rehabilitating idle agriculture land in Malaysia despite the bitter lesson learned of the importance of agriculture in general, and of food production in particular, since the regional economic crisis three years ago (1997).

Several factors have been identified as the causes of Malay idle agricultural land, namely: (1) unfavourable physical attributes including climate, topography, soil type, water supply and accessibility; (2) lack of technical know-how; (3) constraining economic and social conditions such as uneconomic size of holdings, severe shortage of manpower and machinery, costly inputs, uncertain market prospects and unequal competition from the non-agricultural and urban-based sectors; and (4) negative attitudes and behaviour on the part of the farming folks, such as distrusts, disputes and lack of cooperation among land owners (Amriah et al. 1988-1990).

The interplay of these factors are still evident since recent data clearly demonstrate that not only idle agriculture land still prevails in the midst of Malaysia’s development but also that it persists. Table 1 shows that government sponsored rehabilitation efforts hitherto only managed to reduce the extent of idle land in the Peninsula by 24.2 per cent in a span of 6 years (1980-1986). This is equivalent to an achievement rate of 4 per cent per year. More disappointing is the fact that the rejuvenation performance in a later year can be worse than a previous year. For example, the extent of the Peninsulais idle land in 1987 has increased by 15.4 per cent from that of 1986. This renders the rejuvenation achievement for the1980-1987 period even smaller, namely, 10.5 per cent in 7 years or 1.5 per cent per year. Obviously, these are not achievement rates that the nation can be proud of, especially, considering the substantial resources – monetary and non-monetary – that have been invested in the rehabilitation efforts.

The meagerness of the rejuvenation achievement and the persistency of the phenomenon prompt us to ask again the very same question that has been asked all this while: Do Malays really condone the act of neglecting agriculture land that they possess?

Such questioning is pertinent since previous experiences did indicate that owning land was more important to the Malays than the viability of cultivating it. For instance, a Malay heir would still insist on inheriting a piece of land as minute as 0.28 sq. metres or 3 square feet (Malayan Land Administration Commission 1958; Wilson 1958; Census of Agriculture 1960; Maxwell 1884; Debs 1962, Ramachandran 1979; Carlson 1971, Shukor et al. 1984; Wan Hashim 1988; Sahak Mamat 1987; Amriah et al 1988-91). Analysts attribute this insistence to non-productive motives such as social prestige (Wilson 1958; Syed Husin Ali 1975), loan collateral for consumption purposes, (Majlis 19 July 1934) and speculation (Majalah Guru, June 1929). Thus, because the real motive in owning land was not to cultivate it productively it should only come as a little surprise when, typically, the Malays’ land were not tended properly (Ahmad Nazri 1985 for further evidence on such state of affair of the Malay agriculture land).

Situations have, of course, changed now. During the colonial days Malays must insist on owning land because, given the typical political-economic scenario which seldom favoured them then, that served as an only tangible source of benefit – economic and non-economic- for him and family. Now, in post-independence Malaysia,
### TABLE 1

Performance of rehabilitation efforts as reflected in the state of idle land hectarage in Malaysia for selected years

<table>
<thead>
<tr>
<th></th>
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<td>132,355.6</td>
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<td>2,005,700</td>
<td>309,100</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>309,100</td>
<td>n.a</td>
</tr>
<tr>
<td>SARAWAK</td>
<td>837,000</td>
<td>513,200</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>573,200</td>
<td>n.a</td>
</tr>
<tr>
<td>MALAYSIA</td>
<td>5,950,200</td>
<td>1,552,200</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>3,000,000</td>
<td>n.a</td>
</tr>
</tbody>
</table>

**Notes:**
5. Assuming there was no change from 1980.
the Malays may avail themselves of more than one resource to make a better life for them and their families. For instance, as rural citizens they now are supposedly served by not less than twelve formal institutions which all carry the common mission of making them successful farmers. The question is why are their land still idle?

This paper aims at uncovering what lies behind the Malays' attitude of seemingly condoning the idling of their agriculture land even when privatization as a more realistic means of developing it may be resorted to.

DATA AND METHODOLOGY
To achieve its purpose, this paper refers to the following sources of empirical data:

(1) A study on the planning and implementation of idle land development programmes in Peninsular Malaysia, 1988-91. This research which was funded under the IRPA mechanism was conducted by the author and her colleagues Asmah Ahmad, Abd. Rahim Md. Nor dan Mohd. Fuad Mat Jali. At the end of its course, this study has involved a total of 9790 Malay farmers from all eleven states of the Peninsula as respondents. They were adults ranging from 40 to 65 years of age who functioned as heads of households.

(2) A study on the perception of the Malay rural community of the privatization of idle land rejuvenation efforts, 1994. This study was conducted by the author with the assistance of honours year students doing her Agricultural Geography course. It was conducted on 22 villages in the states of Johor, Kedah, Kelantan, Negeri Sembilan, Perak, Perlis, Pulau Pinang and Selangor. A total of 800 respondents were interviewed. They comprised heads of households, ranging from 40 - 70 years of age.


RESULTS AND ANALYSIS
Contradictory Perceptions

The studies reveal that no rural Malays were willing to advocate that their idle agriculture land be left idle. This is why when confronted with the question as to whether they perceived idle agriculture land as a problem the majority of them answered in the affirmative. They gave the impression that idle agriculture land is a major problem (Table 2) that must be resolved (Table 3). In fact, even those who did not perceive it as a problem stressed that it must be cultivated.

This is rather different from Malays in the olden time who did not view negatively those parcels of land which, because they were uncultivated and abandoned, reverted to jungle. For instance, according to the Minangkabau Code (Maxwell 1884:172) it was customary, even religious, not to fret over idle land:

... jika ladang tinggal didapati maka ditebas orang, ditebangnya kayu kayannya kemudian maka pulanglah kepada rimbaanya sekali-kali jangan engkau perbantahkan oleh tuan-tuan sekelian kerana tanah pulanglah ke rimbaanya, sekali-kali jangan engkau perbantahkan oleh tuan-tuan padang itu pulanglah kepada Allah dan janganlah diperbantahkan yang demikian itu habitat antan kita adat.

Thus, based on the above, it is quite clear that today's Malays have a more positive attitude towards land utilization. This positiveness, however, does not necessarily mean that Malays are willing to surrender their idle land which they are unable to rehabilitate back to the government. Even though the majority of them were aware of the fact that the Islamic teaching is opposed to the condoning of idle land (the Quran: 6:99), many of them objected to

<table>
<thead>
<tr>
<th>Question</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is it true that idle agriculture land is not a problem?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>True</td>
<td>128</td>
<td>16.0</td>
</tr>
<tr>
<td>Not true</td>
<td>643</td>
<td>80.4</td>
</tr>
<tr>
<td>Unsure</td>
<td>39</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>800</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 1994
Privatizing the Rehabilitation of Idle Agriculture Land in Malaysia: Feedback from the Malay Folks

TABLE 3
The Malays’ perception of the desirability of resolving the problem of idle agriculture land

<table>
<thead>
<tr>
<th>Question</th>
<th>Answers</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is it necessary to solve the idle agriculture land problem?</td>
<td>Necessary</td>
<td>794</td>
<td>91.7</td>
</tr>
<tr>
<td></td>
<td>Not necessary</td>
<td>34</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>32</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>800</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 1994

returning their idle land to the legitimate authorities in order to avoid wasting the valuable land resource, although such move is more in line with the spirit of the Islamic teaching. This can be seen from the comparison of Table 4 with Table 5. In Table 4, the number of respondents who were aware of the Islamic prohibition against wasting land totals up to 92 per cent, but this percentage goes down drastically to 55 per cent in Table 5 to denote those who agreed to the giving up of such idle land so that they can be rehabilitated by the authorities or other relevant parties. Now this seems like a contradiction in the attitude of the Malays towards land. They said that land should not be left idle but they were reluctant to pave the way for idle land to be rehabilitable.

The Preferred Rescuers

Most of the Malay farmers interviewed were of the opinion that they should no longer be expected to rejuvenate idle agriculture land in their localities. This is because they lacked both the physical strength to carry out the arduous job themselves and the capital either to hire labour or to pay for farm mechanization instead. Labour shortage has been a nagging problem in Malaysia’s countryside for decades now. It was one vital reason hindering Malay farmers and landowners from rejuvenating their idle land and when they, too, could not afford to pay for farm machines and other inputs that rejuvenation entails, rehabilitating their idle land was simply out of question.

Quite often past encounters with failure prevented them subsequently from trying again. Studies show that parcels of idle padi land which were successfully rejuvenated the first time tended to become idle again for a variety of reasons. One was the absence of subsidies for subsequent rejuvenation efforts. The other was the incurrance of losses due to poor pest management. Alternatively, in the case of rejuvenation projects which involved cash crops, the first success was almost always hard to repeat either because government assistance in marketing the produce was withdrawn or that coordination was so hopeless that incomes from subsequent rejuvenation projects were much reduced (Amriah et al. 1988-91). Bitter

TABLE 5
The Malays’ perception of the implementation of the Islamic view on idling agriculture land

<table>
<thead>
<tr>
<th>Question</th>
<th>Answers</th>
<th>Agree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you agree that in line with the Islamic prohibition of idle land the government should repossess the Malay’s idle agriculture land?</td>
<td>States</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>Total</td>
<td>%</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>------------------</td>
<td>-------</td>
<td>----------------</td>
<td>--------</td>
<td>---------</td>
<td>------</td>
<td>---------</td>
<td>------</td>
<td>---------</td>
<td>------</td>
<td>---------</td>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>Johor</td>
<td>372</td>
<td>54.1</td>
<td>314</td>
<td>45.7</td>
<td>1</td>
<td>0.2</td>
<td>687</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kedah</td>
<td>676</td>
<td>62.0</td>
<td>383</td>
<td>35.1</td>
<td>31</td>
<td>2.9</td>
<td>1090</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kelantan</td>
<td>425</td>
<td>36.2</td>
<td>732</td>
<td>62.5</td>
<td>15</td>
<td>1.3</td>
<td>1172</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melaka</td>
<td>478</td>
<td>56.2</td>
<td>358</td>
<td>42.1</td>
<td>15</td>
<td>1.7</td>
<td>851</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negeri Sembilan</td>
<td>570</td>
<td>43.8</td>
<td>458</td>
<td>54.3</td>
<td>16</td>
<td>1.9</td>
<td>844</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pahang</td>
<td>423</td>
<td>44.4</td>
<td>529</td>
<td>55.6</td>
<td>0</td>
<td>0.0</td>
<td>952</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perlak</td>
<td>506</td>
<td>50.6</td>
<td>482</td>
<td>48.2</td>
<td>12</td>
<td>1.2</td>
<td>1000</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perlis</td>
<td>168</td>
<td>57.5</td>
<td>104</td>
<td>35.6</td>
<td>20</td>
<td>6.9</td>
<td>292</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulau Pinang</td>
<td>248</td>
<td>57.3</td>
<td>234</td>
<td>48.4</td>
<td>1</td>
<td>0.3</td>
<td>483</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selangor</td>
<td>825</td>
<td>67.4</td>
<td>380</td>
<td>31.1</td>
<td>18</td>
<td>1.5</td>
<td>1223</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terengganu</td>
<td>879</td>
<td>73.5</td>
<td>283</td>
<td>23.7</td>
<td>34</td>
<td>2.8</td>
<td>1196</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5370</strong></td>
<td><strong>54.8</strong></td>
<td><strong>4255</strong></td>
<td><strong>48.5</strong></td>
<td><strong>163</strong></td>
<td><strong>1.7</strong></td>
<td><strong>9790</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
experiences and painful memories like these underline the Malay farmers' reluctance to ever again take risks with new rejuvenation projects. As such, they expect the government to lead back subsequent rejuvenation projects. To start the rejuvenation ball rolling the government is expected to extend fund and subsidise inputs. Ideally, the government should supervise and coordinate all group rejuvenation projects. As usual, the government must also provide extension services, infrastructural facilities such as irrigation, farm machineries, technical know-how in production, processing and marketing intelligence. The government should also start doing something dramatic to motivate local youths to join the rejuvenation projects (Table 6).

The question is would the government be willing to shoulder back the burden of leading idle land rejuvenation? Is this re-engagement justifiable?

Previously, the government had initiated rejuvenation efforts through its three main agencies: the Ministry of Agriculture, the Federal Land Consolidation and Rehabilitation Authority (FELCRA) and the Rubber Industry Smallholder Development Authority (RISDA). Under the purview of the Agriculture Ministry, agencies which were directly involved with rejuvenation of idle padi land were the Department of Agriculture, the Integrated Agricultural Development Programme (IADP), the Farmers Organization Authority (FOA) and the Area Farmers Organization (AFO). All of these agencies were responsible for initiating rejuvenation projects, extending credits and subsidies, enhancing infrastructural facilities, disseminate marketing information and rationalise alternative production strategies ranging from individual to group farming, mini-estate and corporatisation.

FELCRA rehabilitated idle land through a two-pronged approach of consolidation and direct rehabilitation. Under the consolidation approach fragmented parcels of land were consolidated so that their sizes become economic to be jointly rejuvenated. In this strategy share schemes and taking over abandoned agriculture

### TABLE 6

The Malays' perception of the government role in the development of idle agriculture land

<table>
<thead>
<tr>
<th>Question</th>
<th>What do you think that the government should do with the Malays' land which are lying idle now?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answers</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Give capital subsidies so that owners can rejuvenate their idle agriculture land</td>
</tr>
<tr>
<td>2</td>
<td>Assist with technical know-how so that owners can rejuvenate their idle agriculture land</td>
</tr>
<tr>
<td>3</td>
<td>Bring in entrepreneurs who can rejuvenate the idling land</td>
</tr>
<tr>
<td>4</td>
<td>Launch campaigns to induce local youths to rejuvenate the idling land with government aids</td>
</tr>
<tr>
<td>5</td>
<td>Repossess the idling land and give it to those who want to cultivate it</td>
</tr>
<tr>
<td>6</td>
<td>Issue land titles to those who had previously tended the idling land</td>
</tr>
<tr>
<td>7</td>
<td>Improve existing irrigation and other infrastructural facilities so that idling land can be rehabilitated</td>
</tr>
<tr>
<td>8</td>
<td>Lease out locals' idling land and rejuvenate it</td>
</tr>
<tr>
<td>9</td>
<td>Give extension services to local owners of idle land so that they can rejuvenate it</td>
</tr>
<tr>
<td>10</td>
<td>Government rejuvenates idling land (e.g. by initiating group rejuvenation projects)</td>
</tr>
<tr>
<td>11</td>
<td>Change the land titles</td>
</tr>
<tr>
<td>12</td>
<td>Force land owners to rejuvenate their idling land but give them aids to do so</td>
</tr>
<tr>
<td>13</td>
<td>Force land owners to rejuvenate their idling land and penalise those who defy</td>
</tr>
<tr>
<td>14</td>
<td>Change the land title conditions so that different crops can be grown</td>
</tr>
<tr>
<td>15</td>
<td>Develop idle land as FELCRA had done</td>
</tr>
<tr>
<td>16</td>
<td>Guarantee market for farm produce</td>
</tr>
<tr>
<td>17</td>
<td>Form idle land rejuvenation co-operatives</td>
</tr>
<tr>
<td>18</td>
<td>Don't know / uncertain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>221</td>
<td>27.6</td>
</tr>
<tr>
<td>71</td>
<td>8.9</td>
</tr>
<tr>
<td>13</td>
<td>1.6</td>
</tr>
<tr>
<td>107</td>
<td>13.4</td>
</tr>
<tr>
<td>25</td>
<td>3.1</td>
</tr>
<tr>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
<td>73</td>
<td>9.1</td>
</tr>
<tr>
<td>8</td>
<td>1.0</td>
</tr>
<tr>
<td>92</td>
<td>11.5</td>
</tr>
<tr>
<td>109</td>
<td>13.6</td>
</tr>
<tr>
<td>6</td>
<td>0.8</td>
</tr>
<tr>
<td>19</td>
<td>2.4</td>
</tr>
<tr>
<td>2</td>
<td>0.2</td>
</tr>
<tr>
<td>11</td>
<td>1.4</td>
</tr>
<tr>
<td>15</td>
<td>1.9</td>
</tr>
<tr>
<td>7</td>
<td>0.9</td>
</tr>
<tr>
<td>15</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Total: 800 100.0

Source: Fieldwork, 1994
land were the chief instruments of implementation. Under the rejuvenation approach co-operative or group farming were the chief modes of rejuvenation although individual farmers could still opt to embark on rejuvenation personally but with FELCRA's managerial assistance.

RISDA also adopted a two-pronged strategy to rehabilitate smallholders' idle rubber holdings. The first was in-situ group development whereby idle rubber holdings were rehabilitated collectively. The second was the mini-estate mode whereby old rubber holdings were consolidated, replanted and collectively managed after the plantation fashion.

The performance of all these rejuvenation strategies has been far from satisfactory if the rehabilitation rate of 1.5 per cent per year as reflected in Table 1 above is the yardstick. Several inter-twining factors conspired to hamper a better performance of the rejuvenation programmes including, of course, unhelpful attitudes on the part of the Malay folks themselves. The latter, however, were not the real reason why the government decided to pull out from leading idle land rehabilitation. The real reason had a lot to do with economic and business calculations which were quite far removed from the consciousness and comprehension of the Malay folks themselves.

For instance, with respect to the rejuvenation of idle padi land, the government decided to limit assistance to the rice bowl areas. This was in line with the government policy of limiting domestic rice production to only 65 per cent of the national self sufficiency level, a decision that the government made based on the shrewd economic rationale that Malaysia was a high cost rice producer (Business Times 2 February, 1993). This was the government way of reducing the burden of input and price subsidies of domestic padi production which have, it was thought, reached ridiculous levels. Fertiliser subsidies had increased from 10 per cent in 1965 to 100 per cent in 1990 and price subsidies had jumped from RM16.50 per 100 kg in 1984 to RM27.50 per 100 kg in 1990 (Sivalingam 1993).

Furthermore, the government had not been very happy with the costs of the FELCRA's rejuvenation projects. For instance, out of the total of RM136 million spent by the agency to develop land in 1985, only 48 per cent really went into helping participant farmers; the remainder was spent on infrastructural development, management apparatus and staff emoluments (this latter item alone formed 24 per cent of the total expenditure). This means that for every ringgit spent on a land rehabilitation programme a participant farmer had only to repay 48 sens (Sivalingam 1993). In other words, to extend a loan of RM1 to help rejuvenating idle farm land, the government had to spend an additional amount of 52 sens. Viewed this way, the FELCRA mode of rehabilitation was very costly indeed.

As to the RISDA's, the government was rethinking the justification for the various subsidies that the agency extended under its mini-estatisation programmes. Among the subsidies reviewed were replanting and subsistence loans extended to participating smallholders while waiting for the trees to mature. All of these loans incurred extremely low interest rates. Meanwhile all operational costs were borne by the government, including staff emoluments and charges for extension services, technical advice and the like (Horii 1991). What was even more apprehensive about the RISDA method was that after incurring such a vast expenditure for replanting rubber holdings, the participating smallholders' role was little more than that of menial labourers while the management still recruited more managerial and supervisory personnel (Mid-Term Review of the Fifth Malaysia Plan).

That the government was very serious about disengaging itself from leading the development of Malaysia's agricultural sector may be gauged from the 1992 National Agricultural Policy. According to this NAP, a truly sustainable agriculture would not develop in Malaysia if the government continues to prop the sector with all sort of subsidies and services. Instead the government must give way to the private sector and allow market forces to operate fully. The private sector and market forces will not only see to the natural running of the cultivation, processing and marketing affairs of the agricultural produce, but also to the amalgamation and consolidation of fragmented and small farms. Only in this way will the Malaysian agricultural sector be truly efficient, sustainable and progressive.
The Unwelcome Players

The policy shift from being led by the public (government) sector to being driven by the private sector definitely requires some radical adjustment in terms of land acquisition, ownership and tenure. The ownership status of the land to be developed or rejuvenated must be legally clear in a market driven agricultural development. This may not be an imperative when development and rejuvenation is led by the government. As such, the first step would be to build an institutional capacity to define, allocate and legally protect the rights of the private entrepreneurs. Secondly, undistorted market must be established for land to be properly transacted. All this is to ensure that productive factors such as land flow only to buyers who offered the highest value for their utilization (Sivalingam 1993).

In any case, the Malays’ perception of the privatization of idle land rehabilitation poses certain problems. Research findings indicate that the Malay folks were rather divided about the desirability of letting private entrepreneurs to rehabilitate their idle land (Table 7). They became even more uncomfortable if the potential private developers were not of Malay origin (Table 8).

The situation was rather different if privatization only meant the leasing out, and not outright sale, of the Malays’ land. More respondents expressed consent to this version of privatization. Nevertheless, the number of those opposed to the idea superceded that of those who consented to it (Table 9).

The question posed in Table 9 was designed to probe into the Malay folks’ sensitivity when tempted with supposedly generous price offers from potential non-Malay private developers. The answers show that the majority of them (85.2 per cent) were reluctant to make way for the potential non-Malay developers even if they were offered very good prices for their idle agriculture land.

Opportunities in Problems

The doubts cast by the rural Malay folks over the privatization of their idle land and their reluctance to lease it out to private developers reflected their worry about, and concern with, the implications of losing possession and control of land as a most valued tangible repository of their worth. They wondered if privatization would

---

**TABLE 7**

Perception of the Malay folks of the privatization of idle land rejuvenation

<table>
<thead>
<tr>
<th>Question:</th>
<th>Is it good that private developers rehabilitate Malays' idle land?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answers:</td>
<td>Number</td>
</tr>
<tr>
<td>Good</td>
<td>430</td>
</tr>
<tr>
<td>Not good</td>
<td>350</td>
</tr>
<tr>
<td>Uncertain</td>
<td>13</td>
</tr>
<tr>
<td>Wait and see</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>800</td>
</tr>
</tbody>
</table>

Source : Fieldwork 1994

**TABLE 8**

Perception of the Malay folks regarding the involvement of non-Malay developers in the rejuvenation of their idle agriculture land

<table>
<thead>
<tr>
<th>Question:</th>
<th>What do you think of non-Malay entrepreneurs developing Malays' idle agriculture land?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answers:</td>
<td>Number</td>
</tr>
<tr>
<td>Should be allowed</td>
<td>274</td>
</tr>
<tr>
<td>Should never be allowed</td>
<td>515</td>
</tr>
<tr>
<td>Unsure</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>800</td>
</tr>
</tbody>
</table>

Source : Fieldwork 1994

**TABLE 9**

Perception of the Malay folks regarding the leasing out of their idle land to non-Malay developers

<table>
<thead>
<tr>
<th>Question:</th>
<th>What do you think of Malays leasing out their idle land to non-Malay developers?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answers:</td>
<td>Number</td>
</tr>
<tr>
<td>Should be allowed</td>
<td>339</td>
</tr>
<tr>
<td>Should be allowed with certain conditions</td>
<td>12</td>
</tr>
<tr>
<td>Should never be allowed</td>
<td>445</td>
</tr>
<tr>
<td>Unsure</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>800</td>
</tr>
</tbody>
</table>

Source : Fieldwork 1994

really benefit them and not another instrument for savvy businessmen to rake in substantial returns while distributing only crumbs to them. This could not be a fair situation since they were the very owners of the resource. They wondered
if this was not going to be another phase and another form of their disempowerment. They reasoned if private rehabilitation could really bring in worthwhile profits, why should not they rejuvenate the land themselves. Indeed they were of the opinion that being the owners themselves, and instead of being disenfranchised, a way must be found so that they could be empowered to undertake the task of rehabilitating their own idle land.

And finding that way brought them back to the government re-engagement. According to them the government has a valid moral responsibility to help them gain this empowerment, this obligation to make successful farm entrepreneurs out of them – and especially when it means preventing Malay land from falling into non-Malay hands.

From the government perspective – and this is amplified again in the latest Third National Agriculture Plan – such perception by the Malay folks only shows how ignorant the typical rural Malay folks are with regard to the dynamics of sustainable and viable agricultural development. The way the government sees it, all government-sponsored assistance that should go into the empowerment of Malay farmers has already been extended, yet the results have not been satisfactory. The noble mission of creating a progressive and competitive Malay farming community has proven to be beyond accomplishment. After three or four long decades of implementing benevolent national policies Malay farmers have turned out to be as weak and dependent as ever.

How and where have things gone wrong can be a subject of unending polemics? The very question that is in need of an urgent answer now, however, is who should be entrusted with the task of rehabilitating the Malays' idle land given (1) the current government's hands-off policy, while (2) the Malay folks are not ready to welcome the entry of non-Malay private developers. The rural Malay folks had expressed their wish that their idle land be rehabilitated by their own people. Elsewhere, it was found that there was a marked shift in the occupational preference of rural Malay youth (Amriah 1997). The latter demonstrates that rural Malay youths of the nineties no longer prefer to work as government employees or school teachers as did their predecessors decades ago; instead they have come to prefer working as businessmen, entrepreneurs and professionals. Perhaps, building on this fact Malaysia may do better nurturing the growth of young Malay agricultural entrepreneurs than imposing on the Malay farming community agricultural development projects which are conceived by, or in conjunction with, non-Malay and other foreign developers.

For, behind the seemingly oblivious attitude of the rural Malay folks towards their idle land, there is the ardent wish to entrust the task of rejuvenating their idle land to their own people. They believe such a stance is imperative if they were to perpetuate the dominance of the Malays in Malaysia.

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Auditor Change During Listings: Effect on IPO Premiums

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Keywords: Audit quality, IPO Premium, ex-ante uncertainty

ABSTRACT

The study examined the relationship between choice of quality differentiated audit firm and initial return at listing. It is conjectured that the superior audit quality of Tier 1 audit firms helps to reduce ex-ante uncertainty and consequently reduces the initial premiums at listing. The findings show that there is an inclination for listed firms to engage Tier 1 audit firms, and no significant difference in the initial returns of IPOs firms audited by either Tier 1 or Non-Tier 1 audit firms were observed. However, higher significant initial returns for new issues were observed for Second Board firms relative to Main Board firms. The findings do not appear to suggest that the auditor reputation is a determinant of initial returns at listing. The findings are consistent with those documented by Shamsher and Annuar (1997) that investors are indifferent to the quality of audit service provided by Tier 1 and Non-Tier 1 audit firms.

INTRODUCTION

The change of auditors prior to listing has been an issue of interest among academics, investors, and management in developed economies due to its effect on underpricing or overpricing of the new issue. It is a statutory requirement in Malaysia for every company that goes public to engage the services of merchant banks to help them get listed. In the process, the companies are required to provide prospectus audited by independent auditors to verify the statements as being true and fair view of the company. The
prospectus normally contains information on assets, historical profitability, economic prospects, investment plans and some form of profit forecast and dividends. The entrepreneurs usually disclose favourable private information about the firm to the potential investors so as to enhance marketability of the offering without too much offer premium. To add more credibility to the basic information provided in the prospectus, the management may engage the service of reputable auditor. The reputation of the accountants and auditors is potentially a signaling device for conveying the credibility of the information supplied to potential investors, since investors might not have any other resource to verify the information provided by a listing firm. It may also reduce uncertainty and therefore the level of premiums on the new listings, as investors might be willing to pay a higher offer price for the shares offered if the audit firm is more reputable than the one engaged prior to going public. Choice of quality differentiated audit firm might provide a useful setting to ascertain whether potential investors perceive the auditor change as a signal of the level of uncertainty in the new issue.

Though the information contained in the prospectus gives potentially useful information to prospective investors there is also a great deal of uncertainty surrounding the pricing of IPO, which is further complicated given limited disclosures by companies prior to listing. In view of the concern about the inherent risk associated with rapid expansion of business activities being financed by the proceeds from a new issue, IPO represents a classic example of information asymmetries between the pre-issue owners who are the entrepreneurs and the investing public. Entrepreneurs have detailed information on the companies and their true worth whereas potential investors have limited knowledge of the business and its future economic prospects. Thus independent auditors will serve as signaling device in validating entrepreneurs’ claims based on private information about the potential value of the firm to stockholders. There is no documentation on this important issue in this emerging Malaysian IPO market.

In view of the importance of the auditors’ choice at listing, this paper examines the effect of choice of quality differentiated audit firms on the IPO premiums of newly listed firms in the Kuala Lumpur Stock Exchange (KLSE). The hypothesised relationship between the choice of quality-differentiated audit and the initial return of the IPOs is investigated.

The findings have implications for corporate management decisions, the auditing profession, investment adviser/banker and investors in general. The documentation of the various auditor choice and auditor switch and the effect on the initial return (market premium) from offerings will assist the corporate decision makers to signal inside information to potential investors before the listing. The findings would also provide information to the audit profession regarding public’s perception on the quality and differentiation of quality of audit services. Investment adviser/banker would benefit from the understanding of choice of auditor as a signal of investment adviser/banker reputation and the pricing strategy of the new issues. Finally, the investing public could use this market signal in formulating price expectation of the new issues. Section 2 presents literature on the auditor credibility and initial public offerings. Section 3 provides discussion on methodology, data collection and return measurement techniques. Section 4 provides discussion on findings and the final section summarises the findings of the paper.

REVIEW OF LITERATURE

The theory of the firm as amended to include agency problem emphasises the importance of auditing as a monitoring device (Jensen and Meckling 1976) to validate the management’s use of audited statements to convey a true and fair view of the company to the potential investors who have very limited access to the company’s private information. DeAngelo (1981a;1981b) developed a demand and supply model for audit quality. Audit quality is defined as the probability that an auditor will both discover the breach of contract (by the management and the investing public) and the ability to subsequently report it. An analogy from product differentiation hypothesis is that firms use auditor choice as a signaling device to reveal firm’s desirable characteristic. Firms appear to signal ex-ante uncertainty by engaging the services of a reputable audit firm. This signal is credible to the market since the auditor’s compensation is higher exhibiting firm-specific reputation capital. Firms with favourable information would prefer the services of highly reputed auditors to reduce
uncertainty. A switch to a prestigious audit firm can enhance audit services because of superior industry understanding, which help reduce uncertainty of the value of information in financial statements. Management may seek a reputable auditor in an attempt to install a better monitoring system and enhance the principals' faith in the financial reporting system. This would also portray to the potential shareholders the management's integrity and good stewardship of shareholders. It is widely perceived that higher prestige audit firm has greater incentive not to perform low quality audit (DeAngelo 1981).

It is well documented in the literature that some companies replace their auditors before going public for reasons of prestige, reputation and greater technical ability (Carpenter and Strawser 1971). The AICPA (1978) and Lurie (1977) examined the various reasons for auditor switch and found that the larger and better-known audit firms were believed to encourage the sales of their shares. Francis and Wilson (1988) documented that firms may change to higher prestige audit firms (Big-Eight) to increase marketability of the shares. It is also a common practice among Malaysian firms to employ more reputable auditors before listing. Huson et al. (2001) examined the wealth effect of auditor switch among Malaysian listed firms. They documented no evidence of significant wealth effect from auditor switch announcement. Thus, auditor switch in this emerging capital market conveys no information value associated with auditor switch.

Unlike the corporate announcement of ex-post events such as earnings, dividends, etc., which reflect real change in corporate performance about expected future prospect of a company, auditor change is an event that conveys no direct apparent economic information. Rather, the possible economic effect from such event is the signal associated with different interpretation about the quality of auditor switch by the investors at large (Hagigi et al. 1993).

DeAngelo (1981a) found that financial statement users do not directly observe the audit procedure and have only limited information about the auditor contractual arrangement. However, they develop observable proxies for audit procedures and auditor contractual arrangement, which are associated with audit quality. De Angelo (1981b) argues that larger firms have greater incentive to supply high quality audit services. It is also asserted that the size of the audit firm signals audit quality, since larger ones have more clients and accordingly, more future quasi-rents will be lost if the auditor's reputation is tarnished. Dopuch and Simunic (1982) assert that larger audit firms have differentiated themselves from other audit firms in terms of higher audit quality. The assertion on size and quality of audit firms suggests that larger audit firms deliver higher quality audits and are less likely to accede to client's pressure regarding the use of questionable accounting policies and practices. This is designed to build confidence on the financial statement from the auditors. If the company with a favourable private information chooses to engage higher prestige audit firm, the market should react favourably. However, a switch to a lower prestige firm (non-Big-8) is viewed negatively due to the shifting signals of lesser quality standard (Hagigi et al. 1993; Johnson and Lys 1990). Therefore, the market would probably respond positively to the former and negatively to the latter moves.

From the agency perspective, a company's audited financial statements provide a means for owners to monitor the performance of the firm's managers. Financial statements that are certified by independent professional auditors provide assurance about reliability and credibility. Wallace (1980) suggests that increased credibility of financial statements certified by credible auditors reduce investors' uncertainty about the reliability of the content of financial statements. This suggests that the price effect on shares from auditor switch actually is a proxy for the quality of information under strict professional applications of standards of a robust accounting environment. Thus, financial statements attested to by a credible auditor provide believable attestation about the quality of information certified by the accounting profession represented by particular auditor to investors. In contrast, financial statements that are audited by smaller audit firms, which are less reputable, may not reduce investors' uncertainty about the well being of a company. Hence, a costly search by investors to evaluate the true and fair value of the company is perpetrated in such situations. Accordingly, market participants may lower the price they are willing to pay for the securities of such firms that switch to lower quality auditors.
There are also conflicting opinions in some studies. Contrary to the above arguments, some of earlier studies are based on the argument that professional standard imply homogeneity across different size of audit firms such that audit quality is independent of firm size. It was further argued that audit quality is relatively homogeneous across audit firms assuming all audit firms adhere to Generally Accepted Accounting Principles (GAAPs) and Generally Accepted Auditing Standard (GAASs). However, Dopuch and Simunic (1982) argued that that credibility must be associated with an observable characteristic, such as brand name. Since the detailed information of various audit firms are not publicly disclosed, auditors need not be perceived to be homogeneous in the quality of their services. Such an attribute is difficult and costly to develop as well as maintain, thus it must have market value. Therefore, market for auditors should be characterized by product differentiation, as are all competitive producing units. In other words, there is heterogeneity among the audit firms. From the observed two-tier audit industry structure, Dopuch and Simunic inferred that higher prestige audit firm is more credible than the others.

Auditor switch prior to the company going public is fairly common and widely explained as one of management's efforts to reduce uncertainty in emerging market. Carpenter and Strawser (1971) explained this phenomenon as necessary to sell their offering at the highest possible price. This widely held view suggests that the employment of a reputable audit firm will increase the offer price of the new issue and investors may be predisposed to accept lower returns in exchange for greater certainty.

There is ample of evidence on underpricing of the firm's equity securities (Rock 1986; Beatty and Ritter 1986; Balvers et al. 1988; and Allen and Faulhaber 1989). Various explanations have been offered for the underpricing: for example, Baron (1982) proposed that the investment banker is 'better informed' than the issuing company as to the demand of issuing company's issue and therefore the issuer underprice to ensure success of the issue. Rock (1986) and Beatty and Ritter (1986) proposed two classes of investors, 'informed' and 'uninformed' investors are assumed to exist, and underpricing is to entice the informed investors to participate to reveal the value of the issue. These explanations suggest that there is a positive relationship between ex ante uncertainty and the underpricing of IPO.

With regard to choice of auditors at the time of listing, Simunic and Stein (1987) suggest that audit firm disassociated themselves by differentiation on the dimensions of control and credibility. Product line motivates management's auditor choice in IPO market. The form of the underwriter agreement, the proportion of common stocks held by outsiders after the IPO, and a measure of uncertainty are related to the choice of which auditing firm is chosen. Beatty (1989) provides evidence consistent with Simunic and Stein (1987) that larger and less risky IPO clients tend to hire the Big Eight auditing firms.

Titman and Trueman (1986) suggests that auditor quality provides useful information to investors to assess the value of the IPO firm. They showed analytically that an entrepreneur has the incentive to choose level of auditor quality that correctly reveals the private information about the firm. They suggest that the more reputable auditors charge a premium price for additional credibility they bring. Such auditors are more likely to uncover and disclose adverse information about the firm.

DATA AND ANALYSIS

Data

This study covers 213 firms listed on the main second boards of KLSE over the period 1996 to 2000. The information on offer price and the traded price of these firms was extracted from KLSE records, the company prospectus and annual reports. Information prior to listing, was obtained from the Registrar of Companies (ROC). The Composite Index is used as a proxy of the market portfolio and the values of the index were extracted from the daily diary of KLSE.

To determine the impact of auditor switch prior to going public, the choice of auditors at the time of listing was examined. Auditor changes that occurred more than two financial periods prior to the IPO were not considered.

Analysis

To determine the price impact of various auditor switches, the audit firms are categorised into two categories, the 'Big Eight' (and subsequently 'Big Five') as Tier I audit firms and Non-Big
Auditor Change During Listings: Effect on IPO Premiums

(Non Tier 1) audit firms (Dopuch and Simunic 1982). Tier 1 firms are used to proxy higher prestige audit firm with greater reputational capital, whereas the Non-tier 1 firms' proxy the less prestige audits firms with lesser reputational capital. To analyse the impact of auditor switch during the issue, the data on auditors are sorted into six groups in two different categories:

a. IPO with Auditor Switch
1. Switch from no-Tier 1 audit firm to Tier 1 audit firm - upward switch.
2. Switch from Tier 1 audit firm to Non-Tier 1 audit firm - downward switch.
3. Switch from Tier 1 audit firm to another Tier 1 audit firm - lateral switch.
4. Switch from non-Tier 1 audit firm to another Non-Tier 1 audit firm - lateral switch.

b. IPO with No Auditor Switch
1. Remain with the same Tier 1 auditor
2. Remain with the same Non-Tier 1 auditor

The IPO with no auditor switch serves as the control group.

The initial return for a firm going public is defined as the first day gross return to an investor who acquires a share and sells at the closing price on the first day of public trading. The initial return in percentage is:

$$\text{Initial Return (IR)} = \left(\frac{P_{MC} - P_{IPO}}{P_{IPO}}\right) \times 100\%$$

Where

- $P_{MC}$: Market price at the close of first trading day,
- $P_{IPO}$: IPO's offer price.

The market return in percentage is defined as:

$$\text{Market Return (MR)} = \left(\frac{KLCI_{MC} - KLCI_{p}}{KLCI_{p}}\right) \times 100\%$$

Where

- $KLCI_{MC}$: Kuala Lumpur Composite Index at the close of first trading day,
- $KLCI_{p}$: Kuala Lumpur Composite Index at the close of the previous trading day.

The market adjusted initial return (MAIR) is estimated for all categories of switch sample. It is defined as the difference between the initial return on the new issue and the return on the market, that is, $\text{MAIR} = \text{IR} - \text{MR}$. The average market adjusted initial return (AMAIR) for each group is computed.

$$\text{AMAIR} = \frac{\sum \text{MAIR}}{N_g}$$

Where

- $\text{AMAIR}$: average market adjusted initial return of respective groups
- $\text{MAIR}$: market adjusted initial return of respective groups
- $N_g$: number of firms in each of the groups

It is hypothesized that the IPOs audited by the Tier 1 auditor signals lesser ex ante uncertainty than IPOs audited by Non-Tier 1 auditor, thus earning lower average initial returns (AIR),

$$\text{AIR (Tier 1 auditors)} < \text{AIR (Non Tier 1 auditors)}$$

Similarly, IPOs with downward auditor switch (i.e. switch from Tier 1 auditor to Non-Tier 1 auditor) resulting an increases the ex ante uncertainty, thus earning a higher initial returns.

$$\text{AIR (downward switch)} > \text{AIR (Tier 1 no switch)}$$

However, for the price effect of IPOs with lateral auditor switches (i.e. Tier 1 auditor switch to another tier 1 auditor or Non-Tier 1 auditor switch to another Non-Tier 1 auditor) is more ambiguous, and a mixed signal is expected. However, the initial returns of IPO with Non-Tier 1 lateral auditor switch are expected to generate higher initial returns than the IPO with Tier 1 lateral auditor switch. This could be expressed as:

$$\text{AIR (Non Tier 1 lateral switch)} > \text{AIR (Tier 1 lateral switch)}$$

The student-t statistics are used to test the statistical significance of the observed values.

FINDINGS

IPOs - Board of Listing and Auditor Choice
A summary of the sample of main and second board firms and their auditor classifications is presented in Table 1. The sample consists of 213
initial public offerings with 75 Main Board and 138 Second Board firms. Fifty-seven (76%) of the main board firms and 78 (56%) of the second board firms were audited by tier 1 auditors. Non-Tier 1 auditors audited the remainder. A dominance by Tier 1 auditors firms in the Main Board is little more than half of the Second Board firms. The bias towards choice by Tier 1 auditors indicates the management’s preference to signal the companies’ credibility, integrity, reliability of the published information and responsibility towards potential investors. The Main Board IPOs are expected to employ the services of Tier 1 auditors to sustain their reputation as larger, more established and less risky firms. Tier 1 auditors are perceived to be more stringent in providing better quality audit and help reduce uncertainty for inviting public.

**Auditor Choice and Initial Returns**

Table 2 shows initial return of main board and second board firms audited by both Tier 1 and Non-Tier 1 auditors.

Initial return for overall IPO sample audited by Tier 1 and Non-Tier 1 auditors are 117.30% and 134.04% respectively. However, there is no significant difference (p=0.293) between these initial returns, implying no price effect of auditor choice (Tier 1 or Non Tier 1) decision during listing. Similarly, there are no significant differences at acceptance level of .10 between initial returns of Main Board firms audited by either Tier 1 or Non-Tier 1 audit firms. Similar results are observed for Second Board firms.

For firms audited by Tier 1 auditors only, there is a significant difference (at .05 acceptance level) in initial returns with a t=1.996 for the value of the main and Second Board firms. Similarly, for firms audited by Non-Tier 1 audit firms only, there is a significant difference (at .01 acceptance level) between initial returns with a t=3.94 of Main and Second Board firms.

These findings are consistent with the product differentiation hypothesis proposed by DeAngelo (1981a;1981b). The Tier 1 auditors appears to provide higher quality audit service that reduces the IPOs' ex ante uncertainty more than Non-Tier 1 audit firms. This results in lower initial returns for firm engaging Tier 1 auditor. Despite the observed audit firm’s reputation effect on the initial returns, the lower returns of Main Board firms might also be attributable to the perceived lower risk compared to Second Board firms that are less stable and more volatile.

| TABLE 1 |
| Sampled main board and second board IPOs and their auditor choice |

<table>
<thead>
<tr>
<th>Auditors Classification</th>
<th>Tier 1 Auditors</th>
<th>Non Tier 1 Auditors</th>
<th>Combined (Tier 1 and Non Tier 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number %</td>
<td>Number %</td>
<td>Number %</td>
</tr>
<tr>
<td>Listing Board</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Board</td>
<td>57 26.8</td>
<td>18 8.4</td>
<td>75 35.2</td>
</tr>
<tr>
<td>Second Board</td>
<td>78 36.6</td>
<td>60 28.2</td>
<td>138 64.8</td>
</tr>
<tr>
<td>Combined (Main and Second Board)</td>
<td>185 63.4</td>
<td>78 36.6</td>
<td>213 100.0</td>
</tr>
</tbody>
</table>

| TABLE 2 |
| Auditors choice and IPOs’ initial return |

<table>
<thead>
<tr>
<th>Auditors Classification</th>
<th>Tier 1 Auditors</th>
<th>Non Tier 1 Auditors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Return (%)</td>
<td>Std Dev. (%)</td>
</tr>
<tr>
<td>Listing Board</td>
<td></td>
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</tr>
<tr>
<td>Main Board</td>
<td>95.69</td>
<td>97.76</td>
</tr>
<tr>
<td>Second Board</td>
<td>133.09</td>
<td>119.58</td>
</tr>
<tr>
<td>Combined (Main and Second Board)</td>
<td>117.30</td>
<td>112.05</td>
</tr>
</tbody>
</table>


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IPOs and Auditor Changes

The distributional characteristics of various categories of auditor switch for the newly listed Main and Second board firms are presented in Table 3.

Table 3 shows that only 24 (about 18%) firms did change their auditors at the time of listing, and majority of the change (18 out of the 24 firms) were in the upward switches (Non-Tier 1 to Tier 1) category. Seventeen of the upward switch firms were from the second board. Eighty-two percent of the sampled firms did not switch auditors when listing. Of these, a majority is from Second Board firms that engaged the services of Tier 1 audit firms. The high proportion of no-switch firms may be due to a combination of factors.

The large numbers of IPOs were incorporated shortly prior to the listing, therefore the choice of auditors had been duly considered and was not expected to change within such a short time period. Possibly firms that were incorporated for a long time, a majority of firms changed their auditors earlier than two financial periods prior to listing. In the process of complying with the capital and profit performance requirements, these firms switched their auditors in anticipation of going public three years or five years ahead.

Auditor Switch and Initial Returns

Table 4 summarizes the various categories of auditor switch and their respective initial returns.

For the Main Board listings, the initial returns for non-switch Tier 1 firms are larger (94.86%) than the initial returns of non-switch Non-Tier 1 firms (76.27%), the difference is not statistically significant. However, the firms in the upward switch category recorded 142.40% initial returns. For the Second Board, the Tier 1 non-switch firms generated 129% initial returns, which are lower than the non-switch Non-Tier 1

| TABLE 3 |
| Auditors switch during IPOs |
| Type of Switches | Main Board | Second Board | Combined (Main and Secondboard) |
| No. | % | No. | % | No. | % |
| Tier 1 unchanged (no switch) | 56 | 26.29 | 60 | 28.17 | 116 | 54.46 |
| Tier 1 to another Tier 1 (lateral switch) | 0 | 0.00 | 1 | 0.47 | 1 | 0.47 |
| Tier 1 to Non Tier 1 (downward switch) | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Non Tier 1 unchanged (no switch) | 18 | 8.45 | 55 | 25.82 | 73 | 34.27 |
| Non Tier 1 to another Non Tier 1 (lateral switch) | 0 | 0.00 | 5 | 2.35 | 5 | 2.35 |
| Tier 1 (lateral switch) | 1 | 0.47 | 17 | 7.98 | 18 | 8.45 |
| Total | 75 | 35.21 | 138 | 64.79 | 213 | 100.00 |

| TABLE 4 |
| Auditors switches and IPOs' initial return |
| Type of Switches | Main Board | Second Board |
| Mean Returns (%) | Std Dev. (%) | Mean Returns (%) | Std Dev. (%) |
| Tier 1 unchanged (no switch) | 94.86 | 98.44 | 129.15 | 124.85 |
| Tier 1 to another Tier 1 (lateral switch) | 0 | 0 | 70.00 | - |
| Tier 1 to Non Tier 1 (downward switch) | 0 | 0 | 0 | 0 |
| Non Tier 1 unchanged (no switch) | 76.27 | 54.71 | 149.58 | 102.26 |
| Non Tier 1 to another Non Tier 1 (lateral switch) | 0 | 0 | 171.00 | 177.84 |
| Non Tier 1 to Tier 1 (upward switch) | 142.40 | - | 150.70 | 103.45 |
| Total | 75 | 35.21 | 138 | 64.79 |
firms' returns of 149%; the difference is not statistically significant. Firms that had upward switch (from Non-Tier 1 to Tier 1) recorded 150% returns. These findings are basically inconsistent with the auditor reputation hypothesis, which postulates that firms audited by reputable auditors should have lower initial returns due to less uncertainty.

CONCLUSION
This paper investigates the hypothesised relationship between the firms' choice of quality differentiated audit firms (reputable (or Tier 1) and non-reputable (Non-Tier 1)) audit firms and the initial returns at listing. The findings appear to suggest that there is an inclination for newly listed firms to engage Tier 1 audit firms, probably due to management's intention of signaling the firm's favourable private information and credibility of the reported financial information. Investment banker's and other advisors' prefer to engage Tier 1 auditors to project a better image that could increase the marketability of the issue and reduce the risk of under-subscription.

The findings also show that there is no significant difference in the initial returns of IPOs firms engaging Tier 1 and Non-Tier 1 audit firms. However, there is a higher and significant initial return for Second Board firms at listing compared to Main Board firms. Firms that had upward switch (Tier 2 to Tier 1) showed higher returns as compared to lateral change in the same tier, inconsistent with the auditor reputation hypothesis. This results, however, could be biased by the large number of newly listed firms that did not switch auditors at listing, probably due to lack of time to make changes before listing, and/or have engaged Tier 1 auditors at incorporation in anticipation of listing. These results do not support the widely held view that firms that seek listing do switch auditors prior to their listing for positive market signaling. The results indicate that auditor's reputation is not an important determinant of the IPOs initial return. These findings are consistent to those documented by Shamsher and Annuar (1997) that investors are indifferent to the quality of audit services provided by Tier 1 and Non-Tier 1 audit firms. It is highly probable the differences in the listing board characteristics are important determinant of initial returns at listing.

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The Perceived Entrepreneurial Characteristics of Malaysian Living Skill Teachers: Implication for Teacher Preparation Programme

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Keywords: Entrepreneurial characteristics, Living Skills, teacher education programme

ABSTRACT
Entrepreneurial efforts in the form of small, new businesses have become an important force in the economic growth of a nation. Living Skills subject (KHB) with an entrepreneurship component was introduced in the Malaysian school curriculum since 1988, but a question arise whether the teachers themselves possess the entrepreneurial characteristics needed. A survey was conducted to investigate the levels of the perceived entrepreneurial characteristics of the Integrated Living Skills teachers (KHB) in Malaysian secondary schools. Findings indicated that a majority of the teachers participated in the study had a moderate level of perceived entrepreneurial characteristics. Male teachers were more entrepreneurial compared to female teachers. The entrepreneurial characteristics of teachers with different teaching responsibility did not differ. Teachers who aspired for entrepreneurship were more entrepreneurial than the teachers who did not have such an aspiration. It is believed that all KHB teachers should possess the entrepreneurship characteristics and it can be developed through in-service training. It is suggested that all teacher education programme should have a 3 credit course in entrepreneurship education.

INTRODUCTION
The growing interest of entrepreneurship, especially on the part of the government, is prompted in part by the assumptions that much of the economy's ability to innovate, diversify, and create new jobs comes from the small business sectors (Shapero 1985). Small businesses are presumed to be a major driving force behind the job creation as well as sustaining the economic development of a country. In fact, entrepreneurial efforts in the form of small, new businesses have become an important force...
in the economic growth of a nation (Osln 1985). Birch (1990) stated that during the 1980s the Fortune 500 firms in the US eliminated 4 million workers, but during the same period the total U.S. employment expanded by more than 20 million. Majority of them were employed by small business companies. The entrepreneurial sector as posited by Birley (1989) is viewed as a significant factor in designing the strategies for the recovery and economic growth of many nations.

Entrepreneurship itself has been diversely defined by many people. Entrepreneurship as defined by Gunderson (1990) is the enhancement of skills to serve the consumers. It has been defined by Kuratko and Hodgetts (1992) as a process of innovation and venture creation. Entrepreneurship is also defined as a process of creating something different with value (Hisrich and Peter 1995).

Who are the entrepreneurs? According to Burch (1986), typically an entrepreneur is seen as someone who owns and operates small businesses. However, he argued that simply to own or operate a small business does not make someone an entrepreneur. It is more than owning and operating a small business. Entrepreneurs are the initiators of economic growth. They are the self-starters and doers. Kuehl and Lambing (1990) regarded the entrepreneur as a person who takes initiative for a business project, organizes the resources it requires, and assumes the risks it entails. An entrepreneur is someone with a unique idea beyond the imagination of others. He or she is someone who always goes against the odds because he or she can see the future of his or her venture. As such, Osln (1985) defined the entrepreneur as a future-oriented, risk-taking person who engages in the identification and development of new ideas. In the field of education, we may defined a teacher who is entrepreneurial as a teacher who is innovative, creative, and futuristic. Those teachers have ideas on how to make teaching and learning appealing to students.

Studies have unearthed different characteristics of successful entrepreneurs. For example, Moorman and Haloran (1996) postulated that in order to be successful, an entrepreneur should have the confidence, determination, perseverance, creativity, and need for achievement. Hisrich and Peters (1995), on the other hand perceived that an entrepreneur should have three basic skills which include technical skills, business management skills, and personal entrepreneurial skills.

**STATEMENT OF THE RESEARCH PROBLEM**

Studies on the entrepreneurial characteristics of students are numerous (e.g., Kourilsky 1990; Solomon and Fernald 1990; and Hatten and Ruthland 1995). Their findings showed that entrepreneurial characteristics are inherent among students. However, the writers are not able to find a research investigating the entrepreneurial characteristics of vocational and technical teachers. Lachman (1980) believed that if a person has the same characteristics as entrepreneurs he or she will have a higher tendency to perform entrepreneurial acts than people who do not possess such characteristics.

Entrepreneurs can be developed if given proper training and exposure. Meyers (1992) suggested that if students are to be prepared to be entrepreneurs, they should be provided with experiences to assist them in the development of entrepreneurial skills. In Malaysia, various government agencies, such as the Ministry of Entrepreneurs Development, Ministry of Education, Ministry of Youth and Sports have undertaken steps to create entrepreneurs. However, in order to provide a good entrepreneurial training, it is very proper for the trainer in this case, the school teachers to be entrepreneurial. But, a question arises as to whether or not the school teachers, especially the integrated living skill (KHB) teachers possess the entrepreneurial characteristics. Thus, a study was conducted to ascertain the entrepreneurial characteristic of the KHB teachers.

**OBJECTIVE OF THE STUDY**

The primary purpose of the study was to assess the perceived entrepreneurial characteristics of the KHB teachers. More specifically, the study attempted to answer the following research questions:

- What are the levels of perceived entrepreneurial characteristics of the KHB teachers?
- Do the perceived entrepreneurial characteristics of teachers who primarily teach KHB subject differ than teachers who did not primarily teach KHB subject?
Entrepreneurial Characteristics of Malaysian Living Skill Teachers

- Do the perceived entrepreneurial characteristics of male and female teachers differ significantly?
- Do the perceived entrepreneurial characteristics of teachers with different specialization during teacher training differ significantly?
- Do the perceived entrepreneurial characteristics of teachers who aspire to be entrepreneurs differ significantly from those who do not aspire to be entrepreneurs?
- Do the perceived entrepreneurial characteristics differ significantly among teachers of different races?

METHODOLOGY

The study employed a descriptive correlational research method. The independent variables were selected demographic variables which include gender, training specialization, race and aspiration. The dependent variable was the perceived entrepreneurial characteristics.

Population and Sample

The target population was all integrated living skill teachers in Malaysia. The sample consisted of 153 KHB teachers from the selected academic schools in Malaysia. A multi-stage random sampling procedure was employed to obtain the sample. Four states were randomly selected. From each of the four selected states, two school districts were randomly selected. From the selected school district, a random selection of secondary schools was done. All KHB teachers from the selected schools formed the sample of the study.

Instrumentation

The research instrument was developed by the researchers. It consists of the section about demographic variables and the section containing statements describing the entrepreneurial characteristics. The section on the entrepreneurial characteristics was developed based on the literature about entrepreneurship. Originally, the research instrument contained 84 statements/items that describe the entrepreneurial characteristics. The perceived entrepreneurial characteristics were measured using 5 point Likert scale (5= strongly agree, 4=agree, 3= moderately agree, 2=disagree, and 1=strongly disagree). However, based on the pilot-test results, the statement/items in the research instrument were reduced to 42 statements on entrepreneurial characteristics (Table 5). The elimination of the statements was done based on the reliability test results. The statements were removed from the questionnaire on two basis: (1) negative total item correlation and (2) close to zero correlation. The estimated reliability coefficient of the final research instrument containing 42 items was 0.93.

RESULTS

One hundred and fifty-three Integrated Living Skills (KHB) teachers were involved in the study. About 61% of them were female teachers and 39% were male teachers. A majority of them were Malay teachers (Table 1). Their ages were between 21 and 54 years old with a mean of 34.6 years old. On the average the KHB teachers have been in the teaching profession for almost 12 years. They have taught the KHB subjects for about 6.5 years. Most of them (81%) were educated at the Teacher Training Colleges. They were trained in home science, agricultural science, industrial arts, integrated living skills, and commerce (Table 2). Even though their training specializations differed, most of them taught the KHB subject in school (Table 3).

The first research question was designed to ascertain the perceived entrepreneurial

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>Ethnic background of the respondents (n = 153)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic background</td>
<td>f</td>
</tr>
<tr>
<td>Bumiputra</td>
<td>120</td>
</tr>
<tr>
<td>Chinese</td>
<td>20</td>
</tr>
<tr>
<td>Indians</td>
<td>2</td>
</tr>
<tr>
<td>Others</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>153</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>Areas of specialization at the certificate level (n=124)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas of specialization</td>
<td>f</td>
</tr>
<tr>
<td>Home Science</td>
<td>37</td>
</tr>
<tr>
<td>Agriculture Science</td>
<td>30</td>
</tr>
<tr>
<td>Industrial Arts</td>
<td>11</td>
</tr>
<tr>
<td>Living Skills</td>
<td>28</td>
</tr>
<tr>
<td>Commerce</td>
<td>11</td>
</tr>
<tr>
<td>Others</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
</tr>
</tbody>
</table>
TABLE 3
Types of academic subjects (primarily) taught by
the respondents (n=131)

<table>
<thead>
<tr>
<th>Subjects</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Science</td>
<td>5</td>
<td>3.8</td>
</tr>
<tr>
<td>Agriculture</td>
<td>4</td>
<td>3.0</td>
</tr>
<tr>
<td>Science</td>
<td>118</td>
<td>90.0</td>
</tr>
<tr>
<td>Living Skills</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>English</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Bahasa Melayu</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Commerce</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100.0</td>
</tr>
</tbody>
</table>

characteristics of the KHB teachers. As shown in Table 5, the respondents reacted favorably to the statements describing their entrepreneurial characteristics (M=3.98, SD. =.31). The respondents' perceptions of their entrepreneurial characteristics were divided into three categories (Table 4). The total score of the perceived entrepreneurial characteristics was the accumulated scores of all 42 items was used as the basis to classify the levels of perceived entrepreneurial characteristics of the KHB teachers. The total scores of the perceived entrepreneurial characteristics of the KHB teachers were between 106 and 203 with a mean of 164.14 and a standard deviation of 13.99. Although the KHB teachers reacted favorably to the statements of their entrepreneurial characteristics, a majority of the them possess a medium level of entrepreneurial characteristics.

Another objective of the study was to ascertain if the perceived entrepreneurial characteristics differ among the male and female KHB teachers. The study showed that the perceived entrepreneurial characteristics were more prominent among male teachers than female teachers (M= 168.33 and M=161.23 respectively, t = 3.01, p = .003). The entrepreneurial characteristics were also more prominent among teachers who aspired to be entrepreneurs than teachers who did not aspire to be entrepreneurs (M = 165.05 and M =156.78 respectively; t = 2.09, p = .019). On the other hand, the study showed that the perceived entrepreneurial characteristics did not differ among teachers of different ethnic groups (t = .72, p = .48), among teachers with different specializations (F (5,118) = 1.06, p = .38), and among teachers with different teaching emphasis in schools (t =.33, p >.05), as illustrated in Table 6.

TABLE 4
Levels of the perceived entrepreneurial characteristics of the KHB teachers (n=137)

<table>
<thead>
<tr>
<th>Scores</th>
<th>Level</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;150.14</td>
<td>Low</td>
<td>13.1</td>
</tr>
<tr>
<td>150.14 - 178.13</td>
<td>Medium</td>
<td>76.7</td>
</tr>
<tr>
<td>&gt;178.13</td>
<td>High</td>
<td>10.2</td>
</tr>
</tbody>
</table>

Means and standard deviations of the perceived entrepreneurial characteristics of KHB teachers

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>If nobody will go somewhere with me, I'll go by myself [DEPENDABLE]</td>
<td>4.11</td>
<td>.56</td>
</tr>
<tr>
<td>When I am given the job, I'll do it until it is finished [DEPENDABLE]</td>
<td>4.44</td>
<td>.65</td>
</tr>
<tr>
<td>I'll voice my opinion even if other people dislike it [DEPENDABLE]</td>
<td>3.83</td>
<td>.65</td>
</tr>
<tr>
<td>I can see many business opportunities in the community [INNOVATIVE]</td>
<td>4.13</td>
<td>.66</td>
</tr>
<tr>
<td>A problem is an opportunity for me to develop new product [INNOVATIVE]</td>
<td>3.94</td>
<td>.67</td>
</tr>
<tr>
<td>If I am an entrepreneur, I will find ways to introduce new product in the market [INNOVATIVE]</td>
<td>4.28</td>
<td>.54</td>
</tr>
<tr>
<td>Even if the risk of any investment is very high, as an entrepreneur I will invest because the return is also high [RISK-TAKER]</td>
<td>3.68</td>
<td>.74</td>
</tr>
<tr>
<td>I will never be frustrated if any of the projects I am working on fails [RISK-TAKER]</td>
<td>3.62</td>
<td>.88</td>
</tr>
<tr>
<td>I am an honest person [SELF-VALUE]</td>
<td>4.19</td>
<td>.66</td>
</tr>
<tr>
<td>I am trustworthy [SELF-VALUE]</td>
<td>4.32</td>
<td>.58</td>
</tr>
<tr>
<td>I am a responsible person [SELF-VALUE]</td>
<td>4.38</td>
<td>.55</td>
</tr>
<tr>
<td>I like to finish the job that I have started [SELF-VALUE]</td>
<td>4.36</td>
<td>.56</td>
</tr>
<tr>
<td>Favorable economic condition is important for me [SELF-VALUE]</td>
<td>4.35</td>
<td>.65</td>
</tr>
<tr>
<td>I am very firm [SELF-VALUE]</td>
<td>3.80</td>
<td>.66</td>
</tr>
<tr>
<td>I have the potential to lead [WORK VALUE]</td>
<td>3.82</td>
<td>.66</td>
</tr>
<tr>
<td>I want to lead others [WORK VALUE]</td>
<td>3.70</td>
<td>.78</td>
</tr>
</tbody>
</table>
Entrepreneurial Characteristics of Malaysian Living Skill Teachers

I can make decisions [WORK VALUE] 3.91 .68
I can follow other directions [WORK VALUE] 4.09 .56
I like to help people [WORK VAUE] 4.24 .62
When I work, I am always on time [WORK VALUE] 4.09 .61
I can work under pressure [WORK VALUE] 3.24 .10

I start work before being asked by someone [INITIATIVE] 3.82 .74
I will do the job before I knew that I have to do it [INITIATIVE] 3.23 .91
I will find information needed to complete the task [INITIATIVE] 4.20 .66

My health does not hinder me to teach [ENERGETIC] 3.95 .88
I like active teaching [ENERGETIC] 4.34 .53
I am always in good health and fresh even I am in stress [ENERGETIC] 3.69 .78

I can do the job better without supervision [SELF-CONFIDENCE] 3.75 .71
I always overestimate my ability to succeed in any project [SELF-CONFIDENCE] 3.97 .69
I am always worried [SELF-CONFIDENCE] 3.2 1.74

In business, I like to see the development rather than making profit [ACHIEVEMENT ORIENTATION] 4.21 .64
The salary is the main factor in choosing a job [ACHIEVEMENT ORIENTATION] 4.05 .61
I like to work with well-known people [ACHIEVEMENT ORIENTATION] 4.38 .59

When I have a difficult problem, I will spend time trying to solve it [PERSEVERANCE] 4.13 .66

I like the activities which I have the knowledge about it and am comfortable with it [OPPORTUNITY] 4.03 .61
I will try to obtain new job opportunities [OPPORTUNITY] 4.21 .49
I like to try new things that are different from what I have done [OPPORTUNITY] 4.00 .51
I like to mingle with successful people [OPPORTUNITY] 3.49 .77
I need special attention when dealing with others [OPPORTUNITY] 3.94 .61

I will look for anything to do the job quickly [EFFICIENCY ORIENTATION] 4.07 .57
I do not know how to use time wisely [EFFICIENCY ORIENTATION] 3.89 .76
I feel uneasy when time is wasted [EFFICIENCY ORIENATION] 4.18 .54

Item mean = 3.98; SD = .31
Scale mean = 164.14; SD = 13.99
Note on scale = 5 = Strongly agree; 4 = Agree; 3 = Moderately agree;
4 = Disagree; 1 = Strongly disagree

TABLE 6
Means and standard deviations of the perceived entrepreneurial characteristics by selected demographic variables

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Mean</th>
<th>SD</th>
<th>t-Test</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>168.33</td>
<td>12.7</td>
<td>3.01*</td>
<td>.003</td>
</tr>
<tr>
<td>Female</td>
<td>161.23</td>
<td>14.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial aspiration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial</td>
<td>165.05</td>
<td>14.3</td>
<td>2.09*</td>
<td>.019</td>
</tr>
<tr>
<td>Non-entrepreneurial</td>
<td>156.78</td>
<td>11.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bumiputra</td>
<td>168.57</td>
<td>14.62</td>
<td>.72*</td>
<td>.475</td>
</tr>
<tr>
<td>Non-bumiputra</td>
<td>166.09</td>
<td>15.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching emphasis</td>
<td></td>
<td></td>
<td></td>
<td>KHB</td>
</tr>
<tr>
<td>167.83</td>
<td>14.41</td>
<td>.33*</td>
<td>.74</td>
<td>Non KHB</td>
</tr>
<tr>
<td>169.00</td>
<td>12.7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DISCUSSION
Possessing the entrepreneurial characteristics will benefit teachers even if they themselves are not entrepreneurs. Teaching is a very complex process requiring a teacher to possess all the necessary qualities of an effective teacher. Miller (1983) contended that teachers are the most important element in vocational education. The values, skills, professional knowledge, experience, and human relation skills that a teacher possesses will determine the quality of the entrepreneurial learning opportunities available to students.

Teachers have to be entrepreneurial because they will determine the success of education. Their innovativeness and creativity in their teaching approaches will enhance not only the teaching process, but the learning process as well. They have to make the correct decisions with regard to the teaching strategies to be used with which different of students. They have to constantly look for opportunities to improve and update their knowledge and skills to be able to provide a good entrepreneurship education to students. Enterprise development and enterprise education is not so much on the development of individual businesses, but the process of developing the entrepreneur and people who may work in the businesses (Rosa 1992).

Regardless of the differences in demographic characteristics, teachers should be entrepreneurial in order to be successful in their profession. However, the present study shows the entrepreneurial characteristics differ among teachers of different gender and entrepreneurial aspirations. The study showed that the entrepreneurial characteristics did not differ among teachers with different training specializations and the subject primarily taught by the KHB teachers. The study also shows that majority of the teachers possess a medium level of the perceived entrepreneurial characteristics. We believe that every teacher who teaches the integrated living skills subject should have a high level of entrepreneurial characteristics in order to train students to be educated entrepreneurs. Scott (1988) believed that long term supply of well educated and well qualified entrepreneurs is essential to the strong modern economy. Hynes (1996) believed that it is necessary to encourage and foster enterprise at an earlier age and this can be effectively actioned through the promotion of enterprise through education. The KHB teachers should possess all the characteristics associated with the successful entrepreneurs. Based on the findings of the study, the training programs should emphasize on developing teachers to be innovative, be able to take risk, be self-confident, be able to look for opportunities, and efficiency. However, other characteristics should be developed as well if we are to have teachers who are entrepreneurial.

CONCLUSION
The following conclusions based on the findings of the study were:
- Majority of the teachers participated in the study had a medium level of perceived entrepreneurial characteristics.
- Male KHB teachers were more entrepreneurial compared to female KHB teachers.
- KHB teachers who aspired to be entrepreneurs perceived themselves to be more entrepreneurial than the KHB teachers who did not aspire to be entrepreneurs.
- There was no significant difference of perceived entrepreneurial characteristics among teachers who had different training specializations.
- There was no significant difference of perceived entrepreneurial characteristics among teachers who had different teaching responsibilities.

RECOMMENDATION
The entrepreneurship education will result in the birth of new generation of entrepreneurs who will spur the economic growth of a nation. As noted by Singh (1990) entrepreneurship education can be used as a means of safeguarding the economic sovereignty of the Third World countries. Therefore, students should be trained to gradually adopt the spirit of being entrepreneurs. They should be provided the experiences through various activities in order for them to develop the entrepreneurial spirit and characteristics needed for the success in their chosen profession. The educators of the future workforce (entrepreneurs or non-entrepreneurs) must be entrepreneurial.

The educational system is one of the several environmental influences which may help form entrepreneurs who will make such contribution. Hence, schools should serve as a training ground for entrepreneurial skills development where
future entrepreneurs could adopt a positive attitude while anticipating changing needs and prepare them optimally by coupling themselves and their skills to the needs of the ever-changing environment (Leo-Paul Dana 1993). Leo suggested that entrepreneurship education should have a greater emphasis on practical experience. More activities (eg. selling of souvenirs, hari raya cards) should be planned and implemented through clubs and societies in schools. The entrepreneurial activities conducted through societies and clubs will encourage students to be entrepreneurial regardless of the type of professions they will enter. The country needs a pool of entrepreneurial workforce in order to be competitive.

With regard to teacher preparation, we would like to suggest that a general 3 credit hour course on entrepreneurship education to be included in the curriculum of teacher education. Each prospective teacher needs to be exposed to entrepreneurship regardless of their teaching specializations. Prospective teachers have to acquire the knowledge about and skill of entrepreneurship simply because by being entrepreneurial the teachers can make teaching and learning more effective. As for prospective technical and vocational education students who do not major or minor in entrepreneurship or business education, a different structure of an entrepreneurship education must be made compulsory to them. The course should have both theoretical as well as practical components. In other words, prospective teachers of technical and vocational education will have to undergo a laboratory training in entrepreneurship. Hatten and Ruthand (1995) believed that nurturing potential entrepreneur through the educational process could produce more entrepreneurs. In the case of teacher preparation, it implies that prospective teachers will be able to acquire the entrepreneurship skills that may make their teaching more successful. Some of the entrepreneurial skills that may relate well with the teaching professions are initiative, creative thinking, organizing, innovativeness and many more. It is believed (Lachman 1980) that a person who has the same characteristics as entrepreneurs will have a higher tendency to perform entrepreneurial acts than people who do not possess such characteristics.

**REFERENCES**


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Broad Money Demand and Financial Liberalization in Malaysia: An Application of the Nonlinear Learning Function and Error-Correction Models

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Keywords: Broad money demand, financial liberalization and innovation, nonlinear learning function, and error-correction model

ABSTRACT

This paper attempts to model the effects of financial liberalization and innovations on the demand for broad money in Malaysia. The nonlinear learning function and error-correction mechanism model were utilized. The results of encompassing tests and dynamic (ex post) simulation confirm the error-correction as the parsimonious specification. The augmented error-correction model with nonlinear interacted variables is unable to detect the effects of financial liberalization on Malaysian broad money demand.

INTRODUCTION

Relatively little research work has been undertaken on the underlying effects of the financial liberalization and innovations on the demand for money in Malaysia. The view that financial liberalization and innovations are important for money demand and thus have important consequences for the conduct of monetary policy, has a pedigree that goes back to the mid-1950s. The precursor to recent studies was the work of Gurley and Shaw (1955, 1960); Cagan and Schwartz (1975); and Friedman (1984).

An important feature in the conduct of monetary policy and hence the monetary transmission mechanism, is the existence of a stable and predictable relationship between monetary aggregates, output, prices and interest rates. However, financial liberalization and financial innovations, have been the prime suspects for the breakdown in the money demand relationship, leading the authority to focus its control on other indicators of monetary policy such as bank credit and interest rate (Ismail and Smith 1993).

Moreover, one must take notice that there are various types of financial liberalization taken place in the context of developing countries. For example, Tseng and Corker (1991) had emphasized on interest rates liberalization. As a result they argued that 'it is important to question which interest rates have been liberalized: if, for example, interest rates on time deposits increase after liberalization, the demand for broad money might rise at any given level of income, but the demand for narrow money might decline. This
means that financial deregulation and innovation might cause instability on both monetary aggregate demand functions - cause a one-time or a gradual shift in money holdings and hence alter the sensitivity of money demand to changes in both income and interest rates' (p. 11) 1.

Having mentioned the above issues, certainly, additional work is needed before the impact of financial deregulation and financial innovation on the money demand in Malaysia can be fully understood. The purpose of this paper is to clarify the situation. In so doing, this study adopts the nonlinear learning function model (NLM) recently proposed by Hendry and Ericsson (1991) and Baba, Hendry and Starr (1992) to capture the impact of financial deregulation and financial innovation on income and interest rates, which technique to my best knowledge, has never been tested on the Malaysian money demand function 2. In addition, the error-correction mechanism model (ECM) is utilized for comparison purposes. The procedures are elaborated in the immediate section. Specifically, this study emphasizes on the demand for real broad money (m2) due to the following reasons:

First: As a result of financial liberalization and financial innovation, the Malaysian monetary authority currently monitors the growth of broad monetary aggregate (m2). It is argued that the growth of m2 reflects the growth of private sector liquidity (BNM 1994). Thus, focussing on m2 is justified in order to parallel to the present practice of the Malaysian monetary authority (Mohamed 1996).

Second: A study by Mohamed (1998) has discovered that the short-run narrow money demand function has suffered from one serious problem such as temporal structural instability and thus reducing the robustness of policy implications.

Having mentioned the introduction above, the remainder of the paper is organized as follows. Section II presents the methodology used in estimating the nonlinear model. Section III deals with the series properties. The empirical results are presented and discussed in Section IV. Finally, Section V presents the paper’s concluding remark.

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3. Hossain (1994) employed partial adjustment as his base line model.

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METHODOLOGY

A Model of the Nonlinear Learning Process (NLM)

In the literature on financial deregulation and financial innovation it is often suggested that deregulation and innovation take time to exert their full impact on money demand as economic agents need time to learn about newly innovated financial assets and to change their behaviour of money holdings. To model the transition phase of financial adaptation; Hester (1981), Hendry et al. (1991), and Baba et al. (1992); amongst others, have used the NLM. They have constructed the nonlinear interacted variables using the following nonlinear weighting function w to represent agents learning process about the newly introduced financial assets. The nonlinear weighting function is constructed as:

\[ w_t = (1 + \exp(\alpha - \beta(t - t^*) + 1) \]

for \( t \geq t^* \) and 0 otherwise.

where \( t \) is time, \( t^* \) is the date of introduction of the assets, and \( \alpha \) and \( \beta \) correspond to initial knowledge and the rate of learning. Following Hendry et al. (1991), Baba et al. (1992), they have set \( \alpha = 7 \) and \( \beta = 0.8 \) for the US, implying the learning adjustment \( w_t = 0.50 \) after two years and \( w_t = 0.999 \) after 3.5 years; while for the UK they set \( \alpha = 5 \) and \( \beta = 1.2 \), implying \( w_t = 0.50 \) after one year and \( w_t = 0.999 \) after two years, indicating higher initial knowledge and more rapid learning for the UK counterpart. In his work on the Australian data, Hossain (1994) set the \( \alpha \) and \( \beta \) values exactly as Hendry et al. (1991) had done in the US case. Hendry et al. (1991) showed that the inclusion of the learning-adjusted \( m1 \) retail sight-deposit interest rate in the error-correction model explained sufficiently the rapid growth of \( m1 \) in the UK and in the US. Baba et al. (1992) also found a similar result on the demand for \( m1 \). On the other hand, the study by Hossain (1994) indicated that the results were qualitatively similar, either using the nonlinear learning adjustment function or using the linear time trend.
Following those studies, we have adjusted the initial values for \( \alpha \) and \( \beta \) in order to be well fitted to the Malaysian case. We set the \( \alpha = 10 \) and \( \beta = 0.5 \), implying \( w_t = 0.50 \) after five years and \( w_t = 0.999 \) after 8.5 years to indicate a lower initial knowledge and slower learning process among the economic agents in Malaysia. The series \( (w_t) \) were constructed beginning in 1979 and reached the peak at the end of the 1980s, so that the generated weighting series would capture most of the financial deregulation and financial innovation during the 1980s. Next, the generated weighting series were used to define two nonlinear interacted variables for income \( (y) \) and interest rate \( (ir) \), respectively: \( w^t \Delta y \) and \( w^t \Delta ir \), and finally these variables were included in the augmented error-correction model for estimation purposes. The equation can be written as follows:

\[
\Delta (m2-p) = a_0 + a_1 \Delta y + a_2 \Delta ir + a_3 \Delta ir + a_4 ECM_{t-1} + a_5 w^t \Delta y + a_6 w^t \Delta ir,
\]

where \( m2-p \) is real \( m2 \); \( \Delta p \) is an annualized inflation rate, and \( ECM_{t-1} \) is an error-correction term. From equation (2) there are three testable null hypotheses: \( a_0 = 0, a_1 = 0 \) and \( a_2 = a_3 = 0 \). The first two hypotheses indicate that for each interacted variable has no effect on money demand, whilst the latter shows the combining effects are insignificant on money demand. In this paper, the final estimated ECM is estimated using Hendry-type general-to-specific methodology (Hendry 1979; Hendry et al. 1984).

The Time Series Properties

Detailed sources and data description used in this study are presented in Data Appendix. The quarterly data used spanning 1972q1 to 1993q4. The Dickey-Fuller (DF), the Augmented Dickey-Fuller (ADF) and the Phillip-Perron (1988) procedures were utilised in order to check the order of integration or the data stationarity. For all tests, the results show that all variables are integrated of order one or stationary after first differences. All variables are specified in natural logarithm. The cost of holding money is measured by the ir, which is the margin between the 3-month Treasury bill rate \((tbr3)\) and the 3-month banks fixed deposit rate \((dbr3)\). In modeling the long-run broad money demand function, we have tried various measurements of opportunity cost of holding broad money i.e. 3-month, 6-month and 12-month Treasury bill rates. However, the results were inconsistent with the standard theoretical sign (negative) in the money demand study. This problem is actually well recognized in the literature of money demand in the developing countries (Aghchevi et al. 1979; Tseng and Corker 1991; and Tariq and Matthews 1996)). Following Tariq and Matthews (1996) and Johansen and Juselius (1990), the \( ir \) was constructed as the margin rate between the 3-month Treasury bill rate and the 3-month commercial banks fixed deposit rate. Moreover, the \( ir \) could be considered as a tightness of holding money. The fixed deposit rate acts as the own rate of interest and the \( tbr3 \) acts as the rate on the alternative asset.

Cointegration test - The Johansen-Juselius’s (1990, 1992) maximum likelihood procedure was utilised to test for long-run cointegrating relationships among real broad money \((m2-p)\), real income \((y)\), interest rate margin \((ir)\) and annualised inflation rate \((\Delta p)\). The estimates of the cointegrating vector was based on a VAR model with two lags, a constant, ‘centered’ seasonal dummies \((S1, S2 \text{ and } S3)\) to capture the presence of the linear time trend in the nonstationary part of the data generating process, and a shift variable with value zero to 1978:4 inclusive and non-zero thereafter \((DUM1)\) to allow for the effects of financial liberalization. The results of the rank tests are shown in Table 1 below.

The null hypothesis of non-stationary with no cointegration \((r = 0)\) was rejected at the 5% level on the basis of the trace and the maximal-eigenvalue \((\lambda_{max})\) test statistics, whereas the null hypothesis of \( r \) to be, at most, one was not rejected. This led to the conclusion that there...
TABLE 1
Cointegration with unrestricted intercepts and restricted trends in the VAR

Cointegration LR Test Based on Maximal Eigenvalue of the Stochastic Matrix

80 observations from 1974Q1 to 1993Q4. Order of VAR = 2.

List of variables included in the cointegrating vector:
\( m^2 \quad y \quad i_r \quad \Delta p \)

List of I(0) variables included in the VAR:
DUM1 S1 S2 S3

List of eigenvalues in descending order:
0.32567 \( \quad 0.19297 \quad 0.065559 \quad 0.0082307 \)

Null Alternative Statistic 95% Critical Value 90% Critical Value
\( r = 0 \quad r \geq 1 \quad 31.5229^* \quad 27.4200 \quad 24.9900 \)
\( r \geq 1 \quad r \geq 2 \quad 17.1511 \quad 21.1200 \quad 19.0200 \)
\( r \geq 2 \quad r \geq 3 \quad 5.4245 \quad 14.8800 \quad 12.9800 \)
\( r \geq 3 \quad r \geq 4 \quad 0.6611 \quad 8.0700 \quad 6.5000 \)

Cointegration LR Test Based on the Trace of the Stochastic Matrix

Null Alternative Statistic 95% Critical Value 90% Critical Value
\( r = 0 \quad r \geq 1 \quad 54.7597^* \quad 48.8800 \quad 45.7000 \)
\( r \geq 1 \quad r \geq 2 \quad 23.2668 \quad 31.5400 \quad 28.7800 \)
\( r \geq 2 \quad r \geq 3 \quad 6.0857 \quad 17.8600 \quad 15.7500 \)
\( r \geq 3 \quad r \geq 4 \quad 0.6611 \quad 8.0700 \quad 6.5000 \)

was at most one cointegrating vector \( \beta \) forming a cointegrating relationship \( \beta'x \) where \( x' = [(m^2-p), y, i_r, \Delta p]' \). Normalised for \( (m^2-p) \), the unrestricted cointegrating vector can be written as:
\[
(m^2-p) = 1.1726 y - 3.0412 i_r - 0.24394 \Delta p \quad (0.3679)^* (2.7624) (0.1285)^* \quad (3)
\]

where standard errors in bracket; and \( *\)\[^[\ast]\] denotes significant at the 1\%[5\%] level.

The null hypothesis of a unit income elasticity (\( \alpha = 1 \)) also was accepted by the data as indicated by the log likelihood ratio test statistics, asymptotically chi-squared distribution with one degree of freedom; \( \chi^2(1) = 0.15452 [0.694] \); yielding the long-run restricted cointegrating vector:
\[
(m^2-p) = 1.0 y - 3.2482 i_r - 0.29385 \Delta p \quad (4)
\]
or the so-called an error-correction term (ECM2) and can be written as
\[
ECM2 = 1.0 (m^2-p) - 1.0 y + 3.2482 i_r + 0.29385 \Delta p \quad (4.1)
\]

In summary, the results of cointegration tests suggest that it seems reasonable to proceed with a single-equation analysis for \( (m^2-p) \). However, before doing so, the explanatory variables were tested for exogeneity by applying the Wu-Hausman test. The computed Wu-Hausman \( \hat{T}_2 \) statistic \( F(3,71) = 0.595[0.554] \) supported the hypothesis that the explanatory variables in the cointegrating vector were exogenous.

There are two main results that can be derived from the estimates of long-run imposed restrictions money demand function:

**First:** Although the imposed unit long-run income elasticity was not rejected, however, the unrestricted income elasticity was found to be 1.1726 which is consistent with the results found in most previous studies in the developing countries, Chowdhury (1997), Tariq and Matthews (1996); Tseng and Corker (1991); and Aghevli et al. (1979). The results indicated that the velocity of broad money in Malaysia had declined over time. A likely explanation is that as a result of financial deregulation and innovation, the banking institutions can provide more services, i.e. transaction services, and electronic facilities, and thus have a greater impact on the growth of broad money, implying the growing degree of monetisation in the economy.

**Second:** The estimation result also indicated that a strong exogeneity assumption on the explanatory variables was not rejected by the
An Application of the Nonlinear Learning Function and Error-Correction Models

Wu-Hausman test statistics. In addition, the acceptance of one cointegrating vector in the data allowed an efficient estimation of the short-run dynamic of the demand for broad money in Malaysia.

RESULTS

IV The Estimates of NLM and ECM

The final estimated base line ECM model is summarised in Table 2. However for comparison purposes, we have also estimated the augmented ECM model which includes two nonlinear interacted variables namely, $w^n\Delta y$ and $w^n\Delta i r$ (see Table 3). As mentioned in Section II, the final estimated models were derived using the Hendry-type general-to-specific methodology. By inspection on both tables, the former estimation results indicate better outcomes particularly in the acceptance of the income variable. That means the inclusion of two nonlinear interacted variables to capture for the effects of financial liberalization on the demand for broad money are unable to improve the final specification. The results are supported by the nonrejection of the null hypotheses: $a_y = 0, a_z = 0$ and $a_y = a_z = 0$ using the standard F-test (see, Table 4).

Encompassing Alternative Models

Two different models have been estimated in the last section: [1] the base line ECM model or the error-correction model without the nonlinear interacted variables, and [2] the augmented ECM model - the base line ECM model with the nonlinear interacted variables. The next question to be asked is which equation represents the best approximation of the data generating process. Following an approach developed by Mizon and Richard (1986), this section conducts an F-test, the so-called encompassing F-test, which is a test for 'restricted' against 'unrestricted' models. The encompassing F-test is conducted on the 'restricted' model (base line ECM model) against the 'unrestricted' models (augmented ECM model) as follows.

### TABLE 2

Ordinary Least Squares estimation of the base line error-correction model

<table>
<thead>
<tr>
<th>Dependent variable is ($\Delta m2-p$)</th>
<th>80 observations used for estimation from 1974Q1 to 1993Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regressor</strong></td>
<td><strong>Coefficient</strong></td>
</tr>
<tr>
<td>Constant</td>
<td>0.03891</td>
</tr>
<tr>
<td>$\Delta y$</td>
<td>0.18102</td>
</tr>
<tr>
<td>$\Delta i r$</td>
<td>-0.90363</td>
</tr>
<tr>
<td>$\Delta i r(-2)$</td>
<td>-0.99451</td>
</tr>
<tr>
<td>$\Delta A p$</td>
<td>-0.00586</td>
</tr>
<tr>
<td>$ecm2(-1)$</td>
<td>-0.01551</td>
</tr>
<tr>
<td><strong>R-Squared</strong></td>
<td>0.3131</td>
</tr>
<tr>
<td><strong>S.E. of Regression</strong></td>
<td>0.0917</td>
</tr>
<tr>
<td><strong>Mean of Dependent Variable</strong></td>
<td>0.0265</td>
</tr>
<tr>
<td><strong>Residual Sum of Squares</strong></td>
<td>0.0279</td>
</tr>
<tr>
<td><strong>DW-statistic</strong></td>
<td>1.4413</td>
</tr>
</tbody>
</table>

**Diagnostic Tests**

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>LM Version</th>
<th>F Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Serial Correlation</td>
<td>CHSQ (4)= 7.4404 [.114]</td>
<td>F(4, 70)= 1.7945 [.140]</td>
</tr>
<tr>
<td>B: Functional Form</td>
<td>CHSQ (1)= 0.4149 [.519]</td>
<td>F(1, 73)= 0.3805 [.539]</td>
</tr>
<tr>
<td>C: Normality</td>
<td>CHSQ (2)= 3.2765 [.194]</td>
<td>Not applicable</td>
</tr>
<tr>
<td>D: Heteroscedasticity</td>
<td>CHSQ (1)= 0.3002 [.584]</td>
<td>F(1, 78)= 0.2938 [.589]</td>
</tr>
</tbody>
</table>

**Notes:**

A: Lagrange multiplier test of residual serial correlation
B: Ramsey’s RESET test using the square of the fitted values
C: Based on a test of skewness and kurtosis of residuals
D: Based on the regression of squared residuals on squared fitted values

where $ecm2 = 1.0*m2 -1.0* y + 3.2482* ir + 0.29385* A p$
TABLE 3
The augmented error-correction model with nonlinear interacted variables

<table>
<thead>
<tr>
<th>Regressor</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-Ratio[Prob]</th>
</tr>
</thead>
<tbody>
<tr>
<td>constant</td>
<td>0.04124</td>
<td>.00995</td>
<td>4.1441[.000]</td>
</tr>
<tr>
<td>Δy</td>
<td>0.17657</td>
<td>.11625</td>
<td>1.5189[.133]</td>
</tr>
<tr>
<td>Δir</td>
<td>-0.64388</td>
<td>.38157</td>
<td>-1.6861[.096]</td>
</tr>
<tr>
<td>Δir(-2)</td>
<td>-0.87181</td>
<td>.30094</td>
<td>-2.8970[.005]</td>
</tr>
<tr>
<td>ΔΔp</td>
<td>-0.00628</td>
<td>.00242</td>
<td>-2.5972[.011]</td>
</tr>
<tr>
<td>ecm2(-1)</td>
<td>-0.01763</td>
<td>.09491</td>
<td>-1.8783[.065]</td>
</tr>
<tr>
<td>w*Δy</td>
<td>0.02294</td>
<td>.18266</td>
<td>0.1256[.900]</td>
</tr>
<tr>
<td>w*Δir</td>
<td>-0.79335</td>
<td>.68145</td>
<td>-1.1642[.248]</td>
</tr>
</tbody>
</table>

R-Squared: 0.326080  R-Bar-Squared: 0.2605
S.E. of Regression: 0.019523  F(7,72): 4.9768[.000]
Mean of Dependent Variable: 0.026557  S.D. of Dependent Variable: 0.0227
Residual Sum of Squares: 0.027443
DW-statistic: 1.4615

Diagnostic Tests
Test Statistics
A:Serial Correlation
B:Functional Form
C:Normality
D:Heteroscedasticity
LM Version

<table>
<thead>
<tr>
<th>Test Statistic</th>
<th>CHSQ (4)= 6.7641[.149]</th>
<th>F(4, 68)= 1.5701 [.192]</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHSQ (1)= 0.0860[.769]</td>
<td>F(1, 71)= 0.0764[.783]</td>
<td></td>
</tr>
<tr>
<td>CHSQ (2)= 2.5753[.276]</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>CHSQ (1)= 0.2079[.648]</td>
<td>F(1, 78)= 0.2033[.653]</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
A: Lagrange multiplier test of residual serial correlation
B:Ramsey's RESET test using the square of the fitted values
C:Based on a test of skewness and kurtosis of residuals
D:Based on the regression of squared residuals on squared fitted values

TABLE 4
The OLS regression results: The error-correction model with nonlinear interacted variables

\[ \Delta(m^2-p)_t = a_0 + a_1 \Delta y_t + a_2 \Delta ir_t + a_3 \Delta ir_{t-2} + a_4 \Delta \Delta p_t + a_5 ecm2_{t-1} + a_6 w*\Delta y_t + a_7 w*\Delta ir_t \]

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>k=56</td>
<td>F(1,48)</td>
<td>F(1,68)</td>
<td>F(1,72)</td>
</tr>
<tr>
<td>k=72</td>
<td>0.709</td>
<td>0.0200</td>
<td>0.150</td>
</tr>
<tr>
<td>k=80</td>
<td>F(1,48)</td>
<td>F(1,68)</td>
<td>F(1,72)</td>
</tr>
<tr>
<td></td>
<td>0.184</td>
<td>0.516</td>
<td>1.350</td>
</tr>
<tr>
<td></td>
<td>F(2,48)</td>
<td>F(2,68)</td>
<td>F(2,72)</td>
</tr>
<tr>
<td></td>
<td>0.486</td>
<td>0.269</td>
<td>0.690</td>
</tr>
</tbody>
</table>

Notes: '*' denotes significant at a 10% level.

Restricted base line error-correction model:

\[ \Delta(m^2-p)_t = a_0 + a_1 \Delta y_t + a_2 \Delta ir_t + a_3 \Delta ir_{t-2} + a_4 \Delta \Delta p_t + a_5 ecm2_{t-1} \]

Unrestricted augmented error-correction model with nonlinear interacted variables:

\[ \Delta(m^2-p)_t = a_0 + a_1 \Delta y_t + a_2 \Delta ir_t + a_3 \Delta ir_{t-2} + a_4 \Delta \Delta p_t + a_5 ecm2_{t-1} + a_6 w*\Delta y_t + a_7 w*\Delta ir_t \]
The test results are reported in Table 5 below. The tests in Table 5 indicate that all the null hypotheses cannot be rejected, implying the original restricted specification is not misspecified. However, whether the respecified 'restricted' error-correction model (equation 5) can be regarded as a satisfactory short-run broad money demand function, depends on its ability to provide adequate out-of-sample (ex post) forecasts. The results are reported in the next subsection.

<table>
<thead>
<tr>
<th>TABLE 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encompassing F-test - Restricted vs. unrestricted models</td>
</tr>
<tr>
<td>sample period</td>
</tr>
<tr>
<td>1974q1-1991q4</td>
</tr>
<tr>
<td>1974q1-1992q4</td>
</tr>
<tr>
<td>1974q1-1993q4</td>
</tr>
</tbody>
</table>

Ex post Dynamic Forecast Results
A summary of the forecast statistics is detailed in Table 6. The results show that the root-mean-square prediction errors (rmse) of the original restricted model are quantitatively similar to the unrestricted models. In addition, all of the equations passed the predictive failure tests. An F-test was also conducted to test the null hypothesis that there is no difference in the accuracy of these forecasts (see, Holden, Peel and Thompson 1990; pp. 33-37 for the details of the procedure). However, the latter test also failed to reject the null hypothesis. As an alternative criterion to select the best specification, all equations were re-estimated and then their properties were compared. The estimation results on equation (5) were reported earlier in Table 5, while results on equation (6) were reported in Table 4. Based on these estimation results, it is clear that the original model ('restricted' version) provided the best outcomes. Although they retained the desirable diagnostic residual properties, the estimates of equation (6) indicate that the income variable was insignificant. Therefore, the restricted specification (equation 5) was considered to be the parsimonious model for broad money demand in this study.

CONCLUSION
This study has shown that equation (5) is the preferred error-correction specification for the short-run broad money demand function, while equation (4) for the long-run function. The results of encompassing tests and dynamic (ex post) simulations confirm equation (5) as the parsimonious error-correction specification. The inclusion of the nonlinear interacted variables was unable to detect the underlying effects of financial liberalization and innovations on the demand for broad money in Malaysia. The estimated short-run elasticities of income, cost of holding money, and inflation, are all reasonably estimated by the restricted model as reported in Table 2. Overall, the parsimonious model is rather simple, and it includes basic explanatory variables in the contemporary literature of money demand function.

Given the present results, the following two policy implications can be drawn from this study. First, the evidence supports the present strategy taken by the Malaysian monetary authority in monitoring the growth of the broad monetary aggregate as one of several strategies to curb

<table>
<thead>
<tr>
<th>TABLE 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary statistics for ex post forecasts</td>
</tr>
<tr>
<td>Estimation period</td>
</tr>
<tr>
<td>Significance test among the RMSE</td>
</tr>
<tr>
<td>Equation (5) has a smaller RMSE than equation (6)</td>
</tr>
<tr>
<td>F(2,2) = 0.27</td>
</tr>
</tbody>
</table>
inflationary pressure. This study shows that inflation has a significant negative impact on the demand for real \( m_2 \). For example, a 1% rise in the price level could bring about a 0.58% decline in the demand for real \( m_2 \), ceteris paribus. Hence, monetary policy has an important role in controlling the price stability in Malaysia.

Second, the impact of the financial deregulation and innovation on the models' coefficients had been tested using two formal procedures. The result showed that the recursive estimates of the short-run interest elasticity had gradually decreased over time\(^{11}\). (Figs. 1 and 2) Thus, the evidence suggested that the interest sensitivity of money demand had increased, implying a small slope of the LM curve (a flatter LM curve). The flatter the LM curve, the greater would be the rise in real income and the smaller would be the rise in the interest rate (Parkin and Bade 1988; p.256). This result should prove valuable for the effectiveness of monetary policy\(^{12}\).

Finally, recent development in the money demand literature suggests to estimate Divisia aggregates (Barnet et al. 1984). For example, Cuthbertson (1988, p. 97) argues that ‘the approach is probably most useful where interest rates are market determined rather than subject to regulation and hence may prove useful in an increasing competitive financial environment.’ Hence, the deregulation of interest rates opens up the possibility that future innovations in \( m_2 \) may need to be remodelled within the framework of the ‘divisia’ approach\(^{13}\). I leave this issue for future research studies.

REFERENCES


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Fig. 2. Recursive estimates of the coefficient of $\Delta r$, (Equation 6)

\begin{figure}
\centering
\includegraphics[width=\textwidth]{fig2}
\end{figure}

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Coef. of DIR</th>
<th>2 S.E. bands</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973Q1</td>
<td>-.0064007</td>
<td>-.83014</td>
</tr>
<tr>
<td>1978Q2</td>
<td>-.16539</td>
<td>1.6539</td>
</tr>
<tr>
<td>1983Q3</td>
<td>2.47761</td>
<td></td>
</tr>
<tr>
<td>1988Q4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993Q4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


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M. Azali & Kent Matthews
DATA APPENDIX
Data used in the paper come from various issues of the International Financial Statistics published by the International Monetary Fund and the Quarterly Bulletin Bank Negara Malaysia. The quarterly data of the Industrial Production Index (IPI, 1990=100) were utilised to interpolate the quarterly GDP data (y) using the Vangrevelinghe’s method (see Ginsburgh 1973)). Observations spanning 1972:q1 to 1993:q4. The variables which have been used in the paper are as follows: GDP - Gross Domestic Product; m2 - broad money supply; p - consumer price index (CPI, 1990=100); dR3 - 3-month deposit rate; and tbr3 - 3-month Treasury bill rate.
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