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Modelling the Volatility of Currency Exchange Rate Using GARCH Model

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ABSTRAK

Kertas ini mengkaji model GARCH dan modifikasinya dalam menguasai kemeruapan kadar pertukaran mata wang. Parameter model tersebut dianggar dengan menggunakan kaedah kebolehdajian maksimum. Prestasi bagi penganggaran dalam sampel didiagnosis dengan menggunakan beberapa statistik kebagusan penyuaian dan kejituan telahan satu langkah ke depan dan luar sampel dinilai dengan menggunakan min ralat kuasa dua. Keputusan kajian menunjukkan kegigihan kemeruapan kadar pertukaran mata wang RM/Sterling. Keputusan daripada penganggaran dalam sampel menyokong kebergunaan model GARCH dan model variasi malar pula ditolak, sekurang-kurangnya dalam sampel. Statistik Q dan ujian pendarab Langrange (LM) mencadangkan penggunaan model GARCH yang beringatan panjang menggantikan model ARCH yang beringatan pendek dan berperingkat lebih tinggi. Model GARCH-M pegun berprestasi lebih tinggi daripada model GARCH lain yang digunakan dalam kajian ini, dalam telahan satu langkah ke depan dan luar sampel. Apabila menggunakan model perjalanan rawak sebagai tanda aras, semua model GARCH berprestasi lebih baik daripada model tanda aras ini dalam meramal kemeruapan kadar pertukaran mata wang RM/Sterling.

ABSTRACT

This paper attempts to study GARCH models with their modifications, in capturing the volatility of the exchange rates. The parameters of these models are estimated using the maximum likelihood method. The performance of the within-sample estimation is diagnosed using several goodness-of-fit statistics and the accuracy of the out-of-sample and one-step-ahead forecasts is evaluated using mean square error. The results indicate that the volatility of the RM/Sterling exchange rate is persistent. The within sample estimation results support the usefulness of the GARCH models and reject the constant variance model, at least within-sample. The Q-statistic and LM tests suggest that long memory GARCH models should be used instead of the short-term memory and high order ARCH model. The stationary GARCH-M outperforms other GARCH models in out-of-sample and one-step-ahead forecasting. When using random walk model as the naive benchmark, all GARCH models outperform this model in forecasting the volatility of the RM/Sterling exchange rates.

INTRODUCTION

Issues related to foreign exchange rate have always been the interest of researchers in modern financial theory. Exchange rate, which is the price of one currency in terms of another currency, has a great impact on the volume of foreign trade and investment. Its volatility has increased during the last decade and is harmful to economic welfare (Laopodis 1997). The

exchange rate fluctuated according to demand and supply of currencies. The exchange rate volatility will reduce the volume of international trade and the foreign investment.

Modelling and forecasting the exchange rate volatility is a crucial area for research, as it has implications for many issues in the arena of finance and economics. The foreign exchange volatility is an important determinant for pricing

of currency derivative. Currency options and forward contracts constitute approximately half of the U.S. 880bn per day global foreign exchange market (Isard 1995). In view of this, knowledge of currency volatility should assist one to formulate investment and hedging strategies.

The implication of foreign exchange rate volatility for hedging strategies is also a recent issue. These strategies are essential for any investment in a foreign asset, which is a combination of an investment in the performance of the foreign asset and an investment in the performance of the domestic currency relative to the foreign currency. Hence, investing in foreign markets that are exposed to this foreign currency exchange rate risk should hedge for any source of risk that is not compensated in terms of expected returns (Santis *et al.* 1998).

Foreign exchange rate volatility may also impact on global trade patterns that will affect a country's balance of payments position and thus influence the government's national policy-making decisions. For instance, Malaysia fixed the exchange rate at RM3.80/US\$ in September, 1998, due to the economic turmoil and currency crisis in 1997. This turmoil has spread to developed countries such as USA, Hong Kong, Europe and other developing South American countries such as Brazil and Mexico. Due to this currency crisis, various governments have resorted to different national policies so as to mitigate the effect of this crisis.

In international capital budgeting of multinational companies, the knowledge of foreign exchange volatility will help them in estimating the future cash flows of projects and thus the viability of the projects.

Consequently, forecasting the future movement and volatility of the foreign exchange rate is crucially important and of interest to many diverse groups including market participants and decision makers.

Beginning with the seminal works of Mandelbrot (1963a, 1963b, 1967) and Fama (1965), many researchers have found that the stylized characteristics of the foreign currency exchange returns are non-linear temporal dependence and the distribution of exchange rate returns are leptokurtic, such as Friedman and Vandersteel (1982), Bollerslev (1987), Diebold (1988), Hsieh (1988, 1989a, 1989b),

Diebold and Nerlove (1989), Baillie and Bollerslev (1989). Their studies have found that large and small changes in returns are 'clustered' together over time, and that their distribution is bell-shaped, symmetric and fat-tailed.

These features of data are normally thought to be captured by using the Autoregressive Conditional Heteroskedasticity (ARCH) model introduced by Engle (1982) and the Generalised ARCH (GARCH) model developed by Bollerslev (1986), which is an extension of the ARCH model to allow for a more flexible lag structure. The use of ARCH/GARCH models and its extensions and modifications in modeling and forecasting stock market volatility is now very common in finance and economics, such as French *et al.* (1987), Akgiray (1989), Lau *et al.* (1990), Pagan and Schwert (1990), Day and Lewis (1992), Kim and Kon (1994), Franses and Van Dijk (1996) and Choo *et al.* (1999).

On the other hand, the ARCH model was first applied in modeling the currency exchange rate by Hsieh only in 1988. In a study done by Hsieh (1989a) to investigate whether daily changes in five major foreign exchange rates contain any nonlinearities, he found that although the data contain no linear correlation, evidence indicates the presence of substantial nonlinearity in a multiplicative rather than additive form. He further concludes that a generalized ARCH (GARCH) model can explain a large part of the nonlinearities for all five exchange rates.

Since then, applications of these models to currency exchange rates have increased tremendously, such as Hsieh (1989b), Bollerslev, T. (1990), Pesaran and Robinson (1993), Copeland *et al.* (1994), Takezawa (1995), Episcopos and Davies (1995), Brooks (1997), Hopper (1997), Cheung *et al.* (1997), Laopodis (1997), Lobo *et al.* (1998) and Duan *et al.* (1999).

In many of the applications, it was found that a very high-order ARCH model is required to model the changing variance. The alternative and more flexible lag structure is the Generalised ARCH (GARCH) introduced by Bollerslev (1986). Bollerslev *et al.* (1992) indicated that the squared returns of not only exchange rate data, but all speculative price series, typically exhibit autocorrelation in that large and small errors tend to cluster together in contiguous time periods in what has come to be known as volatility clustering. It is also proven that small

lag such as GARCH(1,1) is sufficient to model the variance changing over long sample periods (French *et al.* 1987; Franses and Van Dijk 1996; Choo *et al.* 1999).

Even though the GARCH model can effectively remove the excess kurtosis in returns, it cannot cope with the skewness of the distribution of returns, especially the financial time series which are commonly skewed. Hence, the forecasts and forecast error variances from a GARCH model can be expected to be biased for skewed time series. Recently, a few modifications to the GARCH model have been proposed, which explicitly take into account skewed distributions. One of the alternatives of non-linear models that can cope with skewness is the Exponential GARCH or EGARCH model introduced by Nelson (1990). For stock indices, Nelson's exponential GARCH is proven to be the best model of the conditional heteroskedasticity.

In 1987, Engle *et al.* developed the GARCH-M to formulate the conditional mean as function of the conditional variance as well as an autoregressive function of the past values of the underlying variable. This GARCH in the mean (GARCH-M) model is the natural extension due to the suggestion of the financial theory that an increase in variance (risk proxy) will result in a higher expected return.

Choo *et al.* (1999) studies the performance of GARCH models in forecasting the stock market volatility and they found that i) the hypotheses of constant variance models could be rejected since almost all the parameter estimates of the non-constant variance (GARCH) models are significant at the 5% level; ii) the EGARCH model has no restrictions and constraints on the parameters; iii) the long-memory GARCH model is more suitable than the short-memory and high-order ARCH model in modelling the heteroscedasticity of the financial time series; iv) the GARCH-M is best in fitting the historical data whereas the EGARCH model is best in out-of-sample (one-step-ahead) forecasting; v) the IGARCH is the poorest model in both aspects.

Since Choo *et al.* (1999) have indicated that the GARCH-M model performs well in within-sample estimation and the EGARCH model performs best in out-of-sample forecasting, the combination of both models, EGARCH-M should be able to enhance the performance in both aspects.

In order to know the out-of-sample forecasting performance of EGARCH-M, we compare the performance of EGARCH-M and the other modifications of the GARCH model to the simple random walk forecasting scheme.

The models are presented in the following section. The third section is the background of currency exchange rate data and the methodology used in this study. All the results will be discussed in the fourth section. The conclusion will be in the final section.

MODEL

The conditional distribution of the series of disturbances which follows the GARCH process can be written as

$$\varepsilon_t / \psi_{t-1} \sim N(0, h_t)$$

where ψ_{t-1} denotes all available information at time $t-1$. The conditional variance h_t is

$$h_t = w + \sum_{i=1}^q \alpha_i \varepsilon_{t-i}^2 + \sum_{j=1}^p \beta_j h_{t-j}$$

Hence, the GARCH regression model for the series of r_t can be written as

$$\phi_s(B)r_t = \mu + \varepsilon_t, \text{ with } \phi_s(B) = 1 - \phi_1 B - \dots - \phi_s B^s$$

$$\varepsilon_t = \sqrt{h_t} e_t$$

$$e_t \sim N(0, 1)$$

$$h_t = w + \sum_{i=1}^q \alpha_i \varepsilon_{t-i}^2 + \sum_{j=1}^p \beta_j h_{t-j}$$

where B is the backward shift operator defined by $B^k y_t = y_{t-k}$. The parameter μ reflects a constant term, which in practice is typically estimated to be close or equal to zero. The order of s is usually 0 or small, indicating that there are usually no opportunities to forecast r_t from its own past. In other words, there is always no auto-regressive process in r_t .

1) ARCH

The GARCH(p,q) model is reduced to the ARCH(q) model when $p = 0$ and at least one of the ARCH parameters must be nonzero ($q > 0$).

2) *Stationary GARCH, SG(p,q)*

If the parameters are constrained such that

$$\sum_{i=1}^q \alpha_i + \sum_{j=1}^p \beta_j < 1,$$

they imply the weakly stationary GARCH (SG(p,q)) model since the mean, variance and autocovariance are finite and constant over time.

3) *Unconstrained GARCH, UG(p,q)*

The parameter of w , α_i and β_j can be unconstrained, thus yielding the unconstrained GARCH (UG(p,q)) model.

4) *Non-negative GARCH, NG(p,q)*

If $p \geq 0$, $q > 0$ and $w > 0$, $\alpha_i \geq 0$, $\beta_j \geq 0$, yields the non-negative GARCH (NG(p,q)) model.

5) *Integrated GARCH, IG(p,q)*

Sometimes, the multistep forecasts of the variance do not approach the unconditional variance when the model is integrated in variance; that is

$$\sum_{i=1}^q \alpha_i + \sum_{j=1}^p \beta_j = 1.$$

The unconditional variance for the IGARCH model does not exist. However, it is interesting that the integrated GARCH or IGARCH (IG(p,q)) model can be strongly stationary even though it is not weakly stationary (Nelson 1990a, b).

6) *Exponential GARCH, EG(p,q)*

The exponential GARCH or EGARCH (EG(p,q)) model was proposed by Nelson (1991). Nelson and Cao (1992) argue that the nonnegativity constraints in the linear GARCH model are too restrictive. The GARCH model imposes the nonnegative constraints on the parameters, α_i and β_j , while there is no restriction on these parameters in the EGARCH model. In the EGARCH model, the conditional variance, h_t , is an asymmetric function of lagged disturbances, ε_{it} :

$$\ln(h_t) = w + \sum_{i=1}^q \alpha_i g(Z_{t-i}) + \sum_{j=1}^p \beta_j \ln(h_{t-j})$$

where

$$g(Z_t) = \theta Z_t + \gamma [|Z_t| - E|Z_t|]$$

$$Z_t = \varepsilon_t / \sqrt{h_t}$$

The coefficient of the second term in $g(Z_t)$ is set to be 1 ($\gamma = 1$) in this formulation. Note that $E|Z_t| = (2/\pi)^{1/2}$ if $Z_t \sim N(0,1)$.

7) *GARCH-in-Mean, G(p,q)-M*

The GARCH-in-Mean, G(p,q)-M model has the added regressor that is the conditional standard deviation

$$r_t = \mu + \delta \sqrt{h_t} + \varepsilon_t$$

$$\varepsilon_t = \sqrt{h_t} e_t$$

where h_t follows the GARCH process.

8) *Stationary GARCH-in-Mean, SG(p,q)-M*

This model has the added regressor that is the conditional standard deviation

$$r_t = \mu + \delta \sqrt{h_t} + \varepsilon_t$$

$$\varepsilon_t = \sqrt{h_t} e_t$$

where h_t follows the stationary GARCH, SG(p,q) process.

9) *Unconstrained GARCH-in-Mean, UG(p,q)-M*

This model has the added regressor that is the conditional standard deviation

$$r_t = \mu + \delta \sqrt{h_t} + \varepsilon_t$$

$$\varepsilon_t = \sqrt{h_t} e_t$$

where h_t follows the unconstrained GARCH, UG(p,q) process.

10) *Non-negative GARCH-in-Mean, NG(p,q)-M*

This model has the added regressor that is the conditional standard deviation

$$r_t = \mu + \delta \sqrt{h_t} + \varepsilon_t$$

$$\varepsilon_t = \sqrt{h_t} e_t$$

where h_t follows the non-negative GARCH, NG(p,q) process.

11) *Integrated GARCH-in-Mean, IG(p,q)-M*

This model has the added regressor that is the conditional standard deviation

$$r_t = \mu + \delta\sqrt{h_t} + \varepsilon_t$$

$$\varepsilon_t = \sqrt{h_t} e_t$$

where h_t follows the integrated GARCH, IG(p,q) process.

12) Exponential GARCH-in-Mean, EG(p,q)-M

This model has the added regressor that is the conditional standard deviation

$$r_t = \mu + \delta\sqrt{h_t} + \varepsilon_t$$

$$\varepsilon_t = \sqrt{h_t} e_t$$

where h_t follows the exponential GARCH, EG(p,q) process.

Since a small lag of the GARCH model is sufficient to model the long-memory process of changing variance (French *et al.* 1987; Franses and Van Dijk 1996; Choo *et al.* 1999), the performance of GARCH models in forecasting RM-Sterling exchange rate volatility is evaluated by using SG(1,1), UG(1,1), NG(1,1) IG(1,1), EG(1,1), G(1,1)-M, SG(1,1)-M, UG(1,1)-M, NG(1,1)-M, IG(1,1)-M, and EG(1,1)-M.

DATA AND METHODOLOGY

In this study, simple rate of returns is employed to model the currency exchange rate volatility of RM-Sterling. Consider a foreign exchange rate E_t , its rate of return r_t , is constructed as $r_t = \frac{E_t - E_{t-1}}{E_{t-1}}$. The exchange rate t denotes daily exchange rate observations.

The foreign exchange rate used in this study is focused on the Malaysian Ringgit (RM) to the Pound Sterling. This exchange rate is chosen because in addition to the US dollar, the Pound Sterling is also one of the major currencies traded in the foreign exchange markets. Traditionally and historically, the UK has always

been one of the important trading partners of Malaysia. The data was collected from 2 January 1990 to 13 March 1997, from 1810 observations. The daily closing exchange rates were used as the daily observations. The first 1760 observations are used for parameters estimation and the last 50 observations reserved for forecasting evaluation.

Fig. 1 shows nearly 1810 daily observer cross rates of the Malaysian Ringgit to the Pound Sterling, covering the seven years from 2 January 1990 to 13 March 1997. Some characteristics of the rate of returns, r , are given in Table 1. The means and variances are quite small. The excess kurtosis indicates the necessity of fat-tailed distribution to describe these variables. The skewness of -0.200 indicates that the distribution of rate of returns for RM-Sterling is negatively skewed.

The family of GARCH models is estimated using the maximum likelihood method. This method enables the rate of return and variance processes being estimated jointly. The log-likelihood function is computed from the product of all conditional densities of the prediction errors.

$$l = \sum_{t=1}^n \frac{1}{2} \left[-\ln(2\pi) - \ln(h_t) - \frac{\varepsilon_t^2}{h_t} \right]$$

where $\varepsilon_t = r_t - \mu$ and h_t is the conditional variance. When the GARCH(p,q)-M model is estimated, $\varepsilon_t = r_t - \mu - \delta\sqrt{h_t}$. When there are no regressors (trend or constant, μ the residuals ε_t are denoted as r_t or $r_t - \mu - \delta\sqrt{h_t}$. The likelihood function is maximized via the dual quasi-Newton and trust region algorithm. The starting values for the regression parameters μ are obtained from the OLS estimates. When there are autoregressive parameters in the model, the initial values are obtained from the Yule-Walker

TABLE 1

Summary statistics of currency exchange rate data on rate of returns from 2 January 1990 to 13 March 1997

Currency Exchange Rate	n	Mean (x 10-5)	Variance (x 10-5)	Skewness	Excess Kurtosis
RM/Sterling	1809	-3.183	4.076	-0.200	2.370

Source of data: The Federal Reserve, the Central Bank of the United States

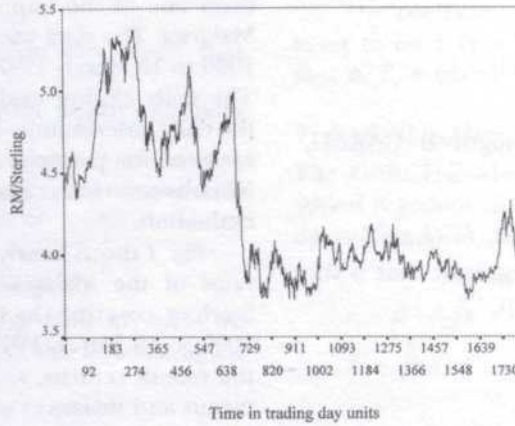


Fig. 1: RM/Sterling, daily from 2 January 1990 to 13 March 1997

estimates. The starting value $1E - 6$ is used for the GARCH process parameters. The variance-covariance matrix is computed using the Hessian matrix. The dual quasi-Newton method approximated the Hessian matrix while the quasi-Newton method gets an approximation of the inverse of Hessian. The trust region method uses the Hessian matrix obtained using numerical differentiation. This algorithm is numerically stable, though computation is expensive.

In order to test for the independence of the indices series, the portmanteau test statistic based on squared residual is used (McLeod and Li 1983). This Q statistic is used to test the non-linear effects, such as GARCH effects, present in the residuals. The GARCH (p,q) process can be considered as an ARMA $(\max(p,q),p)$ process. Therefore, the Q statistic calculated from the squared residuals can be used to identify the order of the GARCH process. The Lagrange multiplier test for ARCH disturbances is proposed by Engle (1982). The test statistic is asymptotically equivalent to the test used by Breusch and Pagan (1979).

The LM and Q statistics are computed from the OLS residuals assuming that disturbance is white noise. The Q and LM statistics have an approximate $(\chi^2_{(q)})$ distribution under the white noise null hypotheses.

Various goodness-of-fit statistics are used to compare the six models in this study. The diagnostics are the mean of square error (MSE), the loglikelihood (Log L), Schwarz's Bayesian information criterion (SBC) by Schwarz (1978) and Akaike's information criterion (AIC) (Judge *et al.* 1985).

The 'true volatility' is measured to evaluate the performance of the six GARCH models in forecasting the volatility in stock returns. As in the studies by Pagan *et al.* (1990) and Day *et al.* (1992), the volatility is measured by

$$v_t = (r_t - \bar{r})^2$$

where \bar{r} is the average return. The measure of the one-step-ahead forecast error is

$$e_{t+1} = v_{t+1} - \hat{h}_{t+1}$$

where \hat{h}_{t+1} is generated using the h_t equations of the GARCH models being studied. The estimated parameters of the GARCH models such as w, α, β, θ and δ are substituted during the generation of \hat{h}_{t+1} . In order to show the performance of GARCH models over a naïve no-change forecast, the forecast errors of the random walk (RW) are calculated as follows:

$$e_{t+1} = v_{t+1} - v_t$$

This is a very important naïve benchmark in the comparison of the forecasts from the GARCH models (Brooks 1997).

RESULTS AND DISCUSSION

Parameter Estimations

The parameter estimates for eleven variations of GARCH models of the rate of returns series are presented in Table 2 (a) and Table 2 (b). These within-sample estimation results enable us to know the possible usefulness of the GARCH

models in modeling the currency exchange rate series.

It can be seen from Table 2(a) that except for μ , all the parameter estimates of the RM/Sterling (w , α and β) are significant at 5% level. However, in Table 2(b), all the two additional parameter estimates (δ and θ) of the EGARCH and all the GARCH models with means are not significant. It appears that for the within-sample estimations, all the family GARCH models perform well in modeling the exchange rate of RM/Sterling.

In general, it can be concluded that almost all α and β (ARCH and GARCH terms) of the RM/Sterling series examined are significant. Hence, the constant variance model can be rejected, at least for the within-sample estimation.

For the linear GARCH models such as SG(1,1), the sum of α and β is close to unity. The properties of $\alpha + \beta = 1$ of IG(1,1) also hold for the series.

Diagnostics Checking

The basic ARCH (q) model is a short memory process in that only the most recent q squared residuals are used to estimate the changing variance. The results for Q statistic and Lagrange Multiplier (LM) test are shown in Table 3. These can help to determine the order of the ARCH process in modeling the RM/Sterling series.

The tests are significant at less than 1% level though order 12. These indicate that the heteroscedasticity terms of the daily RM/Sterling exchange rate series needed to be modeled by a

TABLE 2(a)
Estimation results of rate of returns for the currency exchange rate

Currency Exchange Rate	Model	Parameter estimates			
		δ	t Ratio	θ	t Ratio
RM/Sterling	SG(1,1)				
	UG(1,1)				
	NG(1,1)				
	IG(1,1)				
	EG(1,1)			-0.047	-0.518
	G(1,1)-M	-0.125	-1.305		
	SG(1,1)-M	-0.125	-1.308		
	UG(1,1)-M	-0.125	-1.306		
	NG(1,1)-M	-0.125	-1.306		
	IG(1,1)-M	-0.104	-1.229		
	EG(1,1)-M	-0.056	-0.622	-0.093	

TABLE 2(b)
Estimation results of rate of returns for the currency exchange rate

Currency Exchange Rate	Model	Parameter estimates							
		μ ($\times 10^{-4}$)	t Ratio	$\omega(\times 10^{-6})$	t Ratio	α	t Ratio	β	t Ratio
RM/Sterling	SG(1,1)	1.6	1.246	0.772	4.749	0.072	9.087	0.910	93.618
	UG(1,1)	1.6	1.243	0.764	4.699	0.072	9.061	0.910	93.697
	NG(1,1)	1.6	1.243	0.764	4.699	0.072	9.06	0.910	93.678
	IG(1,1)	1.42	1.112	0.350	4.842	0.076	10.211	0.924	123.442
	EG(1,1)	1.06	0.787	-291080.0	-2.504	0.162	6.588	0.971	85.153
	G(1,1)-M	8.36	1.559	0.758	4.754	0.071	9.006	0.911	94.63
	SG(1,1)-M	8.38	1.56	0.765	4.802	0.070	9.034	0.911	94.667
	UG(1,1)-M	8.37	1.56	0.756	4.744	0.071	9.005	0.911	94.653
	NG(1,1)-M	8.37	1.56	0.756	4.744	0.071	9.005	0.911	94.646
	IG(1,1)-M	7.11	1.528	0.347	4.904	0.076	10.16	0.924	124.188
	EG(1,1)-M	6.03		-294460.0	-2.709	0.163	6.664	0.970	91.004

TABLE 3
Diagnostics for currency exchange rate using Q statistic and Lagrange Multiplier test

Currency Exchange Rate	Diagnostics			
	Q(12)	Prob>Q(12)	LM(12)	Prob>LM(12)
rm/pound	273.447	0.0001	147.373	0.0001

very high order of ARCH model. These results support the use of GARCH model, which allows long memory processes to estimate the current variance of the daily RM/Sterling series instead of the ARCH model.

Goodness of Fit Tests

The result of the goodness-of-fit statistics for the RM/Sterling series is presented in Table 4. Table 5 shows the rankings of various GARCH models.

From Table 5, the ranking of the MSE value indicates that all the family of GARCH in mean models outperform the GARCH models with a slight value of 0.000001. The Log L values however, suggest EG(1,1)-M to be the best model for modeling the volatility of RM/Sterling, followed by UG(1,1)-M, NG(1,1)-M and G(1,1)-M. The SBC values in contrast, ranked indifferently SG(1,1), UG(1,1) and NG(1,1) to be the best model followed by IG(1,1). The AIC values on the other hand, proposed UG(1,1) and NG(1,1) to be the best two models, followed by SG(1,1).

From the goodness-of-fit test, it appears that for within-sample estimations, almost all the GARCH models outperform the GARCH in mean

models in the SBC and AIC test while in the MSE and Log L test, all the GARCH in mean models perform well to model the daily exchange rate compared to their ordinary GARCH model counterparts.

One Step Ahead Forecasting

The good performance in the parameter estimation and goodness-of-fit statistics do not guarantee the good performance in forecasting (Choo *et al.* 1999). The performance of the GARCH models is evaluated through the one-step-ahead forecasting. 50 one-step-ahead forecasts are generated and the mean square error (MSE) is calculated to evaluate the forecasting performance. The results of the forecasting for the GARCH models and the random walk model are shown in Table 6. The rankings of the models based on the performance of the one-step-ahead forecasting are presented in Table 7.

In Table 7, the ranking results of MSE suggest that SG(1,1)-M is the best model for one-step-ahead forecasts, followed by SG(1,1) and G(1,1)-M. It is also noted that, SG(1,1)-M, UG(1,1)-M and NG(1,1)-M clearly outperform

TABLE 4
Goodness-of-fit statistics on rate of returns for the currency exchange rates

Currency Exchange Rate	Model	Goodness-of-Fit Statistics			
		MSE (x10 ⁻⁴)	Log L	SBC	AIC
Rm/pound	SG(1,1)	0.41	6525.371	-13020.9	-13042.7
	UG(1,1)	0.41	6525.414	-13020.9	-13042.8
	NG(1,1)	0.41	6525.414	-13020.9	-13042.8
	IG(1,1)	0.41	6521.151	-13019.9	-13036.3
	EG(1,1)	0.41	6525.729	-13014.1	-13041.5
	G(1,1)-M	0.40	6526.271	-13015.2	-13042.5
	SG(1,1)-M	0.40	6526.232	-13015.1	-13042.5
	UG(1,1)-M	0.40	6526.283	-13015.2	-13042.6
	NG(1,1)-M	0.40	6526.283	-13015.2	-13042.6
	IG(1,1)-M	0.40	6521.992	-13014.1	-13036
	EG(1,1)-M	0.40	6526.674	-13008.5	-13041.3

TABLE 5
Rankings of the models averaged across the currency exchange based on the performance of various goodness-of-fit statistics

Model	RM/pound			
	MSE	Log L	SBC	AIC
SG(1,1)	7	9	1	3
UG(1,1)	7	7	1	1
NG(1,1)	7	7	1	1
IG(1,1)	7	11	4	10
EG(1,1)	7	6	9	8
G(1,1)-M	1	4	5	6
SG(1,1)-M	1	5	8	6
UG(1,1)-M	1	2	5	4
NG(1,1)-M	1	2	5	4
IG(1,1)-M	1	10	9	11
EG(1,1)-M	1	1	11	9

TABLE 6
Out-of-sample forecasting performance of various GARCH models and random walk models for the volatility of the currency exchange rates

Model	MSE (x10-9) of one-step-ahead forecast (forecast period = 50)
	RM/pound
SG(1,1)	3.080
UG(1,1)	3.089
NG(1,1)	3.089
IG(1,1)	3.607
EG(1,1)	3.149
G(1,1)-M	3.085
SG(1,1)-M	3.075
UG(1,1)-M	3.087
NG(1,1)-M	3.087
IG(1,1)-M	3.625
EG(1,1)-M	3.150
RW	6.849

TABLE 7
Rankings of the models averaged across the currency exchange rates based on the performance of one-step-ahead forecasting

Model	MSE of one-step-ahead forecast for RM/pound
SG(1,1)	2
UG(1,1)	7
NG(1,1)	6
IG(1,1)	10
EG(1,1)	8
G(1,1)-M	3
SG(1,1)-M	1
UG(1,1)-M	4
NG(1,1)-M	5
IG(1,1)-M	11
EG(1,1)-M	9
RW	12

their ordinary GARCH models counterparts while EG(1,1) and IG(1,1), in contrast, outperform their with mean GARCH counterparts.

In general, almost all the GARCH in mean models outperform the ordinary GARCH models with the exception of EG(1,1) and IG(1,1). However, the family of GARCH models is clearly being proposed instead of their naïve benchmark, the random walk model.

CONCLUSION

Using seven years of daily observed RM/Sterling exchange rate, the performance of GARCH models, including the family of GARCH in mean models to explain the commonly observed characteristics of the unconditional distribution of daily rate of returns series, were examined.

The results indicate that the hypotheses of constant variance model could be rejected, at least within-sample, since almost all the parameter estimates of the ARCH and GARCH models are significant at 5% level.

The Q statistics and the Lagrange Multiplier test reveal that the use of the long memory GARCH model is preferable to the short memory and high-order ARCH model.

The results from various goodness-of-fit statistics are not consistent for RM/Sterling exchange rates. It appears that the SBC and AIC test proposed GARCH models to be the best for within-sample modeling while the MSE and Log L test, suggest the GARCH in mean models to be best to model the heteroscedasticity of daily exchange rates.

The forecasting results show that SG(1,1)-M is the best model for forecasting purpose, followed by SG(1,1) and G(1,1)-M. Almost all the GARCH in mean models outperform the ordinary GARCH models. On the other hand, the family of GARCH models has clearly shown that they perform better than the naïve benchmark, the random walk model.

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The Influence of Value Orientations on Service Quality Perceptions in a Mono-Cultural Context: An Empirical Study of Malay University Students

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ABSTRAK

Kajian hubungan mutu perkhidmatan dan nilai-budaya telah secara tradisi menggunakan kaedah antara budaya untuk membuktikan kesannya. Tujuan kajian ini ialah untuk menunjukkan bahawa terdapat perbezaan yang penting dalam sesuatu budaya dan perbezaan ini mempunyai implikasi terdapat reka bentuk, penyediaan dan mutu perkhidmatan. Selaras dengan pendirian ini, kajian ini menyelidiki nilai-budaya dalam konteks suatu kumpulan budaya tertentu. Kajian melibatkan seramai 712 siswa-siswi Bumiputera sebuah universiti tempatan telah menghasilkan 2 gugusan nilai yang signifikan. Analisis varian menunjukkan bahawa gugusan 'True Traditionalists' dan 'Transitory Traditionalists' memperlihatkan kesan yang berbeza kepada dimensi mutu perkhidmatan. Hasil kajian menyokong pendirian bahawa kajian hubungan budaya-mutu perkhidmatan mestilah juga fokus kepada perbezaan dalam sesuatu budaya.

ABSTRACT

Service quality and culture studies have traditionally used polar opposite cultures to make their case. This paper argues that these cultural extremes conceal significant variations in culture and has implications for service design, delivery and quality. The study explores the existence of value variations within ostensibly homogenous groups. It is posited that the knowledge of these spectrum of value orientations will enhance the service marketers' ability to 'situate' services as they enter new markets or introduce service innovations. A study conducted among 712 Malay university students produced 2 significantly different value clusters. Variance analysis showed that these clusters labeled as True Traditionalist and Transitory Traditionalist have significantly different impact on service quality dimensions. The findings support the argument that service quality and culture studies must examine between as well as within culture variations.

INTRODUCTION

The rapid extension of service products to global markets has invoked the question of situating the services in the local cultural and social environment (Matilla 1999; Stauss and Mang 1999). Besides the highly general and stylized characterisation of national groups that followed Hofstede's seminal work, service managers have little to go on in designing and localizing their services. The globalisation of service products and inherent intangibility and human interactivity that marks most services has sharply raised the potential for service product failures.

There is, therefore, a growing interest in understanding the interaction between the national and sub-national cultural influences and service products. Concomitantly, there is a noticeable burst of research examining the culture-service nexus in regions other than Europe and North America (Winstedt 1997; Stauss and Mang 1999). Traditionally, this meant the need to understand the cultures of the European and Asians.

Reflecting this need Anderson and Fornell (1994) in their 'consumer satisfaction research prospectus' called for more systematic investigation

into the variations in satisfaction across nations. Due to the interactive and intangible nature of services, cultural expectations play an important role in predisposing the customers towards the consumption experience and their attention and reaction to cues in the service environment. It strongly influences the values that customers are likely to assign to specific service attributes, the perception of the characteristics of the service providers and the strength of their reaction to the presence or absence of the attributes (Matilla 1999).

Since their appeal, there have been several studies to examine the influence of culture on customer satisfaction (Winsted 1997; Donthu and Yoo 1998; Matilla 1999). Despite the obvious role of culture in service quality, the understanding is still rather nascent. As services become more global, there is need to develop better understanding of the influence of different cultures on different dimensions of service quality.

The research thus far has exclusively focused on national and ethnic groups/cultural groups. Because these groups are distinct and commonly become the basis of marketing decisions, they are selected as the natural units of observation. While broad cultural categories still form the basis of global market segmentation, the cultural stereotyping often conceal significant variations within groups that allow for finer segmentation (Matilla 1999). Yet, much of the culture and service quality research relies on the most notable cultural denomination, the national culture. Additionally, the focus of culture-service quality interaction study has been on polar opposite cultures. The national cultural classifications and distinctions conceal much of the distinct cultural sub-groups. These subgroups evince variations, which range from shades of the main culture to vastly different cultural preferences within supposedly homogenous cultures. As more evidence of culture-service quality nexus becomes available, the question is no longer of the connection between the two but rather the expansion of research to even ostensibly monocultural environments. There is need, therefore, to look for cultural variations within supposedly homogenous cultural groups.

REVIEW OF LITERATURE

Of particular interest within the service quality research stream has been the interaction between

the service provider and the customer. The dominant service quality model places the customer expectation as the subjective standard by which a customer evaluates the service performance (Zeithaml, Parasuraman and Berry 1993). Although the explanatory role of customer expectations in service quality assessment has been questioned, it still is accepted as providing valuable means to judge performance assessments by the customer (Cronin and Taylor 1992). The expectation itself is a product of a complex number of factors. The values or cultural orientations of the customer are believed to provide the broadest framework to understand expectations. Consequently, a new stream of research has begun to explore the role of culture in expectation formation and how different cultural orientations impact their evaluation of the various elements in the service performance. Winsted (1997) succinctly brings out the conceptual link between service encounters and social encounters through the following observation;

"Because service encounters are social encounters, rules and expectations related to services encounters should vary considerably according to culture, yet very little guidance has been provided regarding the influence of culture on perceptions of service provision" (p.106).

Many writers have argued for the need for goods and services to be adapted to the different local cultures. Alden, Hoyer and Lee (1993) showed how the use of humour in advertising must be carefully vetted for offensive elements when applied cross-culturally. Generally, the cultural comparisons have been between cultures that can be characterised as polar opposites like the Japanese and the Americans. Winsted (1997) studied the influence of the cultural values on the service quality expectations and evaluations. She found that the Americans expected egalitarianism in service and higher degree of personalisation while their Japanese counterpart preferred more formality in treatment. Malhotra, Ugaldó, Agarwal and Baalbaki's (1994) study is among the few studies on the cultural dimensions of developing and developed countries and their effect on the service quality dimensions. They found that the value orientations as measured via Hofstede's 5 dimensional continua had a significant bearing on the service quality evaluations of the respondents. The findings

point toward the need to localise in international marketing. Donthu and Yoo (1998) examined the effect of cultural values captured via Hofstede's five dimensional scales and the SERQUAL dimensions of reliability, assurance, empathy, responsiveness and tangibles. On most of the service quality dimensions there were statistically significant differences in their evaluations of the retail banking services. Although people processing services are posited as most susceptible to cultural effects (Furrer, Ben and Sudharshan 2000), Matilla (1999) explored the impact of culture on hedonic services. The experience rich services permit the cultural nuances to play a greater role than in other forms of services. Accordingly, it was reported that Western and Non-western business travelers responded to different service cues. Generally it was found that Asian travelers paid more attention to non-tangible and nonverbal cues more than their western counterpart. However, the study also highlighted and alerted attention to the variations possible within otherwise monolithic cultures. Stauss and Mang (1999) tested the hypothesis that inter-cultural service encounters are more problematic than intra-cultural encounters using critical incident method. Interestingly, the results confirmed the reverse. Intra-cultural encounters were more problematic than the inter-cultural ones. The study also used somewhat polar cultures in testing this hypothesis.

Furrer *et al.* (2000) provide a recent study of the impact of culture on service quality. They studied the cultural orientations of American, Asian and European students. They developed a cultural service quality index that captured the interaction between the service quality dimensions and the cultural dimensions. They showed how the groups of students could be segmented on the basis of their cultural proclivities and the service quality dimensions of value.

It is apparent that most of the above-mentioned studies have sought to explore the culture-service question using polar opposites cultures. The use of these 'maximally' different cultures is understandable as they enhance the power of the design to test the postulations. The Western vs. Non-Western or American vs. Non-American designs have shown that the culture-service effect is real and must be addressed by global service producers.

What is of significance is that these postulations can be more stringently tested if they are subjected to less extreme cultural varieties. The exploration of the conceptually viable thesis of finer cultural variations and their effect of services evaluations has been put forth by Matilla (1999) who observed that "...consumer experiences do not remain stable across cultures but instead are open to influences of specific cultures". Indeed, the study of this postulation within what is known as homogenous cultures, can open the same advantages to marketers as has been suggested about inter-cultural studies in international marketing. Niche marketing can immensely benefit from the understanding of the differences in what is otherwise believed to be mono-cultural societies, by exploiting the interaction between specific cultural nuances and the sensitivity to specific service dimensions. Where the service attributes can be easily modified, the within culture value orientations can be a basis to customise services for the niche markets.

Problem Statement

From the review of the literature, it is evident that there is a dire need for culture-service studies to examine the role of value orientations within a culturally homogenous context (Winsted 1997; Matilla 1999). The focus on within culture variations in values will add greater credence to the culture-service studies and allow for finer distinctions and their attendant service implications. This study explores this new and potentially fruitful focus question. The central research question is whether there are distinct value orientations within a cultural group.

The Conceptual Framework

The relationship between the service and culture emanates from the basic characteristic of services as intangible and interactive (Shostack 1977; Lovelock and Wright 2002). Because service encounters are essentially social exchanges, the values undoubtedly colour the perception of both parties. Though not directly apparent, values underpin the expectations, biases, preferences, self-confidence etc. of the customers. Though not directly observable, values have been conceptualized along several key dimensions. One such framework is advanced by Hofstede (1980). Hofstede captured the 'collective

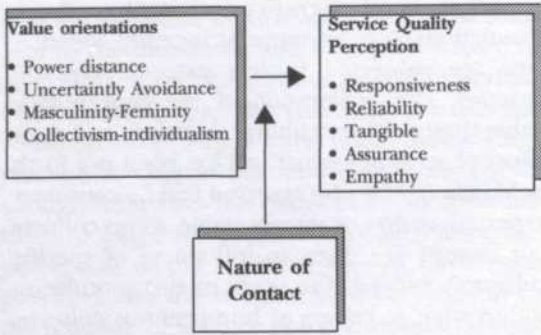


Fig. 1: Conceptual framework

programming of the mind' via four value dimensions namely, Power Distance (PD), Uncertainty Avoidance, Masculinity-femininity and Collectivism-individualism (Fig. 1). Power distance refers to the acceptance of asymmetrical power distributions by members of a group or community. In high PD societies, hierarchy is accepted and may even be revered. In service contexts, PD conditions the perceptions of the status of the service provider and the desired behaviour on the part of the customer. Masculinity-femininity relates to the extent to which strong, aggressive and assertive behaviours are preferred or accepted or desired. Uncertainty avoidance is the aversion to risks and unstructured behaviour situations. The clarity of one's role is desired as opposed to self-development of the roles in any context. Finally, collectivism-individualism indicates the premium placed on self as opposed to the group, be it the society, community or the team. These four dimensions are landmarks of value orientation of any group. The impact of the values on services is eventually felt in the customers' assessment of the service quality itself. The values are expected to impact service quality through the customers' perceptions of the extent of responsiveness, reliability, empathy, assurance and tangibles. These dimensions are susceptible to the preferences and biases that the customer brings into a service encounter. The values tend to affect the customer's position vis-à-vis the service provider by creating mental zones of comfort and discomfort and culturally appropriate roles and behaviours.

However, the interaction between the values and the services is not likely to be the same in all types of service encounter (Chase 1978; Lovelock and Wright 2002: 54). Some services involve high contact between the customer and the

service provider. In high contact services, the extended nature of the social exchange creates more opportunity for values to affect service quality perceptions. In low contact services, the interaction may be short or even momentary. Consequently, the social expectations and value orientations are unlikely to leave much impact.

Research Hypotheses

- H1: There are significantly differing value orientations.
- H2: Value orientations correlate significantly with service quality dimensions.
- H3: The influence of value orientation on the service quality perception is more evident in high contact rather than low contact services.

RESEARCH DESIGN

A cross-sectional correlational study was carried out involving 712 students of UiTM to determine the influence of value orientation of Malay university students on their service quality expectations and perceptions. The Malays have experienced dramatic socio-economic changes over the last two decades. This has introduced and amplified the cultural variations within the Malay community. The current concern about the lack of unity among the Malays is arguably engendered by greater variations in values and consequently, different expectations and assessments. The Malay university students are a close microcosm of the larger Malay society. Therefore, it offers a good setting to test the research question advanced in this study. A representative, though not a random, sample of the student population was obtained for this study from two of the 13 campuses of this university. The main campus represents an urban centre while the East Coast campus captures a more rural background.

To examine the impact of value orientation on service quality expectations, 3 types of university services having different degrees of customer contact were identified. These services range from counseling (high contact) to medical (moderate contact) to library services (low contact) (Table 1). It is well established that not all services allow or require prolonged contact with the customer/user. The influence of the user's value orientation is most likely to matter a great deal in shaping his/her involvement and his/her reaction to the behaviour of the service

TABLE 1
Distribution of the sample

Nature of Service	Sample Size (actual)	Sample Size (planned)
High Contact		
Counseling (S. Alam & Terengganu)	149	200
Moderate Contact		
Medical Care (S. Alam & Terengganu)	273	200
Low Contact		
Library Service (S. Alam & Terengganu)	290	200
Total Sample	712	600

provider in high contact services. Conversely, the influence of value orientation of the student is less likely to impact service quality where the customer and service provider contact is momentary, limited and tangible. The three types of services were used to detect the moderating role of contact in examining the influence of values on service quality perceptions of the students.

Development of the Measurement Instruments

Although the two constructs involved in this study have been defined and measured in many previous studies, a conscious decision was made to review this definition and the performance of these instruments. Hofstede's measures of values were work organisation based. Their relevance and performance in the context of the services and the sector under study in this research are questionable. Therefore, several items were generated for each of the five value dimensions. The item development followed the process suggested by Dunn *et al.* (1994). The items were reviewed by peers familiar with the subject as recommended by Dunn *et al.* (1994). Two academics were required to link the items to the dimension the item appears to measure. Through this process the items that were not identified by the peers as linked to a dimension were dropped. This process of substantive validation is stated by Dunn *et al.* (1994) as the most crucial step in construct validation because substantive convergence should precede statistical convergence.

The value orientations were measured using Hofstede's 5 dimensional instrument (Hofstede 1980,1991). These dimensions are Power-

Distance, Individualism-collectivism, Uncertainty Avoidance, Masculinity-femininity and Time Orientation. Although this instrument was developed and used to measure the national values, it has been successfully used to study culture at an individual level (Matilla 1999).

The original measures of value orientation developed by Hofstede were specifically focussed on work-related values. Since this study addresses a university context, the original items were deemed inappropriate. Based on the 5 key value orientation dimensions, 28 items were generated. Only items that passed the substantive validation process were finally accepted for use in the pilot test. The pilot test based on a sample of 30 individuals was collected and the Cronbach Alphas were determined. The measure attained the minimum threshold of 0.7 (Nunnally 1978). In the study however, the reliability coefficients were slightly below the recommended threshold of .7. Collectivity, masculinity, uncertainty avoidance and power distance achieved a Cronbach alpha of 0.66, 0.60, 0.63, and 0.60 respectively. Since the Cronbach alphas were only marginally lower than the threshold and the lower Cronbach alphas have been used in organisational studies, we did not think that this would seriously affect the outcome.

The service quality perception was measured using the SERQUAL dimensions (Parasuraman *et al.* 1988). This instrument has five service quality dimensions namely; tangibles, responsiveness, reliability, assurance and empathy. Parasuraman *et al.* (1989) viewed service quality as the difference between the perception and the expectation. As Cronin and Taylor (1992) pointed out, the measure of perception itself is sufficient measure of the service without the weighting by expectation attached by the clients. Because Cronin and Taylor's approach yields a simpler measure, we have adopted it for this study. Just like Hofstede's measures, the SERQUAL items are generic items that may be inappropriate for the present educational context. Therefore, the items were developed reflecting the dimensions and put through the same substantive validation process as in the case of value orientation measures. The items were measured on a 7-point Likert scale with 1 denoting Strongly Disagree. All measures attained a minimum Cronbach Alpha of .60 in the main survey, slightly less than the values obtained during the piloting stage. Though the reliability

coefficients were lower than Nunnally's .70, lower reliabilities have been used in published studies (Hinkin 1995).

Data Collection and Data Analysis

Data were collected from two campuses namely, the Shah Alam and the Terengganu campuses. Trained enumerators were positioned at the service centres to identify and sample the respondents (based on the quota sampling method) as they left the service centre after a service encounter. This method allowed for accurate recollection of the experience than at a latter time. They were asked to complete a questionnaire containing the instruments. In the case of the counseling service, the counselors provided the questionnaires to the respondents when the students came in for consultation. This deviation was unavoidable because of the unplanned and irregular nature of the service need. Basic descriptive statistics was used to explore the distributional and locational characteristics of the variables and determine the appropriateness of the statistical techniques given the descriptive properties. Unlike other studies that have used demographic factors to examine the existence and the influence of value orientations on variables of interest, this study follows a method suggested by Furrer *et al.* (2000). Value orientations are composed of unique combinations of the value dimensions. Demographic, ethnic and other common a priori classifications may not necessarily correlate with value orientations. As such, using any one of these a priori groups may result in erroneous findings. Therefore, Furrer *et al.* (2000) suggested that the value groups must be empirically derived through the use of grouping techniques like cluster analysis. Accordingly, cluster analysis was carried out to examine the cluster properties of the respondents. Subsequent analyses of variance (ANOVA) used the value clusters (Traditionalists and Transitory Traditionalists) to examine the relationship between the value clusters and service quality dimensions.

Profile of the Respondents

There is a greater representation of students from the Terengganu campus than from the Shah Alam campus in the sample. This reflects more the accessibility to respondents and the intensity of use of the selected services than anything else.

There is two to one ratio of female to male students. This skewed distribution is reflective of the overall student composition in Universiti Teknologi MARA. From Table 2 it is clear that the respondents are preponderantly Diploma holders. This reflects the general distribution of students and also because these students are given priority for campus housing. They, therefore, are in campuses and presumably, also use the services more than others who are accorded the same privileges.

In keeping with the university's social commitment, the bulk of the respondents fall under the category of the lower income group. The distribution is also influenced by the greater share of the Terengganu campus in the total sample, which attracts students from the East Coast which is a lower income region in Malaysia. The distribution of the sample is weighted slightly in favour of the library services. This is, as explained in the methods section, an outcome of the nature of the use of the library services. Library services are more intensively used as compared with medical and counseling services. The former are dictated by the nature of the campus activity while the latter are peripheral services.

FINDINGS

Intra-Cultural Variations

The correlation matrix in Table 3 displays the specific dynamics of the culture-service quality relationships. All correlation coefficients $> .10$ are significant. The 4 dimensions of the cultural orientations are not strongly correlated, indicating that the dimensions are distinct and not overlapping ones. The highest correlation is between uncertainty avoidance and collective orientation (.410). The correlation between the service quality dimensions and cultural dimensions is of particular interest. Power distance is significantly correlated with all service quality dimensions except responsiveness. However, the correlation values are small or low. This suggests that while the relationship is significant, the impact of this orientation on service quality is quite limited at best. The correlation between the service quality and the cultural orientation dimensions is low. This is to be expected given that this study is focussed on examining relationship between these dimensions within a mono-cultural context. Uncertainty avoidance also displays similar

TABLE 2
Profile of respondents

	No.	%
Campus		
Shah Alam	297	42
Terengganu	415	58
Gender		
Male	234	33
Female	478	67
Programme		
Degree	246	35
Diploma	449	63
Certificate	9	1
Others	8	1
Parents Income*		
<500	167	27
501-1000	224	36
1001 -1500	15	2
1501 -2000	56	9
2001 - 2500	33	5
2501 - 3000	29	5
3001 - 3500	27	4
3501 - 4000	24	4
>4000	47	8
Type of Service		
Counseling	149	21
Medical	273	38
Library	290	41

* n = 622

TABLE 3
Correlation between the service quality and culture variables

No	Variables	1	2	3	4	5	6	7	8
1	Empathy								
2	Assurance	.585**							
3	Responsiveness	.696**	.529**						
4	Tangible	.608**	.523**	.602**					
5	Reliable	.530**	.465**	.581**	.566**				
6	Power Distance	.106**	.108**	.030	.182**	.172**			
7	Uncertainty Avoidance	.121**	.187**	.076*	.174**	.249**	.197**		
8	Masculinity-Femininity	.043	.088*	-.051	.061	.107**	.187**	.295**	
9	Collectivism-Individualism	.217**	.252**	.183**	.282**	.265**	.132**	.410**	.285**

* p<.005, **p<.001 (2-tailed test).

correlation with all service quality dimensions but appears to be relatively more correlated with Reliability. Masculinity is least significantly correlated with the value orientations.

The value orientations of the students were measured via 5 dimensional continua provided by Hofstede (1990) but time orientation items failed to show satisfactory convergence and therefore, have been excluded from further

analysis. It has been argued that since cultural values condition the mind and behaviour in a collective fashion, it should be combined to create recognisable value groups for analysis (Furrer *et al.* 2000). Consequently, it is imperative that the value orientations are understood as a bundle or cluster rather than individual variables. Following in the footsteps of Furrer *et al.* (2000),

the data was cluster analysed to detect groups that have distinctive combinations of the 4 value dimensions. Cluster analysis generated two distinct groups. We have labeled the clusters as True Traditionalist (cluster 1) and Transitory Traditionalist (cluster 2).

The value orientations were measured on a 7-point scale with 1 denoting low and 7 high. Cluster 1, the True Traditionalists display a greater proclivity to the collective interest, appears to accept the appropriacy of greater assertiveness, greater power distance in general relationship and greater aversion to uncertainty. Typical Malay society places a very high premium on collective rather than individualistic interest, the culture can only be classified as feminine in nature with its emphasis on gentleness, decorum and politeness in social encounters and even in disagreement, accepting and also venerating power distance and preferring to avoid uncertainty. The Transitory Traditionalists (cluster 2) scored lower on all dimensions of the

value orientations but in case of Masculinity, it is only marginally lower than their True Traditionalists peers. The Transitory Traditionalists are a group experiencing some dilution of the cultural values that typify the Malay community at large. Based on the evidence from Table 4, we can conclude that there are distinctly differing groups within the Malay student community. Therefore, the 1st hypothesis that there are distinct sub-cultural groups within presumably homogenous groups is supported.

Table 5 provides some answers to the question whether there is significant relationship between the value clusters and the perceptions of service quality. The one-way ANOVA shows that the service quality dimensions differ significantly between the 2 value clusters. This then provides the support for the hypothesis that value orientations influence or have some impact on service quality perceptions. Thus, the second hypothesis is also supported.

TABLE 4
Value clusters

Value Orientations	Clusters	
	True Traditionalists (Means)	Transitory Traditionalist (Means)
Collectivity	6.14 (high)	4.72 (med)
Masculinity	4.69 (med)	3.99 (med)
Power Distance	4.18 (med)	3.90 (med)
Uncertainty Avoidance	5.58 (high)	4.69 (med)
N	417	295

TABLE 5
Influence of cultural clusters on service quality

Service Quality Dimensions	Value Clusters	Sum of Sq.	df	Mean Sq	Sig
Empathy	Between groups	33.596	1	33.596	.000
	Within group	925.860	710	1.304	
Assurance	Between groups	13.076	1	13.076	.000
	Within group	407.631	710	.574	
Responsiveness	Between groups	18.063	1	18.063	.000
	Within group	763.768	710	1.076	
Tangible	Between groups	37.252	1	37.252	.000
	Within group	742.772	710	1.046	
Reliable	Between groups	42.572	1	42.572	.000
	Within group	724.217	710	1.020	

The last hypothesis advanced was whether the postulated relationship between value orientation and service quality differs given the type of service involved. Multivariate analysis of variance showed that there are no interactions between service type and value orientations. Therefore, the last hypothesis that the relationship between value orientation and service quality will be more distinct in high contact service was not supported.

In summary, the findings of this study support two of the three hypotheses advanced. Significant variations in values can be observed even within such homogenous groups as Malay university students. These variations are not without influence on the service quality dimensions.

DISCUSSION AND CONCLUSION

From a theoretical standpoint, this study expands on the current culture-service quality research by seeking out finer distinctions and how they may be pertinent to service providers. Past researches tended to use cultural extremes or polar opposites to show the effect of culture of service perceptions (Furrer *et al.* 2000; Winsted 1997; Matilla 1999). While this is an admirable approach and design, the design is intended to show the postulated relationship. In fact, it could be argued that the design is too powerful and therefore, the outcome is almost a certainty. This study by examining the same issue in an intra-cultural setting is actually putting the postulation to a much more stringent test than has been the case thus far. By seeking out the relationship between service quality and value orientations intra-culturally, the hypothesis is put to a more stringent test.

The study also provides some evidence of the existence of a spectrum of value orientations (though the range is limited) within an ostensibly homogenous group. Although polar opposite cultures dominate culture-service studies, value orientations within homogenous cultures are equally valid and fruitful areas of scrutiny (Winsted 1997). This study established that there were two cultural clusters. These groups, labeled as Transitory Traditionalists and True Traditionalists, provide a significantly different value profile. While both groups display Malay cultural proclivities, the Transitory Traditionalists is markedly less respectful of old values. The universities have become grounds to question

the wisdom of the old ways. The value profile showed here reflects the changing socio-psychological landscape within the university student population and to some extent, within the society at large. The lack of strongly distinct value orientations among the groups is more a function of the homogeneity of the sample than anything else. If a more heterogeneous sample had been acquired, the value profile would have varied much more than observed in this study.

From a managerial standpoint, the service providers in the public sphere, especially the public tertiary institutions must be more aware of the value orientations and how they impact the many quality initiatives that are currently instituted (Cheong 2000). Students still have and are therefore, likely to display values that place a high premium on collective interests. Therefore, services that explicitly or implicitly require one to show individualistic tendencies may cause significant discomfort or dissonance. Students are likely to feel at ease when doing things together and for the benefit of all rather than self only. Relatively high tolerance for power distance is expected to manifest itself in rather passive, meek and unassertive behaviour. This disposition will prevent effective feedback from the service users. Users are likely to be very cognizant of the structure, hierarchy, order and authority and thus less inclined to question or complaint or provide feedback which is not anonymous. Quite unexpectedly, the respondents have expressed a more masculine interest. This proclivity for assertive behaviour does not quite fit with the other orientations especially power distance and collective interest. Given that the Malay community is in the midst of intense and often acrimonious changes socially and culturally, conflicting behaviour especially among the impressionable population may account for the contradiction (Mastor, Jin and Cooper 2000). Making services changes without understanding the cultural nuances of the users will result in supplier-orientated changes. The interaction between the value orientations and service quality dimensions allows for changes that are aligned with the cultural preferences of the students. Many service innovations have strong implicit value base. Most, if not all innovations were born in Caucasian cultures. The effectiveness of these innovations is implicitly a product of the value orientations of the co-producers or co-creators - the service recipients. Changes that

embody greater egalitarianism or empowerment may actually have the effect of inconveniencing the service users because of their value system. The total quality management initiatives will only be effective if the user values are captured and used to bring about service innovation.

As is customary, some caveats are in order. The measures did not display a high level of reliability as was expected. Improvements and further purification of the measures will enhance the strength the correlations and the clarity of the nomological network. The use of a fairly homogenous sample (Malay university students) probably did restrict the range of value orientations. Perhaps, a more representative mix of the members of the Malay community will display even greater variation in value orientations than is the case here. Future studies should examine the interactions between value orientations and the service quality dimensions in specific service sectors to reveal profitable possibilities in service adaptation.

In summary, the study has shown that there is risk in stereotyping the cultural traits of Non-Western societies and in this particular case, the Malays. There exist significant value variations within ethnic and sub-cultural groups. Recognising this will open up new possibilities for service adaptations, which is necessary to compete in the highly competitive market place as well as the non-competitive public sector. As we move beyond the first round of TQM initiatives, finer distinctions will become a center of focus in further service improvements and adaptations.

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The Sociolinguistics of Banking: Language Use in Enhancing Capacities and Opportunities

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ABSTRAK

Penggunaan bahasa Malaysia (bahasa kebangsaan) dan bahasa Inggeris (BI) menawarkan keuntungan ekonomi kepada para pekerja sektor swasta di Malaysia. Para majikan menganggap kedwibahasaan BM-BI sebagai satu cara penting untuk perkembangan perdagangan kerana ini akan membuka pintu kepada pasaran dan menyediakan wawasan negara terhadap senario antarabangsa (Rosli Talif dan Ain Nadzimah 1998). Bagaimanapun, masalah yang dihadapi oleh kedwibahasaan BM-BI di Malaysia adalah kurangnya kata sepakat dari segi tujuan dan matlamatnya. Walaupun setelah mengambil kira keuntungan daripada pengetahuan kedwibahasaan BM-BI dan konteks di mana ia telah dimajukan, dipertahankan dan dikembangkan, ramai lagi yang masih ragu tentang kesannya terhadap bahasa kebangsaan. Perdebatan lebih kepada sama ada memajukan BI sebagai alat kemajuan akan menenggelamkan peranan BM. Kajian ini bertujuan untuk meneliti keperluan dan penggunaan BM dan BI di kalangan pekerja eksekutif dalam industri perbankan. Industri ini dipilih sebagai gambaran perniagaan yang global, pelbagai budaya dan pelbagai bahasa. Satu soal selidik lapangan dan temu duga yang dikendalikan meliputi Bank Negara, bank tempatan dan antarabangsa yang terdapat di Kuala Lumpur. Soal selidik tersebut juga akan menentukan bahasa yang digunakan untuk komunikasi sama ada lisan atau tulisan dalam industri perbankan.

ABSTRACT

The use of BM (the national language) and English offers economic profitability to private sector employees in Malaysia. Employers see BM-English bilingualism as an important tool for commercial development since it can open doors to new markets and provide for the country's visibility on the international scene (Rosli Talif and Ain Nadzimah 1998). However, a problem facing BM-English bilingualism in Malaysia is the lack of agreement as to its purpose and aims. Even after considering the advantages associated with BM-English bilingualism and the contexts in which it is promoted, sustained and developed, many are concerned about its effects on the national language. The debate seems to be about whether promoting English as a tool of development would confine BM to the backwoods. The purpose of this study is to investigate the necessity and use of bahasa Malaysia (BM) and English among executive-level employees in the banking industry. The industry was selected as it reflects a business that is global, multicultural and multilingual. A survey questionnaire and participant interviews were conducted involving the Central Bank, local and international banks in Kuala Lumpur, Malaysia. Contexts of use for languages used in communication, oral and written, within the banking industry were identified.

INTRODUCTION

Sociolinguistics is the study of the relationship between language and society, that is between linguistic and social facts. This relationship has

been studied from two major theoretical orientations: (1) linguistic, such as differences in the realisation of structural features (phonological, morphological, syntactic, and

lexical) by speakers, and (2) pragmatic, function or purpose of language for a particular community. This second theoretical orientation examines language and the social forces which influence its use. It is of particular concern to this study. Research in this area focussing on this functional view has been undertaken in Malaysia. (Ahmad Mohd Yusof *et al.* 1992; Asmah 1992; Shanta 2000).

In studying language choice and use, Fishman (1971), poses the question of "who speaks what language to whom and when." The first part of the question (who?) is answered in this study by limiting the subjects of the study to executives working in local and international banks in Kuala Lumpur. The other two parts of Fishman's question are left open, that is, when and to whom BM and English are spoken and will be discussed below.

Speakers of languages are constantly comparing and evaluating language in terms of its usefulness for a given speech act. Even though a language should never be considered "better" or "worse" than another, attempts to favour one language over another are always present and maybe reflected in the language choice of speakers. These language choice decisions are never made in a vacuum. They are, instead, influenced consciously or unconsciously by a number of factors among which some are social and others economic.

As a matter of fact, Gumperz has argued in 1974 that,

Choice of styles or language is seen as a strategy on the part of speakers trying, for instance, to present themselves as individuals with particular socially defined qualities, or, as another example, trying to convey a particular attitude or impression concerning a topic of conversation (Gumperz in Gal 1979: 91).

When choosing one language over another, a speaker makes a statement about his interpretation of the situation or to turn the argument around, certain social factors (who you are talking to, the social context of the talk, the function and topic of the discussion) become important in accounting for language choice (Holmes 2001).

BM AND ENGLISH: A SMART PARTNERSHIP AND NOT A LINGUISTIC RIVALRY

The current situation in Malaysia shows that bahasa Malaysia (BM) is the national and official language and English, the second most important language. There are policies to maintain and promote allegiance to BM. In view of the country's political stability and its expanding economic opportunities, and in line with modernisation, international recognition, and the desire for progress, English is the logical choice for such a second language.

Obviously, English is the language of wider communication and the need for the general population to be proficient in English is apparent. In spite of this, the government does not plan to accord official language status to English and the use of English can only be complementary to the national language. BM is used consistently at all levels of government transactions.

As stated in the Constitution, Article 152 (1) *The national language shall be the Malay language and shall be in such script as Parliament may by law provide:*

Provided that: (a) no person shall be prohibited or prevented from using (otherwise than for official purposes), or from teaching or learning, any other language; and (b) nothing in this clause shall prejudice the right of the Federal Government or of any State Government to preserve and sustain the use and study of the language of any other community in the Federation.

Today, societal bilingualism (multilingualism in reality) exists in Malaysia with a large portion of the population speaking both BM and English. It is a consequence of a specific language plan to promote linguistic duality without undermining the status, role and allegiance to the national and official language. The linguistic situation in Malaysia encourages the use of BM for intra-national needs and English for international needs. This co-existence of BM and English is an indication of a smart partnership between the two languages, thus avoiding any manifestation of conflict between them.

Nevertheless, the presence of English in the country has been construed by national language loyalists to be disruptive to the linguistic ecology. BM and English are traditionally seen as rivals, and the elevation of one is seen to mean the suppression of the other. There is a negative connotation associated with English coupled with a fervent defence of the national language. The belief is that English has become the language of many crucial domains in Malaysia, while the national language, although retained, finds itself in a precarious state. There was a time not too long ago when "using the English language was regarded unpatriotic and frowned upon. Time has proven that the national language, BM, has achieved the status it deserves." (*The Star*, November 8, 2000, p. 2).

The partnership between BM and English is often misunderstood as it is believed to incorporate the symbolic struggle over cultural or national identity. Language is too often seen as a political force that can unite or threaten to split a country. English is the language of international communication and the gateway to world citizenship. Nationalistic sentiments tend to impede the use of English when it is presented as a threat to the national language. The reasons for preserving a national language may on many occasions be equated with maintaining the national identity of a people. This linguistic rivalry must not exist as we should not be confined by nationalistic sentiments.

Another argument against the use of English upholds the view that English is a colonial language. Such an argument is outmoded. At the end of colonisation, it is the people themselves who became co-processors of the language. The English language is actually being shared by 700 million of the world's population (TESL-EJ 1994). In a global sense, English is no longer a language that belongs to or can be identified with a single race or country.

The following polemics concern the intrusiveness of English and the effects it may have on the wider use of BM. At times the widespread use of English meets with resistance as it is still considered to be the language of the colonialists. The adoption of a foreign (in this case colonial) language is thought to possess the power of re-orientating the people of the country towards the culture and thinking of their former colonial masters. The country will thus become an ardent follower of the western powers and be

unable to develop her own independent mind, *minda bahasa*, or national intellect.

Malaysians must realise that English is the language of wider communication and is no enemy to nationalism. BM is secure in its status and role as official and national language. We are living in an era of information explosion. The need for the general population to be proficient in English is even more apparent now as "three-quarters of the world's mail and four-fifths of its electronic information is in English" (*Asiaweek* June 16 1995).

With the country's present aspiration of becoming industrially developed through a knowledge-based workforce, it seems that the smart partnership of BM and English would provide the platform for Malaysia to take the quantum leap to international success. There is a necessity in Malaysia to master both languages if not more. Having the capacity to use two languages is beneficial to any individual.

LANGUAGE AND BANKING

The banking system in Malaysia was introduced by the British in the mid-19th century. The independence of Malaya in 1957 and the establishment of Bank Negara (Central Bank) two years later did not change banking practices introduced earlier; hence, the dependence on the English language remained in place. Moreover, Acts related to the licensing of financial institutions do not stipulate language requirements for the industry. In fact, not even Bank Negara is obliged to use BM. The constitution does not legislate the use of BM within the financial system. The National Language Act 1963/67 made it only compulsory for the national language (BM) to be used at official functions. However, this does not include the private sector, and especially not the banking and financial sectors.

The Banking System

Bank Negara Malaysia is Malaysia's central bank and is responsible for supervising the banking system. It also issues the Malaysian currency, acts as banker and financial adviser to the government, administers foreign exchange control regulations, and is lender of last resort to the banking system.

The banking system in Malaysia also comprises the commercial banks, merchant

banks, and finance companies. They are the major institutional sources of credit. Thirty-five licensed commercial banks operate through a total of 1888 branches. Representative offices by 36 foreign banks have also been established. A wide range of merchant banking services are provided by 12 merchant banks with a network of 22 branches, many of which have affiliations with merchant banks established overseas. An Islamic bank provides all the conventional banking services, based on the Islamic concept of banking and credit. Twenty-three finance companies operate through 960 branches that accept retail deposits and provide finance for hire purchase and leasing transactions.

Today, the banking industry in Malaysia reflects a business that is global, multicultural and multilingual. Being proficient in the dominant languages (BM and English) is indispensable in this sector. Industrialization and modernisation bring with them the need for the English language and an English-speaking population more adapted to the technological environment that the process generates. A society may find that only through the learning of an additional language will the people have access to social mobility via the power and resources that industrialisation brings.

Possessing linguistic skills in the national language (BM) and English is now important in the banking industry. This becomes increasingly true with the international market becoming integrated into the local scene. These emerging markets offer a tremendous potential for business expansion. Therefore, the possibility of communication in just one language does not suffice. Employees in the banking industry need to measure up to increasingly demanding global expectations for better proficiency in English.

Rosli and Ain Nadzimah show in their 1998 study that English is of instrumental value in the Malaysian private sector workplace. The study also showed that opportunities for employment and commerce tend to be open only to those who are proficient in the dominant languages. Ali Abul Hassan (2000), the former Governor of Bank Negara, states that human capital will certainly be a key driver and critical determinant to the success of an organization.

The banking industry has expanded beyond national boundaries and is now even taking place over cyber space. Markets no longer need to be physical but could exist in virtual networks.

The Star, a national daily, states 'it goes without saying that English is the language of information and technology. Just flip through an international publication, switch on the television, scour the airwaves, click on to the internet or open a computer manual and you will face an English world. Statistics from local IT players show that only 1% of websites use BM' (*The Star*, November 8, 2000, p.2).

The strategic alliance between BM and English should be mutually beneficial and highly relevant in the new economic order of today. This would be in line with meeting global banking standards, which impose increased requirements on banks. Greater importance is now accorded to non-financial as well as financial measures of performance. As a result, proficiency in the national language (BM) and English would be an integral part of evaluating employee performance in the banking sector.

Therefore, it is pertinent that employees in the banking industry communicate clearly and effectively in both BM and English. The country's future lies in a knowledge-based economy where knowledge is an important component in determining performance and management of businesses. The need for the effective use of appropriate language or languages is vital. With the technological revolution that is taking place, the need to communicate and function in the new economy is becoming a major factor for generating growth and transforming businesses. Good, accurate, written and spoken English and BM are no longer a side issue. It is widely accepted as essential to the image of an institution.

The Study

This study investigates the necessity and use of BM and English among executive-level employees in the banking industry. It attempts to find out (1) with whom banking executives use BM and English; and (2) what the location, setting, communicative intent, and mode are. The study also identified languages used for communication, oral and written within the banking industry. This industry was selected as it reflects a business operation that is global in nature. The bilingual trend observed here will determine long-term competitiveness for those linked to the banking sector.

A survey questionnaire was used to gather data from executives working in the central

bank, local and international commercial banks in Kuala Lumpur, Malaysia. The questionnaire comprised three parts. Part one sought information on the respondents' biodata (Table 1), workplace and work experience (Table 2), and educational background (Table 3). Part two aimed at getting respondents' perceptions on the necessity and use of BM and English within the banking industry, while part three sought to identify respondents' code choices for oral and written communication in a variety of situations within the banking industry. The data were reported in terms of percentages. Interview sessions were held at the banks.

Descriptive statistics are presented in this study. The figures shown are reported in percentage because this study is concerned with the tendency of language use rather than absolute frequencies of use. To describe patterns of code choice, the researchers have identified a number of typical day-to-day interactions involving bank executives. The term, domains of language use, follows Fishman's criteria and seeks to show typical interactions between typical participants in typical settings. Though a very general concept, the notion of domain has been found to be useful in capturing broad generalisations of a speech community. It allows one to summarise the norms of language use for a large group of people.

TABLE 1
Biodata

Respondents (n=37)		
1. Race	Malay	19
	Chinese	11
	Indian	7
2. Gender	Male	23
	Female	14

TABLE 2
Workplace and work experience

Respondents (n=37)		
Workplace	Central Bank	8
	Commercial Bank	29
Work Experience	0-5 yrs	3
	6-10 yrs	18
	11-15 yrs	14
	>15 years	2

TABLE 3
Educational background

Respondents (n=37)		
Education	1. Received tertiary education	33
	2. Did not receive education	4
	3. Educated in the country	19
	4. Educated abroad	14

DISCUSSION OF FINDINGS

Respondents

The study involved 37 middle management to senior management personnel from seven different banking institutions. There were 11 Chinese, seven Indian and 19 Malay respondents. Of these, eight were working with Bank Negara Malaysia (Central Bank). The respondents' ages ranged between 30 and 50. A large majority of the respondents (62%) were male. A majority of them (86%) have worked in banks for 6 to 15 years. All but four of the respondents received tertiary education. A majority (57%) received their tertiary education in the country and the others received it abroad.

A. Perception Towards the Necessity and Use of BM and English in Banking

Proficiency in both English and BM is regarded as very important in the banking industry. English is used in six out of seven banking institutions surveyed while BM is used in all. The respondents noted that it would be difficult to work in a bank if one only knows BM. Conversely, knowing English would be most helpful when working in a bank. Respondents also stated that if one had knowledge of only English, it would still be possible to work in certain departments of the bank such as the legal department, corporate banking, corporate credit and loans, research, investment and training, as well as insurance.

Thirty-one respondents agreed that English should play a more important role in the banking industry. They also noted that English is used in the following situations: at meetings, for both internal and external correspondence, communication with clients and among employees. However, they also indicated that BM would be used when dealing with the government as it is the national and official language of the country.

Language competency or the lack of it is a barrier to employment and promotion within the banking system. Eighty-six percent of the respondents noted that it was necessary for an employee from the middle management to management level to be proficient in English in order to be considered well qualified and eligible for further job promotion.

Proficiency in English prepares one to face the increasing demand and challenges of today's world. Although not all jobs require fluency in both BM and English, the ability is a definite advantage and often becomes the decisive factor for employment. Effective use of English seems to be necessary for employees to be marketable and it is essential to those who want to compete and succeed within the banking system.

In recognising that the future lies in a knowledge-based economy where knowledge is an important component in determining performance, it is important to put the management of language knowledge within the banking industry into its right place and cultivate it. This management of language knowledge would enhance the competitive position of the bank and allow for competitive advantage. It is therefore important for the banking industry to ensure that their human resources are managed effectively and optimised for future growth.

(i) English Proficiency

Proficiency in English is important in the respondents' work place for the purposes of communication and business transactions. When asked about the percentage of staff that is fluent in English in their organization, the lowest percentage reported is 60%, while three banks mentioned 90% of their staff being fluent in the language. Interestingly, respondents from the Central Bank noted a higher percentage of staff that is fluent in English. Most respondents indicated that all their departments are involved in using English in their daily routines especially those departments that have corporate and international dealings. The banking industry, therefore, needs to encourage employees to use the national language (BM) as well as English.

(ii) Languages Other Than BM and English

When asked whether knowledge of a language other than BM and English, that is, a third language, is important in the banking industry, only four respondents said that it is not necessary.

The remaining 33 respondents mentioned that a third language is important for the purposes of marketing their services, and communicating with prospective clients. The most popular third language stated by the respondents is Mandarin, followed by Tamil, Japanese and French.

There seems to be the awareness that knowledge of a third language could confer the benefit of broadening one's scope beyond the limits of one's own culture and country. It is hard to ignore the many benefits this extra knowledge can bring. One must realise that added knowledge is an added gift as it allows one to possess a better means of communication because it suggests an increase in individual potential. It also enables one to have many perspectives on life, foster open-mindedness while eliminating cultural ignorance.

(iii) Employment

All respondents said that it is important for employees to be proficient in both, BM and English. Thirty-four respondents stated that they would not employ someone who is not fluent in English while only three said they would. It is interesting to note that when it comes to employing prospective candidates who have the same qualifications but differ in their language proficiency, all respondents stated that the candidates who are more proficient in English stand a better chance of being employed in the banking industry. Twenty-seven respondents mentioned that they would not consider prospective candidates who are more proficient in BM than in English. Eight respondents, in turn, stated that they would consider such candidates while two of them said that it depends on the job requirement.

Being able to use both BM and English shows that one has learned two languages. This demonstrates discipline, spirit of initiative and a predisposition to learn new things. Thus, using more than one language makes the employee more flexible and more valuable. Having the capacity to adapt to two languages is therefore profitable to an individual.

Thirty-two respondents indicated that it was difficult to get prospective employees who are proficient in English, while five others said that it was not difficult to find such candidates. The five respondents were all involved in the corporate banking departments of their respective banks. It could be that this department

had higher expectations and more stringent language requirements and therefore found it harder to obtain employees who could meet those requirements.

B. Code Choices as Reflected in Actual Linguistic Practices

Areas of Communication

The researchers identified four different areas of communication in the banking situation. They are: (i) meetings, (ii) correspondence, (iii) communication between employees, and (iv) communication with clients.

English seems to be the code choice at meetings, for correspondence (both internal and external) and with clients as reported by 35 respondents. However, BM was used more often in conversation between employees as reported by 32 respondents. It was also stated that a superior would commonly use English when speaking to a subordinate officer while a subordinate officer would most likely use BM when speaking to a superior unless he was addressed in English first.

(i) Meetings

When asked to state which language was most commonly used during meetings within the bank, the respondents stated that the chairperson uses English to introduce the meeting, present an idea, advance an argument, pose a question, report a problem, share progress, ask for and make clarifications as well as conclude a meeting. Some of the common issues discussed in English are those related to policy, central banking affairs, electronic banking and foreign exchange. It was also reported that at management and middle management meetings, both the chairperson and participants of the meeting use English predominantly. This was true in six of the seven banks surveyed. Instances of code switching were reported when the matters discussed were non-technical in nature. Whenever meetings were held with government agencies, the dominant language used was BM.

(ii) Correspondence

In all the seven banks surveyed, respondents stated that English was used for all correspondence between departments within the bank. This included correspondence with the Head Office, between high-level management, and with clients. BM, in turn, is used in correspondence

only with government agencies. As for the use of BM, Ali Abul Hassan (2000) reiterates the need for banking institutions to promote increased use of BM in the financial sector hereby catering to the needs of the largest ethnic group of population. A wider use of BM in business correspondence would make banking institutions friendlier and more approachable. At the very least, simple contracts including housing and car loan contracts as well as application forms for banking products and services to the general public should always include a BM version.

(iii) Communication Between Employees

Thirty-four respondents stated that English was used amongst employees when discussing banking-related matters. BM was used when discussing personal matters and when engaging in small talk. BM was also used for salutation purposes.

The government has successfully implemented the use of BM. As a result, BM's primacy is well established. It is the medium of instruction for all levels of education and used for communication, especially in the government sector. As reported by Ain and Chan (2000), BM is the dominant language used for inter-racial communication in Malaysia, especially among post-independence Malaysians.

(iv) Communication with Clients

The banking industry is a service-based industry. It is therefore important that frontline employees develop the necessary language proficiencies toward achieving and depicting a professional, competent, honest, and responsible workforce. This helps to uphold the image of the organisation.

In all except one of the banks surveyed, respondents reported that BM and not English is most often used at reception counters of the banks. However, when meeting clients over loan, insurance and credit card matters, English is used. In the rapidly evolving banking industry, responsiveness to client needs is a crucial test of the industry's survival. With increasing sophistication of needs and higher expectation from clients, there is urgency for banks to set up competitive strategies leading to a highly skilled knowledgeable and language proficient workforce.

CONCLUSION

Language conflicts generally incorporate symbolic struggles over religious, ethnic, cultural, or national identity. The debate in Malaysia seems to be about whether promoting English as a tool of development would confine BM to the backwoods (*Far Eastern Economic Review*, October 10, 1992). There is also the belief that promoting English may result in the loss of the Malay identity as stated by Professor Ismail Hussein, "Language is the soul of the race. We should master English but let it not master us" (*Malaysian Business* 1992).

There is a lack of agreement as to the purpose and aims of using both BM and English. Even after considering the advantages associated with these two languages and the contexts in which they are promoted, sustained, and developed, many are concerned about the effects English could have on the national language. Viewpoints on these issues are linked to general political philosophy and ideals of what it means to be a Malaysian.

The Prime Minister of Malaysia has argued that BM has a role to play and the government is not de-emphasizing that role. No language should ever be seen as having the ability to debase another. In that respect, he argued that, "We should not be fanatical about it (BM) because that would make it difficult for us to benefit our race in a competitive world. Whether we like it or not, English is an international language" (*Malaysian Business* 1992). Being the common international language, it is English that allows us to overcome the influence of linguistic separatism.

In the banking sector, the way business is conducted is rapidly changing. Thus, in such a dynamic and ever changing environment, banks are under enormous pressure to measure up to increasing global expectations especially in the field of communication; hence, the knowledge of both languages, BM and English, is an important component of the growth equation for the banking industry in this new economic order.

Those in the banking sector face a new kind of challenge, that of being able to communicate in both the national language as well as English. This study shows that proficiency in these two languages contributes towards enhancing the capacities and opportunities within the banking sector. Using both these languages empowers

the banking sector to develop global alliances and enhance market possibilities. The simple truth lies in the fact that those who can function in the country's predominant languages find themselves at a considerable advantage over those who cannot.

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Faktor-faktor Mempengaruhi Agihan Pendapatan di Malaysia 1970-2000

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ABSTRAK

Pembangunan ekonomi Malaysia telah menyaksikan trend turun naik dalam ketaksamaan agihan pendapatan di samping penurunan yang berterusan dalam kadar kemiskinan. Antara tahun 1957/58 sehinggalah 1999, berlaku peningkatan dan penurunan dalam ketaksamaan agihan pendapatan. Pekali Gini telah mengalami peningkatan antara tahun 1957/58 hingga 1976, iaitu menunjukkan agihan pendapatan menjadi semakin tidak seimbang. Tetapi antara tahun 1976 hingga 1990, pekali Gini mengalami penurunan yang menggambarkan agihan pendapatan menjadi lebih seimbang. Malangnya antara tahun 1990 hingga 1997, pekali Gini sekali lagi meningkat, tetapi menurun sedikit pada tahun 1999. Objektif artikel ini ialah untuk menganalisis faktor-faktor yang mempengaruhi agihan pendapatan di Malaysia melalui kaedah persamaan regresi dengan menggunakan data-data dari tahun 1970 hingga 2000. Di samping melihat kepada keseluruhan tempoh, analisis juga dilakukan dalam dua tempoh yang berbeza iaitu 1970-1984 dan 1985-2000. Keputusan kajian ini menunjukkan pengaruh faktor-faktor yang dipilih terhadap agihan pendapatan adalah berbeza antara dua tempoh. Antara tahun 1970-1984, kadar pertumbuhan Keluaran Dalam Negara Kasar (KDNK) per kapita, peratus guna tenaga dalam sektor industri, keterbukaan ekonomi, bayaran pindahan dan pelaburan langsung asing memberi pengaruh yang positif terhadap pekali Gini. Ini bererti peningkatan dalam pemboleh ubah-pemboleh ubah ini meningkatkan lagi ketidakseimbangan agihan pendapatan. Dalam tempoh 1985-2000, pelaburan langsung asing masih mempunyai pengaruh positif terhadap pekali Gini di samping kadar celik huruf, kadar pengangguran dan buruh asing. Sementara kadar pertumbuhan KDNK per kapita, guna tenaga sektor industri dan bayaran pindahan memberi kesan negatif yang menggambarkan kenaikan dalam pemboleh ubah-pemboleh ubah ini akan menyebabkan agihan pendapatan menjadi lebih seimbang.

ABSTRACT

Income inequality in Malaysia has followed unstable trends despite a continually decreased incidence of poverty. Between 1957/58 and 1976, the Gini coefficient had increased, which reflected an increased in inequality. But between 1976 and 1990 the Gini coefficient decreased, which implied that income inequality became more equal. Unfortunately between 1990 and 1997 the Gini coefficient again increased, but decreased slightly in 1999. The objective of this article is to analyse determinants of income inequality in Malaysia using regression method. The data covered for the analysis were between 1970 and 2000. Between 1970 and 1984 it was found that the Gross Domestic Products growth (GDP), percentage employment in the manufacturing sector, openness of the economy, transfer payment and foreign direct investment statistically have a significant positive relationship with the Gini coefficient. This implies that an increase in these variables will increase income inequality. Between 1985 and 2000, foreign direct investment, unemployment rate, literacy rate and foreign labour show a positive significant relationship with the Gini coefficient, while GDP growth, manufacturing employment and transfer payment negatively affect income inequality.

PENGENALAN

Pembangunan ekonomi Malaysia telah memberi impak yang besar terhadap agihan pendapatan dan kemiskinan. Walaupun kadar kemiskinan telah mengalami penurunan, agihan pendapatan masih menunjukkan trend yang tidak stabil. Data rasmi menunjukkan kadar kemiskinan di Malaysia telah mengalami penurunan secara berterusan tetapi agihan pendapatan menunjukkan trend yang turun naik. Berdasarkan nilai pekali Gini yang berada antara 0 hingga 1, semakin rendah nilai ini, semakin setara agihan pendapatan. Antara tahun 1957/58 sehingga tahun 1976 agihan pendapatan di Malaysia telah menjadi semakin tidak seimbang, tetapi menjadi lebih seimbang antara tahun 1976 hingga 1990. Walau bagaimanapun dalam tahun-tahun 1990-an ketidakseimbangan agihan pendapatan mulai meningkat semula. Ini ditunjukkan oleh pekali Gini yang meningkat daripada 0.45 pada 1990 kepada 0.46 pada 1993 dan 0.47 pada tahun 1997. Namun demikian nilai pekali Gini menurun sedikit pada tahun 1999 kepada 0.44. Apa yang lebih membimbangkan ialah pekali Gini yang dicapai sepanjang tempoh, walaupun mengalami penurunan, tidak pernah turun serendah nilainya pada permulaan pembangunan tahun 1957/1958.

Jadual 1 menunjukkan trend agihan pendapatan dari tahun 1957/1958 hingga 1999. Umumnya trend agihan pendapatan di Malaysia boleh dianalisis berdasarkan tiga fasa, iaitu 1957/1958 hingga 1976, selepas tahun 1976 hingga 1990 dan tahun-tahun selepas 1990. Dalam tempoh 1957/1958 hingga 1976, berlaku

peningkatan yang berterusan dalam peratus bahagian pendapatan isi rumah 20% teratas. Sebaliknya bahagian pendapatan bagi 40% pertengahan dan 40% termiskin mengalami penurunan. Implikasinya, pekali Gini telah meningkat dari 0.41 pada tahun 1957/58 kepada masing-masing 0.50 dan 0.53 pada tahun 1970 dan 1976 yang menunjukkan agihan pendapatan menjadi lebih tidak seimbang. Pelaksanaan Dasar Ekonomi Baru (DEB) pada 1971 masih tidak mampu mengatasi masalah ketidaksetaraan agihan pendapatan, malahan semakin melebar kerana pada tempoh tersebut proses pembangunan masih dalam era penyesuaian.

Dalam tempoh fasa kedua iaitu dari 1979 hingga 1990 menampakkan penurunan dalam nilai pekali Gini dari 0.51 pada 1979 kepada 0.45 pada 1990. Agihan pendapatan yang semakin setara ini juga ditunjukkan oleh penurunan bahagian pendapatan penduduk 20% teratas, iaitu menurun dari 55.8% kepada 50.3% pada tempoh yang sama. Sementara bagi kumpulan 40% pertengahan dan 40% termiskin, bahagian pendapatan mereka meningkat. Kesannya, pendapatan purata rakyat terus meningkat dari RM693 sebulan pada 1979 kepada RM1167 sebulan pada 1990. Secara keseluruhannya, agihan pendapatan semakin pulih pada fasa ini. Fasa ketiga, iaitu selepas 1990 menunjukkan ketidaksetaraan agihan pendapatan meningkat semula. Keadaan ini digambarkan oleh pekali Gini yang meningkat daripada 0.45 pada 1990 kepada 0.46 pada 1993 dan 0.47 pada 1997, tetapi menurun semula kepada 0.44 pada tahun 1999.

JADUAL 1
Agihan pendapatan isi rumah Malaysia 1957-1999

Peratus Isi rumah	1957/ 58	1967/ 68	1970	1976	1979	1984	1987	1990	1993	1995	1997	1999
20% Teratas	48.6	51.3	56.1	57.7	55.8	53.2	51.2	50.3	-	-	-	50.5
40% Pertengahan	35.5	34.4	32.5	31.2	32.3	34.0	35.0	35.2	-	-	-	35.5
40% Terbawah	15.9	14.3	11.6	11.1	11.9	12.8	13.8	14.5	-	-	-	14.0
Pendapatan Purata	215	240	267	514	693	1095	1074	1167	-	2008	2607	-
Pendapatan Penengah	156	154	167	388	436	723	738	-	-	1346	1682	2472
Pekali Gini	0.41	0.44	0.50	0.53	0.51	0.48	0.46	0.45	0.46	0.46	0.47	0.443

Nota: 1957/58-1987: Semenanjung Malaysia.

Sumber: Snodgrass, 1980
Anand, 1983.

Malaysia, 1981, 1984, 1989, 1991(b), 1993, 1996, 1999, 2001.

Terdapat banyak perbincangan yang mengaitkan faktor kenapa fenomena ini berlaku. Faktor yang sering diutarakan ialah dasar kerajaan, transformasi ekonomi, globalisasi dan liberalisasi, kemasukan buruh asing, agihan pencapaian pendidikan dan sebagainya. Kebanyakan kajian sebelum ini mengutarakan atau menjawab isu di atas hanya melalui pemerhatian kasar. Belum ada satu kajian yang menganalisis faktor-faktor yang mempengaruhi agihan pendapatan di Malaysia melalui pendekatan ekonometrik. Artikel ini bertujuan menganalisis faktor-faktor tersebut antara tahun 1970 hingga 2000 dengan menggunakan kaedah persamaan regresi. Penulisan artikel ini dibahagikan kepada 6 bahagian. Bahagian seterusnya meliputi kajian lepas, kerangka teori, metodologi dan hipotesis, keputusan regresi, rumusan dan implikasi dasar serta kesimpulan.

Sorotan Kajian Lepas

Kebanyakan hasil kajian empirikal yang menggunakan data keratan lintang data pelbagai negara meyokong hipotesis Kuznets yang menghujahkan bahawa perhubungan antara pertumbuhan ekonomi dan agihan pendapatan adalah berbentuk U-terbalik (Paukert 1973; Ahluwalia 1976; Papanek dan Kyn 1986; Campano dan Salvatore 1988; Milanovic 1995; Jha 1996). Walau bagaimanapun, menurut Oshima (1994), bukti tentang kewujudan bentuk keluk U-terbalik Kuznets di negara-negara sedang membangun adalah tidak jelas. Jika dilihat dalam tempoh jangka masa panjang, beliau menyimpulkan hipotesis Kuznets tidak wujud di negara-negara Asia pada hari ini. Sementara kajian yang dijalankan oleh Hassan dan Rahmah (1997) menunjukkan hubungan antara pertumbuhan ekonomi dengan agihan pendapatan bagi kes Malaysia (1957-1990) berbentuk U-terbalik sebagaimana yang dihipotesiskan oleh Kuznets. Walau bagaimanapun, selepas 1990 agihan pendapatan menjadi semakin tidak setara apabila berlaku pertumbuhan ekonomi yang semakin pesat.

Agihan pendapatan yang seimbang bagi satu generasi dapat menjamin kesetaraan agihan pendapatan generasi berikutnya melalui pengumpulan modal manusia (Chiu 1998). Jadi agihan pendapatan yang lebih seimbang boleh membawa kepada penjana modal manusia yang lebih tinggi dan seterusnya pertumbuhan ekonomi yang lebih tinggi (Romer 1986; Alesina

dan Rodrik 1994; Persson dan Tabellini 1994; Perotti 1996). Namun demikian, pencapaian pendidikan dan keupayaan memperoleh pendidikan adalah berbeza antara individu. Perbezaan inilah yang dikatakan meluaskan jurang perbezaan pendapatan. Kebanyakan kajian telah menggunakan kadar celik huruf sebagai proksi kepada pencapaian modal manusia dalam melihat hubungan antara pendidikan dengan agihan pendapatan (Rubinson 1976; Weede dan Tiefenbach 1981; Chase-Dunn 1985; Bollen dan Jackman 1985). Hasil kajian lepas telah membuktikan ketidakseimbangan dalam agihan pencapaian pendidikan memberi impak positif dan signifikan terhadap ketidakseimbangan agihan pendapatan (Hammermesh dan Rees 1984; Caniglia 1988).

Pada peringkat awal proses pembangunan sesebuah negara akan menyaksikan berlakunya jurang perbezaan yang luas antara sektor. Di Malaysia, penekanan terhadap sektor perindustrian, terutamanya dalam dekad-dekad 1970-an dan 1980-an, telah menyebabkan sektor ini lebih terkehadapan dalam segala aspek dibandingkan dengan sektor-sektor lain. Produktiviti yang lebih tinggi dalam sektor ini menyebabkan pekerja mereka juga dibayar lebih tinggi. Maka perbezaan upah antara sektor menjadi lebih ketara dan ini selanjutnya memburukkan jurang agihan pendapatan di Malaysia (Ishak Shari *et al.* 1999). Malah dalam sektor industri itu sendiri berlaku perbezaan pendapatan buruh antara kemahiran (Rahmah 2000). Proses perindustrian juga telah meningkatkan peratus guna tenaga sektor ini dan ini selanjutnya boleh memberi kesan negatif terhadap keseimbangan agihan pendapatan.

Proses industrialisasi dan globalisasi yang pesat juga telah membawa peningkatan kebergantungan kepada perdagangan bebas dan pengaliran modal secara bebas. Wes (1996) mengatakan peningkatan pesat dalam pengaliran modal juga merupakan salah satu faktor utama penggerak globalisasi. Pengaliran modal boleh dibahagikan kepada pelaburan langsung asing, pelaburan portfolio dan pengaliran kewangan. Pengaliran modal merupakan faktor yang mempunyai pengaruh yang kuat terhadap integrasi ekonomi secara global. Globalisasi pula mempunyai kesan ke atas agihan pendapatan, maka secara tidak langsung pengaliran modal juga merupakan salah satu faktor yang akan memberi kesan kepada agihan pendapatan.

Kebanyakan hasil kajian empirikal menunjukkan terdapat hubungan positif yang signifikan antara pekali Gini dengan pemboleh ubah pelaburan langsung asing (Weede dan Tiefenbach 1981; Tsai Pan Long 1995; Beer 1999). Aliran masuk pelaburan langsung asing dikatakan akan memburukkan lagi agihan pendapatan terutamanya bagi negara yang kurang membangun, walaupun ia membawa beberapa kesan positif seperti meningkatkan pertumbuhan ekonomi, menyediakan peluang pekerjaan, pemindahan teknologi dan sebagainya.

Ketidakseimbangan agihan pendapatan boleh juga dikaitkan dengan keterbukaan ekonomi. Lazimnya, pemboleh ubah perdagangan antarabangsa iaitu jumlah eksport dan import digunakan sebagai ukuran kepada keterbukaan ekonomi (Rubinson 1976; Tsai Pan Long 1995; Carol 1998). Kajian Patrik (1998) menunjukkan tujuh peratus peningkatan ketidakseimbangan agihan pendapatan adalah disebabkan perdagangan. Oleh sebab perdagangan bebas akan menguntungkan sistem ekonomi secara keseluruhan, maka beliau mencadangkan keuntungan daripada perdagangan bebas harus diagihkan kepada golongan yang rugi melalui sistem cukai dan sistem kebajikan.

Perbelanjaan kerajaan adalah antara faktor penting yang mempengaruhi agihan pendapatan (Snodgrass 1974, 1980; Meerman 1975). Snodgrass (1974) telah mengelaskan perbelanjaan kerajaan kepada empat kategori, iaitu pembelian barang-barang dan perkhidmatan yang kemudiannya dikelaskan kepada penggunaan awam dan pelaburan awam, bayaran pindahan, bayaran akaun hutang dan pembelian aset. Hasil kajiannya menunjukkan wujudnya hubungan positif antara perbelanjaan awam dan ketidakseimbangan agihan pendapatan. Walau bagaimanapun, hasil kajian Caniglia (1988) di Amerika Syarikat menunjukkan bayaran pindahan mempunyai hubungan negatif dengan pekali Gini, iaitu agihan pendapatan menjadi lebih seimbang dengan meningkatnya pendapatan golongan yang menerima bayaran pindahan tersebut. Sebenarnya, kesan perbelanjaan kerajaan terhadap pendapatan bergantung kepada siapa yang mendapat manfaat perbelanjaan tersebut, contohnya kemudahan kesihatan, pendidikan dan kebajikan. Sekiranya ia lebih memanfaatkan golongan kaya dan pertengahan berbanding golongan miskin,

agihan pendapatan akan menjadi lebih tidak seimbang (Xu dan Zou 2000).

Kitaran perniagaan juga dikatakan merupakan antara faktor yang penting dalam mempengaruhi agihan pendapatan. Dua pemboleh ubah makroekonomi, iaitu kadar pengangguran dan kadar inflasi biasanya digunakan sebagai proksi kepada kitaran perniagaan dalam menguji hubungan antara kitaran perniagaan dengan agihan pendapatan (Blinder dan Esaki 1978; Caniglia 1988). Hasil kajian Caniglia (1988) menunjukkan ketidakseimbangan agihan pendapatan akan meningkat jika kadar pengangguran adalah tinggi. Sementara pemboleh ubah kadar inflasi pula mempunyai hubungan negatif dengan koefisien Gini.

Perkembangan ekonomi yang pesat dan masalah kekurangan tenaga buruh menyebabkan kebanjiran buruh asing di negara ini. Kajian menunjukkan kehadiran buruh asing, terutamanya buruh tidak mahir, akan menyebabkan keluaran marginal buruh pada kategori ini semakin menurun. Ini seterusnya akan menyebabkan upah yang diterima oleh golongan ini juga akan menurun. Kebanjiran buruh asing juga telah menyekat kenaikan upah pekerja tempatan yang tidak mahir kerana mereka sanggup menerima upah rendah akibat desakan hidup yang teruk di negara asal mereka. Dalam jangka masa panjang, jurang perbezaan pendapatan antara buruh mahir dengan buruh tidak mahir semakin membesar. Keadaan ini seterusnya akan menyebabkan ketidakseimbangan agihan pendapatan semakin meningkat (Winegarden dan Lay Boon Khor 1993).

KERANGKA TEORI, METODOLOGI DAN HIPOTESIS

Ahli-ahli sains sosial termasuklah ahli-ahli ekonomi, telah lama mengutarakan perhubungan antara agihan pendapatan dan pembangunan. Marx (1952), seorang ahli ekonomi sosialis mengkritik sistem ekonomi kapitalis yang hanya menguntungkan golongan pemilik modal dan merugikan golongan majoriti buruh dalam proses pembangunan yang berorientasikan pertumbuhan pesat semata-mata.

Kajian terhadap agihan pendapatan pada tahap-tahap pembangunan yang berlainan dimulakan selepas Perang Dunia Kedua oleh

Kuznets(1955). Ukuran pertumbuhan ekonomi yang beliau gunakan adalah tahap atau kadar pertumbuhan Keluaran Negara Kasar (KNK) atau Keluaran Dalam Negara Kasar (KDNK). Beliau cuba mencari jawapan kepada persolan-persoalan seperti adakah ketidaksetaraan agihan pendapatan akan meningkat atau menurun dengan berlakunya pertumbuhan ekonomi? Apakah faktor-faktor yang mempengaruhi corak dan arah aliran agihan pendapatan? Kuznets kemudiannya telah memperkenalkan Hipotesis U-terbalik yang menjelaskan bahawa ketidaksetaraan agihan pendapatan akan bertambah buruk pada tahap awal proses pertumbuhan. Keadaan ini terjadi kerana majoriti penduduk adalah miskin sementara minoriti penduduk sahaja berpeluang menambahkan kekayaan mereka. Apabila proses pertumbuhan telah berlaku pada tingkat ekonomi yang lebih tinggi, lebih ramai penduduk berpeluang meninggalkan sektor luar bandar dan melibatkan diri dalam sektor bandar atau moden. Pendapatan golongan ini akan bertambah dan menyumbang kepada corak agihan pendapatan yang lebih seimbang.

Berlandaskan kepada kerangka teori ini dan kajian-kajian lepas dalam bidang ini, beberapa pemboleh ubah selain daripada indikator pertumbuhan ekonomi telah dimasukkan ke dalam persamaan regresi. Pemboleh ubah-pemboleh ubah tersebut adalah kadar celik huruf, peratus guna tenaga sektor industri, nisbah eksport-import kepada KDNK, nisbah bayaran pindahan kepada KDNK, nisbah pelaburan langsung asing kepada KDNK, nisbah penganggur kepada jumlah tenaga kerja dan nisbah buruh asing kepada jumlah guna tenaga. Kesemua pemboleh ubah ini dirasakan boleh mempengaruhi agihan pendapatan seperti yang akan dinyatakan dalam bahagian hipotesis. Bagi menjawab objektif kajian ini, dua persamaan regresi dibentuk seperti di bawah:

$$PGINI = \beta_0 + \beta_1 RKDKNKP + \beta_2 LIT + \beta_3 PGUNATEI + \beta_4 JXMKDNK + \beta_5 RBPINKDNK + \beta_6 RFDIKDNK + \beta_7 RPANGGUR + \mu_0 \quad (1)$$

$$PGINI = \beta_0 + \beta_1 RKDKNKP + \beta_2 LIT + \beta_3 PGUNATEI + \beta_4 JXMKDNK + \beta_5 RBPINKDNK + \beta_6 RFDIKDNK + \beta_7 RPANGGUR + \beta_8 RBAGUNAT + \mu_1 \quad (2)$$

Dengan,

- PGINI = pekali Gini
- RKDKNKP = kadar pertumbuhan KDNK nominal per kapita
- LIT = kadar celik huruf
- PGUNATEI = peratus guna tenaga sektor pembuatan daripada jumlah guna tenaga
- JXMKDNK = nisbah jumlah eksport dan import kepada KDNK nominal
- RBPINKDNK = nisbah bayaran pindahan kepada KDNK nominal
- RFDIKDNK = nisbah pelaburan langsung asing kepada KDNK nominal
- RPANGGUR = nisbah penganggur kepada jumlah tenaga kerja
- RBAGUNAT = nisbah buruh asing kepada jumlah guna tenaga
- μ_0, μ_1 = pemboleh ubah rawak

Kedua-dua persamaan di atas mempunyai perbezaan dengan adanya pemboleh ubah buruh asing dalam persamaan (2). Objektif memasukkan pemboleh ubah ini ke dalam persamaan (2) adalah untuk melihat sejauh mana pemboleh ubah buruh asing boleh mempengaruhi agihan pendapatan. Dalam hubungan ini dua persamaan perlu dianggarkan kerana data tentang buruh asing hanya tersedia bagi tempoh 1985-2000 sahaja.

Persamaan di atas dianggarkan dengan menggunakan kuasa dua terkecil (*ordinary least square* atau OLS) mengikut tiga tempoh masa, iaitu 1970-2000, 1970-1984 dan 1985-2000. Persamaan (1) akan dianggarkan bagi keseluruhan tempoh iaitu 1970-2000 dan 1970-1984 dan persamaan (2) akan dianggarkan untuk tempoh 1985-2000.

Hipotesis

Sebelum menganalisis hasil penganggaran model regresi, beberapa hipotesis telah dibentuk dalam menerangkan perhubungan antara pemboleh ubah bebas dengan pemboleh ubah bersandar. KDNK per kapita dihipotesiskan mempunyai hubungan yang negatif dengan pekali Gini. Ini kerana apabila semakin meningkat pertumbuhan ekonomi, diikuti oleh peningkatan dalam KDNK per kapita, maka lebih ramai masyarakat mendapat manfaat daripada ini, dan ini

mengurangkan perkadaran masyarakat kurang berada dan agihan pendapatan menjadi lebih seimbang.

Kadar celik huruf juga dihipotesiskan mempunyai hubungan negatif dengan pekali Gini kerana semakin meningkat kadar celik huruf, maka semakin ramai anggota masyarakat yang berpendidikan. Selanjutnya, pendapatan mereka akan meningkat melalui peningkatan produktiviti seperti yang diramalkan oleh teori modal manusia, dan agihan pendapatan menjadi lebih seimbang. Peratus guna tenaga sektor industri pula dijangkakan mempunyai hubungan positif dengan pekali Gini kerana produktiviti dan keperluan kemahiran sektor ini lebih tinggi daripada sektor lain yang selanjutnya meningkatkan upah pekerja mereka.

Tahap keterbukaan ekonomi diandaikan mempunyai hubungan yang positif dengan pekali Gini. Ini kerana manfaat daripada keterbukaan ini contohnya liberalisasi perdagangan antara bangsa dan pelaburan hanya mampu dimanfaatkan oleh sebahagian masyarakat terutamanya mereka yang sedia memiliki sumber, pengetahuan dan hubung jalin yang luas dan lebih terkehadapan daripada individu lain. Oleh itu, peningkatan dalam tahap keterbukaan akan meningkatkan jurang agihan pendapatan. Begitu juga dengan pelaburan langsung asing. Kemasukan pelabur asing ini hanya memberi manfaat kepada individu tertentu dan syarikat multinasional, manakala syarikat-syarikat kecil akan menghadapi persaingan yang hebat. Selanjutnya agihan pendapatan antara masyarakat akan menjadi lebih tidak seimbang.

Bayaran pindahan dihipotesiskan mempunyai hubungan negatif dengan pekali Gini. Ini kerana program bayaran pindahan adalah bertujuan membantu golongan kurang berada. Manfaat yang diperoleh daripada program ini akan meningkatkan keupayaan golongan kurang berada menjana pendapatan dan meningkatkan taraf hidup mereka. Maka agihan pendapatan akan menjadi lebih setara.

Kadar pengangguran diandaikan berhubung secara positif dengan ketidakseimbangan agihan pendapatan. Apabila individu itu menganggur, maka ia kehilangan sumber pendapatan dan peningkatan bilangan mereka akan meningkatkan perkadaran masyarakat dengan pendapatan rendah. Begitu juga, kemasukan buruh asing dihipotesiskan memberi impak positif kepada ketidakseimbangan agihan pendapatan. Ini

kerana kebanyakan pekerja asing yang masuk adalah tidak mahir dan sanggup menerima upah murah. Ini selanjutnya menjejaskan keupayaan pekerja tempatan untuk mendapatkan upah tinggi dan meningkatkan golongan berpendapatan rendah.

Sumber Data

Data bagi menganggarkan persamaan (1) dan (2) di atas diperoleh daripada pelbagai sumber. Pekali Gini diperoleh daripada sumber sekunder seperti Anand, Snodgrass dan buku-buku Rancangan Lima Tahun Malaysia. Disebabkan data ini tidak dilaporkan setiap tahun antara 1970-2000, maka anggaran dilakukan untuk mendapatkan data setiap tahun dengan andaian ia meningkat atau menurun pada kadar pertumbuhan purata yang tetap mengikut trend selepasnya. Contohnya, nilai pekali Gini pada tahun 1970 adalah 0.50 dan nilainya pada tahun 1976 adalah 0.53. Maka kadar pertumbuhan purata bagi tempoh ini adalah 0.01 (iaitu dengan menggunakan formula $r = ((0.53/0.50)^{1/6} - 1)$). Oleh itu, dalam tempoh ini pekali Gini meningkat pada kadar 1.0 peratus. Prosedur yang sama digunakan bagi mengira nilai-nilai pekali Gini pada tahun-tahun lain. Keluaran Dalam Negara Kasar nominal, jumlah penduduk, jumlah eksport dan import serta pelaburan langsung asing diperoleh daripada Laporan Ekonomi, Kementerian Kewangan Malaysia. Sementara data bayaran pindahan kerajaan diperoleh daripada Buletin Statistik Bulanan, Bank Negara Malaysia. Data tenaga kerja, guna tenaga, penganggur, guna tenaga sektor industri dikutip daripada Buletin Perangkaan Sosial, Jabatan Perangkaan Malaysia dan Laporan Ekonomi. Data buruh asing pula dikutip dari Jabatan Imigresen Malaysia. Akhir sekali, data tentang kadar celik huruf diperoleh daripada World Development Report, World Bank dan World Tables, United Nation, Yearbook.

Jadual 2 menunjukkan bagi keseluruhan tempoh kajian, iaitu 1970-2000 nilai purata pekali Gini adalah 0.484. Bagi tempoh 1970-1984 nilai pekali Gini lebih tinggi daripada tempoh 1985-2000 iaitu 0.508 berbanding 0.461. Kadar pertumbuhan KDNK nominal purata adalah 8.9 peratus dalam keseluruhan tempoh kajian. Sekiranya kita mengambil tempoh 1970-1984, kadar ini adalah 11.4 peratus dan menurun kepada 6.6 peratus bagi tempoh 1985-2000. Kadar celik huruf purata yang menggambarkan

JADUAL 2
 Nilai purata dan sisihan piawaian pemboleh ubah dalam model

Pemboleh ubah	1970-2000		1970-1984		1985-2000	
	Nilai purata	Sisihan piawaian	Nilai purata	Sisihan piawaian	Nilai purata	Sisihan piawaian
PGINI	0.484	0.027	0.508	0.014	0.461	0.013
RKDNKP	0.089	0.079	0.114	0.086	0.066	0.065
LIT	70.829	9.864	62.167	4.934	78.950	5.146
PGUNATEI	0.173	0.054	0.132	0.031	0.213	0.040
JXMKDNK	1.104	0.377	0.836	0.089	1.355	0.371
RBPINKDNK	0.802	3.070	0.017	0.006	1.538	4.201
RFDIKDNK	2.593	10.531	0.018	0.009	5.007	14.455
RPANGGUR	0.072	0.094	0.098	0.131	0.046	0.022
RBAGUNAT					0.057	0.051

pencapaian pendidikan penduduk adalah 70.8 peratus bagi tempoh 1970-2000. Pembaikan dalam sistem dan kemudahan pendidikan negara telah meningkatkan kadar ini daripada 62.1 peratus bagi tempoh 1970-1984 kepada 78.9 peratus bagi tempoh 1985-2000. Kepesatan perkembangan sektor pembuatan telah meningkatkan peratus guna tenaga sektor ini secara mendadak. Dalam tempoh 1970-1984 peratus guna tenaga sektor ini daripada keseluruhan guna tenaga adalah 15.2 peratus dan meningkat kepada 21.3 peratus dalam tempoh 1985-2000.

Penglibatan ekonomi Malaysia dalam perdagangan antarabangsa sentiasa meningkat dari tahun ke tahun. Ini dapat dilihat daripada *volume* eksport dan import negara. Tahap keterbukaan sesebuah ekonomi diukur oleh nisbah antara jumlah eksport dan import dengan KDNK. Dalam tempoh 1970-184 nisbah ini adalah 1.104. Jika kita membandingkan kedua-dua tempoh, iaitu 1970-1984 dan 1985-2000, didapati berlaku peningkatan yang besar dalam nisbah ini daripada 0.836 kepada 1.355. Ini menggambarkan tahap keterbukaan ekonomi Malaysia telah meningkat.

Satu indikator lain yang boleh mengukur tahap keterbukaan atau liberalisasi ekonomi Malaysia adalah nisbah pelaburan langsung asing kepada KDNK nominal. Dalam tempoh 1970-2000 nilai purata nisbah ini adalah 2.593. Secara puratanya nisbah ini jauh lebih tinggi bagi tempoh 1985-2000 dibandingkan dengan tempoh 1970-1984, iaitu 5.007 berbanding 0.018.

Nilai bayaran pindahan sangat bergantung kepada prestasi ekonomi sesebuah negara dan selalunya berhubung rapat dengan program

pembangunan kerajaan. Nisbah bayaran pindahan kerajaan kepada KDNK nominal meningkat daripada 0.017 dalam tempoh 1970-1984 kepada 1.538 dalam tempoh 1985-2000. Pembaikan dalam pasaran buruh telah banyak membantu kepada pengurangan dalam bilangan penganggur dan kadar pengangguran negara. Secara puratanya, kadar pengangguran Malaysia telah menurun daripada 9.8 peratus dalam tempoh 1970-1984 kepada hanya 4.6 peratus dalam tempoh 1985-2000. Bagi tempoh 1985-2000 bilangan buruh asing secara puratanya adalah 5.7 peratus daripada keseluruhan guna tenaga negara.

KEPUTUSAN REGRESI

Penganggaran persaman (1) dan (2) di atas telah melalui dua proses. Percubaan awal menunjukkan wujud masalah autokorelasi dalam penganggaran. Oleh itu bagi mengatasi masalah ini penganggaran terpaksa menggunakan prosedur *autoregressive* sehingga kepada peringkat kedua. Hasil daripada penganggaran ini dipaparkan dalam Jadual 3.

Penganggaran bagi keseluruhan tempoh menunjukkan nilai R^2 adalah 0.884 dan bagi kedua-dua tempoh nilai R^2 adalah 0.985 yang menggambarkan antara 88.4 peratus hingga 98.5 peratus variasi dalam pekali Gini dapat diterangkan oleh pemboleh ubah bersandar yang dipilih. Hasil penganggaran bagi keseluruhan tempoh 1970-2000 menunjukkan hanya satu pemboleh ubah yang signifikan dalam menentukan pekali Gini, iaitu nisbah bayaran pindahan. Hasil kajian ini menunjukkan bayaran pindahan mempunyai hubungan yang negatif

JADUAL 3
Keputusan anggaran penentu agihan pendapatan

Pemboleh ubah	1970-2000	1970-1984	1985-2000
Pemalar	0.547 (7.248)***	0.331 (8.708)***	0.228 (5.972)***
RKDKNP	0.025 (1.063)	0.102 (5.386)***	-0.144 (-7.653)***
LIT	-0.001 (-0.371)	-0.001 (-1.009)	0.003 (8.486)***
PGUNATEI	-0.159 (-1.106)	0.242 (5.580)***	-0.247 (-4.560)**
JXMKDNK	-0.006 (-0.536)	0.117 (6.088)***	0.007 (1.333)
RBPINKDNK	-0.002 (-1.757)*	2.619 (6.653)***	-0.002 (-2.350)*
RFDIKDNK	0.0001 (0.520)	1.954 (7.060)***	0.001 (2.515)*
RPANGGUR	0.007 (0.394)	-0.020 (-1.333)	0.740 (4.514)**
RBAGUNAT			0.0003 (8.379)***
R ²	0.884	0.971	0.985
D.W.	2.091	2.078	2.009

Nota: angka dalam kurungan adalah nilai t-statistik

*** = signifikan pada aras keertian 1 peratus.

** = signifikan pada aras keertian 5 peratus.

* = signifikan pada aras keertian 10 peratus

dengan pekali Gini. Peningkatan 1 titik peratusan dalam nisbah bayaran pindahan akan menurunkan pekali Gini sebanyak 0.002. Ini bermakna peningkatan dalam nisbah bayaran pindahan menurunkan ketakseimbangan agihan pendapatan di Malaysia yang menggambarkan program bayaran pindahan kerajaan mencapai matlamat untuk membantu golongan yang kurang berada, dan memperbaiki agihan pendapatan.

Analisis mengikut tempoh yang berbeza telah menghasilkan keputusan yang lebih baik dan menarik. Bagi tempoh 1970-1984 misalnya, kesemua pemboleh ubah, kecuali kadar celik huruf dan kadar pengangguran, menunjukkan nilai yang signifikan dan berhubung secara positif dengan pekali Gini. Ini bermakna peningkatan dalam pemboleh ubah-pemboleh ubah ini akan membawa kepada meningkatnya ketidakseimbangan agihan pendapatan. Peningkatan 1 titik peratusan dalam kadar pertumbuhan KDNK

akan meningkatkan pekali Gini sebanyak 0.102. Pada peringkat awal pembangunan, peningkatan dalam kadar pertumbuhan pendapatan per kapita meningkatkan lagi jurang perbezaan agihan pendapatan di Malaysia, dan dapatan ini selari dengan apa yang dihipotesiskan oleh Kuznets dan selari dengan hasil kajian Hassan dan Rahmah (1997). Walaupun dalam tempoh ini DEB telah dilaksanakan, objektifnya belum tercapai. Proses pembangunan dalam tempoh ini lebih memanfaatkan golongan yang lebih berada kerana mereka merupakan pemilik modal dan lebih mengetahui peluang ekonomi.

Seperti yang dijangkakan, peningkatan dalam guna tenaga sektor industri meningkatkan ketidakseimbangan agihan pendapatan. Peningkatan 1 titik peratusan dalam peratus guna tenaga sektor industri akan meningkatkan pekali Gini sebanyak 0.242. Keputusan ini menggambarkan dalam tempoh 1970-1984, proses perindustrian yang berlaku di Malaysia

telah menyebabkan berlakunya perbezaan upah mengikut sektor, dengan sektor industri mendahului sektor-sektor lain. Pekerja dalam sektor ini dibayar upah lebih tinggi kerana produktiviti mereka lebih tinggi. Dasar kerajaan pada awal pembangunan lebih menekankan sektor perindustrian, contohnya melalui dasar pengembangan eksport.

Dalam tempoh ini juga, hasil kajian menunjukkan tahap keterbukaan ekonomi Malaysia memainkan peranan yang signifikan dalam meningkatkan jurang perbezaan agihan pendapatan dan ia selari dengan penemuan Patrik (1998). Hasil kajian menunjukkan kenaikan 1 titik peratusan dalam nisbah eksport-import kepada KDNK akan meningkatkan pekali Gini sebanyak 0.117. Peningkatan dalam aktiviti perdagangan antarabangsa menyebabkan segelintir masyarakat mendapat manfaat yang lebih besar daripada golongan yang lain. Contohnya, golongan yang mempunyai daya saing yang lebih tinggi dari segi teknologi, rakan kontak dan pasaran akan mendapat keuntungan yang lebih besar kerana dapat meningkatkan eksport. Sehubungan dengan ini juga hasil kajian ini menunjukkan pelaburan langsung asing memberi impak yang positif terhadap ketidakseimbangan agihan pendapatan di Malaysia. Ini sekali lagi menggambarkan liberalisasi pelaburan hanya memberi manfaat kepada golongan yang berada.

Hasrat kerajaan memberi bayaran pindahan adalah untuk membantu golongan kurang berada. Tetapi dalam tempoh 1970-1984, nampaknya objektif ini kurang berjaya kerana kesan bayaran pindahan terhadap ketidakseimbangan agihan pendapatan adalah positif. Nilai koefisien ini agak besar, iaitu menunjukkan kenaikan 1 titik peratusan dalam nisbah bayaran pindahan meningkatkan pekali Gini sebanyak 2.619. Ini ada kaitannya dengan ketakberkesanan dalam pelaksanaan bayaran pindahan tersebut yang menyebabkan ia tidak sampai kepada golongan sasaran. Kemungkinan dalam tempoh awal ini, jentera kerajaan masih kurang cekap untuk mengendalikan program ini secara berkesan. Justeru, keputusan kajian ini selari dengan penemuan Snodgrass (1974). Sementara kemasukan pelaburan langsung asing memberi impak positif dan signifikan terhadap ketidakseimbangan agihan pendapatan. Kenaikan 1 titik peratusan dalam nisbah

pelaburan langsung asing akan meningkatkan nilai pekali Gini sebesar 1.954.

Bagi tempoh 1985-2000 pula, keputusan anggaran menunjukkan kadar pertumbuhan KDNK per kapita, peratus guna tenaga industri dan nisbah bayaran pindahan mempunyai hubungan negatif dengan pekali Gini. Peningkatan 1 titik peratusan dalam pembolehubah-pembolehubah ini masing-masing akan menurunkan pekali Gini sebesar 0.144, 0.247 dan 0.002. Ini menunjukkan proses pertumbuhan selanjutnya telah berjaya mengurangkan ketidakseimbangan agihan pendapatan. Peningkatan dalam produktiviti sektor lain juga membawa kepada perbezaan upah yang lebih tidak ketara dan pelaksanaan kerajaan terhadap program bayaran pindahan adalah lebih berkesan. Dalam tempoh ini pencapaian pendidikan masyarakat dan pekali Gini mempunyai hubungan yang positif yang menggambarkan agihan pendapatan lebih tidak seimbang apabila meningkatnya pencapaian pendidikan. Kenaikan 1 titik peratusan dalam kadar celik huruf akan meningkatkan nilai pekali Gini sebesar 0.003. Ini menggambarkan tahap pencapaian pendidikan masih tidak seimbang di Malaysia dan keputusan ini selari dengan teori modal manusia serta penemuan kajian Hamermesh dan Rees (1984) dan Caniglia (1988).

Pelaburan langsung asing masih mempunyai hubungan positif dengan pekali Gini dalam tempoh 1985-2000, tetapi kesannya terhadap pekali Gini menjadi semakin kecil, iaitu hanya 0.001 berbanding 1.954. Dalam tempoh ini juga kadar pengangguran memberi impak yang positif dan signifikan terhadap ketidakseimbangan agihan pendapatan. Kenaikan 1 titik peratusan dalam kadar pengangguran akan menaikkan nilai pekali Gini sebesar 0.740. Namun demikian tahap keterbukaan ekonomi Malaysia tidak memberi kesan yang signifikan. Seperti yang telah dihipotesiskan, kemasukan pekerja asing memburukkan lagi jurang ketidakseimbangan agihan pendapatan di Malaysia. Kenaikan 1 titik peratusan dalam nisbah buruh asing akan meningkatkan pekali Gini sebanyak 0.0003. Walaupun kesannya agak kecil, tetapi sangat signifikan dan dikhuatiri meningkat dalam jangka panjang.

RUMUSAN DAN IMPLIKASI DASAR

Sebagai kesimpulan, terdapat tiga rumusan penting kajian ini, iaitu berkait dengan enam pemboleh ubah yang signifikan dalam menganalisis faktor penentu agihan pendapatan. Pertama, hubungan antara kadar pertumbuhan KDNK per kapita, guna tenaga sektor industri dan bayaran pindahan dengan agihan pendapatan adalah tidak stabil, iaitu meningkatkan jurang agihan pada awal tempoh kajian dan menurunkan jurang ini pada tempoh akhir. Kedua, pelaburan langsung asing dan kadar pengangguran sememangnya memburukkan keadaan agihan pendapatan di Malaysia. Ini ditunjukkan oleh hubungan yang positif pemboleh ubah ini dengan pekali Gini dalam kedua-dua tempoh kajian. Ketiga, kadar celik huruf dan buruh asing memainkan peranan penting dalam meningkatkan jurang agihan pendapatan dalam tempoh 1985-2000.

Berdasarkan kepada hasil kajian ini terdapat beberapa implikasi dasar yang boleh diketengahkan.

- Pelaksanaan skim bayaran pindahan kerajaan yang lebih berkesan. Terdapat pelbagai skim yang telah diperkenalkan kerajaan terutamanya untuk membantu golongan berpendapatan rendah seperti program pembangunan rakyat termiskin (PPRT). Kebanyakan skim adalah secara tidak langsung dalam erti kata bukan dalam bentuk pemberian tunai secara langsung kepada golongan tersebut kecuali subsidi. Maka proses pelaksanaan skim tersebut melibatkan pelbagai peringkat sebelum sampai kepada golongan sasaran. Oleh itu dalam proses ini boleh berlaku kesilapan yang boleh menyebabkan bantuan tersebut tidak sampai kepada golongan sasaran. Bagi mengatasi masalah ini kerajaan seharusnya dapat mengawasi dengan lebih rapi aktiviti penyampaian skim bantuan mereka bagi memastikannya sampai kepada golongan sasaran.
- Peluang pendidikan yang lebih sama rata. Di Malaysia peluang pendidikan telah mengalami pembaikan yang begitu pesat sekali hasil usaha kerajaan. Namun demikian masih terdapat jurang yang besar pencapaian pendidikan antara rakyat dan ia mengalami peningkatan. Keadaan ini juga dapat diperhatikan dalam pasaran buruh di mana sebahagian besar pekerja adalah berpendidikan rendah. Walaupun peratus mereka yang berpendidikan menengah dan tinggi telah meningkat, peratus pekerja yang berpendidikan rendah masih lagi tinggi. Bagi mengatasi masalah ini, saluran pendidikan yang mencukupi perlu disediakan terutamanya bagi menampung pelajar yang tercicir di peringkat rendah lagi.
- Meningkatkan pembangunan sumber manusia. Sering diperkatakan bahawa upah perlu dibayar mengikut tingkat produktiviti. Produktiviti pula berhubung secara positif dengan tingkat modal manusia seseorang. Untuk meningkatkan modal manusia, maka seseorang perlu melabur dalam modal manusia tersebut. Satu bentuk pelaburan yang lazimnya dilakukan di organisasi pekerjaan adalah latihan. Dalam soal ini majikan adalah bertanggungjawab menyediakan kemudahan latihan untuk pekerja mereka. Aspek latihan ini menjadi sangat kritikal terutamanya bagi pekerja tidak mahir dan separuh mahir untuk meningkatkan kerjaya mereka menjadi mahir dan sekali gus mampu dibayar upah yang lebih tinggi. Strategi ini bukan sahaja diperlukan dalam sektor industri tetapi dalam sektor-sektor lain bagi mengatasi perbezaan produktiviti pekerja antara sektor dan juga dalam sektor yang sama.
- Mengawal kemasukan pelaburan langsung asing. Banyak manfaat yang diperoleh daripada pelaburan langsung asing seperti menyelesaikan masalah kekurangan modal dalam negara, kekurangan kepakaran, menyediakan pekerjaan, meningkatkan penyelidikan dan pembangunan serta kemahiran teknologi. Walau bagaimanapun hasil kajian ini menunjukkan pelaburan langsung asing memberi impak positif terhadap ketidakseimbangan agihan pendapatan. Oleh itu, kerajaan perlu berhati-hati dalam soal ini dengan mengehadkan pelaburan asing dalam aktiviti-aktiviti yang tidak dapat diterokai oleh rakyat tempatan kerana kekurangan modal dan kepakaran. Begitu juga, kemasukan pelabur asing seharusnya mampu memindahkan teknologi kepada rakyat tempatan supaya kebergantungan kepada mereka ini tidaklah berpanjangan.
- Meningkatkan peluang pekerjaan. Hasil kajian ini menunjukkan peningkatan kadar pengangguran meningkatkan jurang agihan

pendapatan. Bagi mengurangkan kadar pengangguran, kita perlu melihat kepada aspek permintaan dan penawaran buruh. Dari sudut permintaan, peluang-peluang pekerjaan perlu diwujudkan terutamanya oleh pihak swasta. Dari sudut penawaran pula, pencari kerja perlu melengkapkan diri mereka dengan kemahiran yang diperlukan majikan sama ada melalui sistem pendidikan yang lebih sesuai atau menghadiri latihan yang disediakan. Dalam soal ini sistem pendidikan negara memainkan peranan penting dalam menawarkan tenaga kerja yang sesuai dengan keperluan majikan.

- Mengawal kemasukan buruh asing. Kebanjiran buruh asing ke negara ini sangat berkait dengan kekurangan pekerja dalam negara. Namun demikian, dalam masa yang sama terutamanya akhir-akhir ini, negara menghadapi masalah pengangguran yang agak membimbangkan. Oleh itu, soal kekurangan pekerja tempatan seperti yang sering dikemukakan oleh majikan kemungkinannya tidak benar dan dirasakan ada perkara-perkara lain mengapa majikan lebih suka mengambil pekerja asing dibandingkan pekerja tempatan. Walau apa pun alasan majikan, kita merasakan kemasukan buruh asing perlu dikawal untuk mengurangkan masalah pengangguran dan juga memperbaiki agihan pendapatan di Malaysia. Kerajaan perlu meletakkan kuota pekerja asing untuk sektor-sektor tertentu dan kuota ini perlu diperkecilkan melalui masa.

KESIMPULAN

Trend agihan pendapatan sesebuah berubah mengikut masa. Trend yang dialami Malaysia pada peringkat awal pertumbuhannya adalah selari dengan apa yang dihipotesiskan oleh Kuznets. Tetapi pada masa sekarang Malaysia telah memasuki pusingan kedua hipotesis U-terbalik Kuznets dengan mengalami peningkatan dalam ketidakseimbangan agihan pendapatan selepas 1990. Sebenarnya banyak faktor yang boleh mempengaruhi trend agihan pendapatan. Kajian ini telah cuba mengenal pasti dan menentukan tahap kepentingan faktor-faktor tersebut dan mendapati terdapat lapan faktor penting iaitu pertumbuhan KDNK per kapita,

bayaran pindahan, pelaburan langsung asing, kadar celik huruf, guna tenaga sektor pembuatan, kadar pengangguran, keterbukaan ekonomi dan pekerja asing. Oleh yang demikian bagi menjamin pertumbuhan yang tinggi diikuti oleh agihan pendapatan yang sama rata beberapa strategi adalah dicadangkan dan keberkesanan strategi tersebut sangat bergantung kepada kerjasama semua pihak.

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Performances of Non-linear Smooth Transition Autoregressive and Linear Autoregressive Models in Forecasting the Ringgit-Yen Rate

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ABSTRAK

Kajian ini membandingkan prestasi peramalan di antara model ketaklinearan Autoregresi Berperalihan Licin (Smooth Transition Autoregressive atau STAR) dengan model linear siri masa iaitu model Autoregresi (Autoregressive atau AR) sebagai peramal kadar pertukaran Ringgit-Yen. Berdasarkan kepada prosedur penentuan kelinearan piawai, kami memperoleh bukti empirik bahawa penyelarasan Ringgit-Yen ke arah keseimbangan pariti kuasa beli (Purchasing Power Parity) adalah secara tidak linear. Dari segi prestasi peramalan, keputusan empirik menunjukkan bahawa model STAR dan AR mempunyai purata mutlak ralat ramalan (mean absolute forecast error atau MAFE), purata mutlak peratus ralat ramalan (mean absolute percentage forecast error atau MAPFE) dan purata punca kuasa dua ralat ramalan (mean square forecast error atau RMSFE) yang lebih kecil jika dibanding dengan model SRW. Keputusan yang diperoleh juga menunjukkan ramalan model STAR lebih baik jika dibandingkan dengan pesaing linearnya, iaitu model AR. Hasil kajian ini adalah konsisten dengan penyelidikan yang memberi penekanan kepentingan membenarkan pelarasan yang tidak linear bagi kadar pertukaran asing ke arah keseimbangan jangka panjang.

ABSTRACT

This study compares the performance of Smooth Transition Autoregressive (STAR) non-linear model and the conventional linear Autoregressive (AR) time series model in forecasting the Ringgit-Yen rate. Based on standard linearity test procedure, we find empirical evidence that the adjustment of the Ringgit-Yen rate towards its long-run Purchasing Power Parity equilibrium follows a non-linearity path. In terms of forecasting ability, results of this study suggest that both the STAR and AR models exceed or match the performance of SRW model based mean absolute forecast error (MAFE) mean absolute percentage forecast error (MAPFE) and mean square forecast error (RMSFE). The results also show that the STAR model outperforms the AR model, its linear competitor. Our finding is consistent with the emerging line of research that emphasised the importance of allowing non-linearity in the adjustment of exchange rate toward its long run equilibrium.

INTRODUCTION

In 1926, Yule first formally introduced the time series model in the form of autoregressive (AR) model, which assumes that the future values of a variable depend solely on its historical values. Since then, time series analysis has been viewed as a powerful forecasting tool. In the past two decades or so the theory of time series

econometrics is progressing rapidly (Montgomery *et al.* 1990). As the methodology progresses, the issue of non-linearity was incorporated into the analysis of time series. Smooth Transition Autoregressive (STAR) model is one of the most recent models developed under this concept. The STAR model is a non-linear time series model that allows the variable

under investigation to move within two different state spaces with a smooth transition process. STAR offers an alternative to the modelling of time series variables that exhibit non-linearities.

In our review of the literature, we found that the application of the STAR model in empirical works is still very limited, and its forecasting performance particularly with reference to exchange rates has yet to be determined. Taylor and Peel (2000), Sarno (2000a) and Baum *et al.* (2001) are among the first to demonstrate the usefulness of the STAR in modelling exchange rate dynamics. However, all these authors did not evaluate the forecasting performance of the model. Hence, the main objective of this study is to examine the applicability of the STAR model to the Malaysian Ringgit against the Japanese Yen (RM/YEN). In addition, the present article compares the forecasting performance of the STAR and AR models by using the simple random walk (SRW) model as the yardstick of comparison. This paper extends previous studies by evaluating the forecasting performance of the studied models using mean absolute forecast error (MAFE), mean absolute percentage forecast error (MAPFE) and root mean square forecast error (RMSFE).

We chose to apply the model to the exchange rate for the following reasons: First, the bulk of the literature shows that structural models failed to outperform a simple random walk (SRW) model, and attempts by analysts using more elaborate models have also failed to improve the forecast performances at short or long run horizons significantly. Second, several authors have argued that the failure of existing exchange rate models to yield superior forecast is because these models ignore the non-linearity adjustment of exchange rates towards its equilibrium value (Micheal *et al.* 1997; Taylor and Peel 1997; Sarno 2000a,b; Coakley and Fuertes 2001). These studies also argued that the classical unit root tests may not be able to detect mean reverting behaviour of exchange rate if the variable is a stationary non-linear process. Finally, in applying this model to the Ringgit, we intend to broaden our understanding on the appropriateness of the STAR model as a forecasting tool in the currency markets.

This study models the adjustment process of the deviations of Yen-based Ringgit movement from its fundamental equilibrium as determined by the Purchasing Power Parity (PPP) hypothesis. Simply, the PPP hypothesis postulates that the nominal exchange rate is given by the ratio of the domestic and foreign price levels. It states that exchange rates should tend to equalize prices for identical goods in different countries. Recent studies based on careful application of time series econometrics methods, are more supportive of the mean reverting behaviour of exchange rates towards the long-run PPP equilibrium value (M. Azali *et al.* 2001; Baum *et al.* 2001)¹.

To anticipate our results, we find that RM/YEN rate adjusts in a non-linear fashion towards its long-run equilibrium path using the Lagrange Multiplier (LM)-type test developed by Teräsvirta (1994). Unlike most of the earlier studies, we find that both the STAR and AR models outperform a random walk forecast for nominal RM/YEN rate. In addition, the empirical results suggest that the non-linear STAR model performs better than the linear AR model in the out-sample forecasts. The set out of the paper is organised as follows. The first two sections offer a brief review on the development of STAR models and a discussion on the data used in the analysis. The section that follows immediately describes the linearity test and the test results. We report and interpret the results of forecast accuracy comparison just before offering some concluding remarks in the last section.

THE STAR MODELS

The origin of the non-linear Smooth Transition Threshold Autoregressive or just Smooth Transition Autoregressive (STAR) model could be traced back to the Threshold Autoregressive (TAR) model first proposed by Tong in 1977 (see Tong and Lim 1980). The TAR model assumes that a variable has different behaviour within different regimes. The basic idea underlying the TAR model is piecewise linearisation of non-linear models over the state space by the introduction of the thresholds. An example of the TAR model is the Self-excited TAR (or SETAR) model, which assumes that a

¹ The stylized fact that emerged from this literature is that exchange rate adjusts non-linearly towards its long-run PPP equilibrium (Mahajan and Wagner 1999; Sarno 2000a; Baum *et al.* 2001 and Coakley and Fuertes 2001).

variable (say, exchange rate), y_t is a linear autoregression within regime, but may move between regimes depending on the value taken by a lag of y_t , say y_{t-d} where d is known as delay parameter. For two-regime case ($q = 2$) where y_t follows an AR (p_1) process in the one regime and AR (p_2) process in the other, the SETAR (2; p_1, p_2) representation of can be written compactly as:

$$y_t = \beta_0 + \sum_{i=1}^p \beta_i y_{t-i} + \varepsilon_{1t} + I_{t-d}(r) \left[\beta_0^* + \sum_{i=1}^{p_2} \beta_i^* y_{t-i} + \varepsilon_{2t} - \varepsilon_{1t} \right] \quad (1)$$

where $I_t(r) = 1$ if $y_t > r$ and 0 otherwise is the threshold. For $h = 1, 2$, $\varepsilon_{ht} \sim G(0, \sigma_h^2)$ where $G(\cdot)$ may be a Gaussian distribution but this is not necessarily the case. β_i for $i = 0, \dots, p_1$ and β_i^* for $i = 0, \dots, p_2$ are parameters to be estimated.

The introduction of non-linear time series model such as SETAR model is motivated by the fact that linear time series model should give place to a much wider class of models if we were to gain more understanding into the more complicated phenomena such as limit cycles, time irreversibility, amplitude-frequency dependency and jump resonance (Tong and Lim 1980). Since its introduction, few attempts have been made in applying and validating the SETAR mode, and hence the usefulness of the model in empirical work is yet to be determined. For instance, Diebold and Nason (1990) point out that there is no guarantee that SETAR model will perform better than linear AR model. A similar view is expressed in Clements and Smith (1997), where they note that neither in-sample, nor the rejection of null of linearity in a formal test in favour of non-linearity guarantees that SETAR predicts more accurately than AR models.

The deficiency in SETAR is deemed due to the unrealistic fixed threshold in the model. The fixed threshold of SETAR model is later replaced with a smooth function and thus leads to the formation of STAR model in the early 1990s. STAR model allows the variable under study to alternate between two different regimes with a smooth transition function between these regimes, so that there can be a continuum of states between extreme regimes. STAR

representation is given by (Teräsvirta and Anderson 1993):

$$y_t = \beta_0 + \sum_{i=1}^p \beta_i y_{t-i} + \left(\beta_0^* + \sum_{i=1}^{p_2} \beta_i^* y_{t-i} \right) F(y_{t-d}) + \varepsilon_t \quad (2)$$

where y_t is mean-corrected, β_0 , and β_0^* are constants, β_i and β_i^* , $i = 1, \dots, p$ are autoregressive parameters, $F(\cdot)$ is the transition function depending on the lagged level, y_{t-d} , where d is known as the delay length or delay parameter, and ε_t is a white noise with zero mean and constant variance σ_ε^2 .

For the application of STAR model, Granger and Teräsvirta (1993) have proposed exponential function as one of the plausible transition functions, thus resulting in the exponential STAR or ESTAR model. The exponential function is defined as:

$$F(y_{t-d}) = 1 - \exp\left(-\gamma^2(y_{t-d} - u)^2 / \hat{\sigma}_{y_t}^2\right) \quad (3)$$

where γ^2 is the unstandardized transition parameter, u is the equilibrium or threshold value of the mean corrected y_t series and hence $E(u) = 0$, and $\hat{\sigma}_{y_t}^2$ is the estimated variance of y_t .

Note that $\gamma^2 / \hat{\sigma}_{y_t}^2$ is the standardized transition parameter and the speed of transition between the two regimes is positively related to the value of the transition parameter γ^2 . In other words, higher values of γ^2 imply much faster speed of transition. Taylor and Peel (2000) use a version of transition function, $F(\cdot)$ with $\hat{\sigma}_{y_t}^2 = 1$. Nevertheless, Granger and Teräsvirta (1993, p. 124) argue that scaling the exponential term by the sample variance speeds the convergence and improves the stability of the non-linear least squares estimation algorithm. It also makes it possible to compare estimates of transition parameter across equations.

The exponential transition function is bounded between zero and one. Judging from Equation 3, when y_{t-d} equals its equilibrium value u or when $\gamma^2 / \hat{\sigma}_{y_t}^2$ goes to zero, $F(\cdot) = 0$ and Equation 2 reverts to a standard linear AR(p) representation:

$$y_t = \beta_0 + \sum_{i=1}^p \beta_i y_{t-i} + \varepsilon_t \quad (4)$$

In such case, the conventional restriction of

$$\sum_{i=1}^p \beta_i < 1 \text{ applies so that } y_t \text{ is mean-reverting.}$$

For extreme deviations from the fundamental equilibrium, $F(\cdot) = 1$ (when $\gamma^2/\hat{\sigma}_y^2$ approaches infinity), and Equation 2 becomes a non-linear AR (p) model:

$$y_t = (\beta_0 + \beta_0) + \sum_{i=1}^p (\beta_i + \beta_i^*) y_{t-i} + \varepsilon_t \quad (5)$$

If the non-linear model as in Equation 5 is the

correct specification, it is expected that $|\sum_{i=1}^p \beta_i| \leq 1$

such that y_t may exhibit unit root behaviour but the requirement for global stability is that

$$|\sum_{i=1}^p (\beta_i + \beta_i^*)| < 1 \text{ must be met.}$$

The exponential $F(\cdot)$ allows a smooth transition between two regimes symmetry adjustment for deviations above and below the fundamental equilibrium. This function is considered suitable for the non-linear modelling of exchange rate as it has a number of attractive properties. For instance, it can capture the symmetrical response to positive and negative deviations from its fundamental equilibrium (Baum *et al.* 2001) by its inverted bell-shaped distribution around zero. Despite the potential usefulness of the ESTAR model in modelling the exchange rate specifically and other non-linearities in general, much more empirical work has yet to be done to fill up the related literature. To this end, there are only few published articles on the STAR model. Moreover, most of them are theoretical in nature and the application is only for illustration purposes. Earlier works, for instance by Chan and Tong (1986), Luukkonen *et al.* (1988), Saikkonen and Luukkonen (1988), Luukkonen (1990), Teräsvirta (1994) and Eirtheim and Teräsvirta (1996) discuss the theoretical issues on the linearity tests and model specification of the STAR models. One notable

exception is Teräsvirta and Anderson (1993), which evaluates the forecast performance of ESTAR model, in the context of business cycles.

PRELIMINARY DATA ANALYSIS

The data used in this paper are end-of-period nominal bilateral exchange rate for the Malaysian Ringgit vis-à-vis the Japanese Yen (RM/YEN) and relative price (P_t), which is constructed as the ratio Consumer Price Index (CPI) of Malaysia to CPI of Japan. The data are mainly from International Monetary Fund's *International Financial Statistics* (IMF/IFS), comprising of seasonally unadjusted observations. Our sample period ranges from 1980:1 to 2000:2. The full sample period is divided into two portions. The first sub-period, which starts from 1980:1 and ends in 1997:2 is used for the model estimation purpose while the remaining observations are kept for assessing the out-sample forecast performance of the studied models².

To test whether RM/YEN rate exhibits mean reverting behaviour to its long-run PPP equilibrium, we check for the cointegrating relationship between the two price series. However, prior to any cointegration test, the series involved should be tested for stationarity and order of integration beforehand. This is important as only variables of the same order of integration may provide a meaningful relationship. The commonly used Augmented Dickey-Fuller (ADF) and non-parametric Philips-Perron (PP) unit root tests are employed for this purpose. The results of the unit root tests as summarised in Table 1 strongly suggest that the variables are first difference stationary, which implies they are all integrated of the same order, that is, $I(1)$. These results hold whether trend or without trend.

Next, we proceed to investigate whether or not the long-run PPP conditions hold using the Johansen and Juselius (1990) multivariate cointegration test. Results of the trace test are depicted in Table 2. The test result provides strong evidence that RM/YEN rate and relative price are cointegrated at standard significance levels, thereby verifying that RM/YEN rate exhibits mean reverting behaviour to its long-run PPP equilibrium. The results so far obtained

² The estimation period ends in 1997: 2 and the forecasting horizon includes the 1997/98 Asian financial crises. The volatility of the exchange rates during the currency turmoil allows us to evaluate the robustness of our forecasts during the crisis and post-crisis periods.

TABLE 1
Unit root tests results

Tests	Intercept Without Trend				Intercept with Trend			
	X	ΔX	P	ΔP	X	ΔX	P	ΔP
ADF	-0.362	-4.958*	1.989	-5.537*	-2.696	-4.953*	-0.040	-6.260*
PP	-0.528	-8.653*	3.726	-11.67*	-2.987	-8.653*	0.233	-12.86*

Notes: ADF and PP refer to Augmented Dickey-Fuller test and Phillip-Perron test respectively. X and P denote exchange rate and relative price respectively. Variable with Δ in front means its first difference. Test-statistics with asterisk (*) imply reject null hypothesis of unit-root at 1% significance level.

TABLE 2
Johansen and Juselius cointegration test result

Optimal Lag	Likelihood Ratio of Eigen Value	
	$r = 0$	$r \leq 1$
10	24.369*	5.061
Critical Values		
5%	19.90	9.24
1%	24.60	12.97

Notes: r denotes the hypothesized number of cointegrating equation. Optimum lag-length is determined by the Akaike Information Criterion (AIC). The single asterisk (*) denotes rejection of hypothesis at 5% significance level.

are consistent with those reported in Baharumshah and Ariff (1997) and M. Azali *et al.* (2001).

This finding enables us to estimate the equilibrium values of RM/YEN rate based on the PPP hypothesis. Deviations of RM/YEN rate from its equilibrium (y_e) can then be deduced by subtracting its observed values from the estimated equilibrium values. The nature of adjustment process of these deviations towards the equilibrium position is not known yet. To determine the linearity (or non-linearity) of this adjustment process, we employ the linearity tests against the STAR models as described below.

LINEARITY TESTS

The minimum requirement for the estimation of STAR models is to reject the linearity of the variable under study (Tong and Lim 1980). Various linearity tests have been developed based on the idea of testing the null hypothesis that all β^* s in Equation 2 are simultaneously zero, against the alternative hypothesis that at least one β^* is not zero. Note that if the null hypothesis cannot be rejected, Equation 2 would simply be

reduced to the linear AR (p) model. By the same token, rejection of null hypothesis implies the presence of non-linearity in favour of STAR (p) model. As the properties of the transition parameter (γ^2), the coefficients of non-linear terms (β^* s) and the mean value (μ) of the variable under estimation are not identified under the null hypothesis, linearity is tested in the context of auxiliary model instead of the original STAR specification as in Equation 2. Theoretical issues on linearity tests against STAR models are found in Luukkonen *et al.* (1988), Saikkonen and Luukkonen (1998), Teräsvirta and Anderson (1993), Teräsvirta (1994) and Eirtheim and Teräsvirta (1996). Interested readers may refer to these articles for more detailed discussion on the tests.

This study only highlights a specification of linearity test with alternative hypothesis in favour of the ESTAR model, a variant of STAR model relevant to this study. This specification as proposed by Teräsvirta (1994), is based on the following auxiliary regression:

$$y_t = \alpha_0 + \sum_{i=1}^p a_i y_{t-i} + \sum_{i=1}^p \sum_{j=1}^p \alpha_{ij}^* y_{t-i} y_{t-j} + \sum_{i=1}^p \sum_{j=1}^p \tau_{ij}^* y_{t-i} y_{t-j}^2 + \omega_t \quad (6)$$

The null hypothesis to be tested is that:

$$H_0 : \alpha_{ij}^* = \tau_{ij}^* = 0; i, j = 1, \dots, p \quad (7)$$

In practice, Teräsvirta's Lagrange Multiplier (LM) linearity tests can be performed by following these steps:

(1) Regress y_t on $\{1, y_{tj}; j = 1, \dots, p\}$. Obtain the estimated residuals $\hat{\epsilon}_t$ and compute the residual

sum of squares, $SSR_0 = \sum_{i=1}^T \hat{\epsilon}_i^2$, where T is the sample size;

(2) Regress $\hat{\epsilon}_t$ on $\{1, y_{tj}, y_{tj}^2, y_{tj} y_{tj'}; j, j' = 1, \dots, p\}$. Obtain the estimated residuals \hat{w}_t and compute the residual

sum of squares $SSR = \sum_{i=1}^T \hat{w}_i^2$;

(3) Compute the test statistic:

$$LM = \frac{(SSR_0 - SSR)}{\hat{\sigma}_\epsilon^2} \quad \text{where } \hat{\sigma}_\epsilon^2 \text{ is the}$$

estimated variance of $\hat{\epsilon}_t$, (8)

Under the null hypothesis the LM statistic is asymptotically distributed as a chi-squared (χ^2) with $2p$ degrees of freedom, given that the delay parameter d is known. For unknown d , the degrees of freedom would be as large as $0.5p(p+1)+2p$. This LM linearity test is actually similar to that of Luukkonen, Saikkonen and Teräsvirta (LST) (1988), which is given as:

$$LST = \frac{T(SSR_0 - SSR)}{SSR_0} \quad (9)$$

LST is also asymptotically distributed as a χ^2 with $0.5p(p+1)+p$ degrees of freedom. Luukkonen *et al.* (1988) point out that if the delay parameter d in Equation 2 is assumed known, the number of degrees of freedom for LST statistic would reduce largely to $p+1$ only. This shows that prior knowledge about d is thus very useful in testing linearity against ESTAR model.

Briefly, the optimum lag length p in the first step of the above auxiliary regression procedure

is usually unknown even if the true model is linear, and it has to be determined from the data. Model selection criteria such as Final Prediction Error (FPE), Schwarz Information Criterion (SIC) and Akaike's Information Criterion (AIC) are normally used for this purpose. However, these criteria are of course not without any shortcomings (see for instance, Liew and Shitan (2002) for a brief review of the properties of these selection criteria). In general, these information criteria tend to penalise high-order lags.

On the other hand, if the selected p is too low, the estimated AR (p) model may suffer from autocorrelated residuals. Teräsvirta and Anderson (1993) pointed out that neglecting the autocorrelation structure of the residuals may lead to false rejection of the linearity hypothesis in favour of the non-linearities alternative, because often the test also has low power against serially correlated errors. As such, one may think that over-parameterisation of the linear AR (p) is preferable to under-parameterisation. However, selecting a maximum lag-length greater than the true order p may also weaken the power of the test compared to the case where the maximum lag is known (Teräsvirta and Anderson 1993). Thus, it is important to select order p sufficient enough to eliminate autocorrelation.

In this study, the optimal lag length p of linear AR (p) model is selected based on the Akaike's biased Corrected Information Criterion (AICC). This criterion selects the minimum AICC model, among a class of models with no serial correlation. Liew and Shitan (2002) examine the behaviour of AICC through a simulation study and find that it has little tendency to underestimate the true order p . Thus the use of AICC avoids the problem of too parsimonious model being selected. Based on AICC, the optimal p is determined as 2 in the present case.

Having selected p , d needs to be determined. In order to specify d , linearity test is carried out for the range of values considered appropriate, in this case, $1 \leq d \leq 5$. If the linearity is rejected for more than one value of d , then d is determined such that $Z(\hat{d}) = \sup Z(d)$ for $1 \leq d \leq 5$ where Z is the selected test LM or LST. The argument behind this rule of maximising the test statistic is that the test has maximum power if d is chosen correctly, whereas an incorrect choice of d weakens the power of the test. Ljung-Box

portmanteau Q test is also employed to confirm the absence of serial correlation up to 20 lags.

Results of the linearity tests are summarised in Table 3. It is clear from the table that linearity is rejected at 1% significance level for the deviations of RM/YEN rate from the equilibrium value and hence in favour of the ESTAR model. The optimal values of p and d are determined as 2 and 1 respectively. The Q statistic suggests that the combination of p and d selected for the model yields residuals that are free from autocorrelation problem up to 20 lags. This implies ESTAR (2) process with a delay parameter, $d=1$ is the appropriate representation of the adjustment of deviations towards the long-run PPP equilibrium for the RM/YEN rate during the sample period.

ESTIMATED MODELS

In this study, two versions of ESTAR model, namely the unrestricted and restricted ESTAR models are estimated for y_t , the deviations of RM/YEN rate. The unrestricted ESTAR model, is actually the model as specified in Equation 2 with a transition function given in Equation 3. The word "unrestricted" is given to differentiate it from a special case whereby certain restrictions

$$\left(\sum_{i=1}^p \beta_i = 1 \beta_i^* = -\beta_i \text{ and (Taylor and Peel 2000)} \right)$$

are imposed on it, thus resulting in a so-called restricted ESTAR model. The results obtained from these models are reported in Table 4.

Several features for the estimated unrestricted model are noteworthy here: First, the non-linear parameters (β_1^* and γ) of the unrestricted ESTAR (2) model are statistically

TABLE 3
Linearity tests results

Test statistics	Sup Z (d)	Delay parameter, d	1% Critical value
LM test	19.627	1	$\chi^2(4) = 13.28$
LST test	19.920	1	$\chi^2(3) = 11.34$
Ljung-Box Q statistic	15.912	-	$\chi^2(20)=37.57$

Notes: Null hypothesis, H_0 : Linear model is correct. Rejection of H_0 implies nonlinearity in favour of ESTAR model.

TABLE 4
Estimated ESTAR (2) models

Parameters	Estimated Values (Standard Errors)	
	Unrestricted model	Restricted model
β_0	- 0.031(0.19)	-0.025 (0.02)
β_1	1.799 (0.33)**	1.442 (0.19)**
β_2	-0.340 (0.23)	-0.253 (0.16)
β_1^*	-1.170 (0.40)**	-
β_2^*	0.349 (0.50)	-
γ	1.364 (0.25)**	0.357 (0.05)**
$\hat{\sigma}_y^2$	0.171	0.171
Diagnostic Tests (Marginal Significance Values)		
$\hat{\sigma}_{ESTAR}^2$	0.002	0.002
$\hat{\sigma}_{ESTAR}^2 / \hat{\sigma}_{AR}^2$	0.769	0.819
Q (20)	17.522 [0.619]	20.492 [0.428]
WHITE	5.276 [0.809]	8.270 [0.507]
ARCH (4)	1.563 [0.816]	1.595 [0.809]
GARCH (1, 1)	0.546 [0.761]	0.531 [0.767]
LR (3)	-	8.952 [0.030]
Adjusted R ²	0.882	0.878

significant at 1% level. Second, the residual variance ratio of this unrestricted ESTAR (2) model to the linear AR (2) model is 0.769 indicating that the former has a much smaller variance. This implies that the non-linear model has the ability to produce smaller forecast errors than the linear model. Third, the model passed a battery of diagnostic tests at conventional significance levels. Fourth, the adjusted R^2 value (0.882), the explanatory power of this non-linear model on the adjustment of deviations, is fairly high. Fifth, the sum of linear parameters β_1 and β_2 equals $1.459 > 1$, suggesting that y_t exhibits unit root behaviour and therefore linear AR (2) itself is inadequate representation of y_t . On the

other hand, $\sum_{i=1}^2 (\beta_i + \beta_i^*) = 0.638 < 1$ implies that the requirement for global stability is met. This confirms that y_t is mean-reverting in the non-linear specification (Baum *et al.* 2001; Taylor and Peel 2000). Lastly, our results seem to be supportive of the following relationships: $\beta_1^* = -\beta_1$ and $\beta_2^* = -\beta_2$.

The conclusion that can be drawn from the first five findings is that the above non-linear model is appropriate representation of y_t , the deviations of RM/YEN rate; whereas the two last results enable us to estimate the restricted ESTAR model, with the following restrictions imposed on the unrestricted model: $\beta_1 + \beta_2 = 1$, $\beta_1^* = -\beta_1$ and $\beta_2^* = -\beta_2$ (Taylor and Peel 2000). We utilised

the likelihood ratio (LR) test to determine the validity of these restrictions. The computed LR statistic is compared with chi-squared critical value with 3 degrees of freedom. The LR statistic of 8.952 suggests that the above restrictions cannot be rejected at the 5% significance level. The adequacy of the model is verified by the absence of serial correlation (Ljung-Box Q statistic) and heteroscedasticity (WHITE statistic). Moreover, neither ARCH (4) nor GARCH (1, 1) suggests the presence of ARCH effect. Thus, the restricted ESTAR (2) model passes a battery of diagnostic tests and thereby can be used as a forecasting model, as its unrestricted version.

The linear AR model is also estimated for the purpose of forecast accuracy comparison. The estimation of AR model requires that the variables must be stationary; otherwise interpretation from the outcome would be spurious. We employed classical ADF and PP stationarity tests to check whether the stationary requirement is met. The stationarity tests results are summarized in Table 5. The results in Table 5 postulate that instead of y_t , which is not stationary, we should estimate linear AR model for stationary series, Δy_t , the first difference of y_t . Strategically, we need to estimate AR (1) model for Δy_t in order to obtain the required benchmark model, namely AR (2) model for y_t . The estimated AR (1) model is reported in Table 6.

TABLE 5
Stationarity tests results

Tests	Intercept Without Trend		Intercept with Trend	
	y_t	Δy_t	y_t	Δy_t
ADF	-0.858	-4.081*	-0.034	4.081*
PP	-1.244	-8.657*	-0.493	-8.627*

Note: * denotes the variable is stationary at 1% significance level.

TABLE 6
Estimated AR (1) model

Series	Coefficient of		Diagnostic Tests (Marginal Significance Values)			
	Δy_{t-1} (t statistic)	R^2	Q (20)	WHITE	ARCH (4)	GARCH
Δy_t	0.024 (-0.96)	0.857	16.919 (0.657)	2.267 (0.757)	1.149 (0.362)	0.037 (0.982)

From Table 6, our AR (1) model for Δy_t is given by:

$$\Delta y_t = - 0.024 \Delta y_{t-1} \quad (10)$$

Diagnostic tests results show that Equation 10 is free from all the autocorrelation, heteroscedasticity and ARCH effects. The adjusted R^2 values also suggest that the AR (1) model fits fairly well for the Δy_t series. To sum up, the estimated AR (1) model is an appropriate representation of first difference series of y_t . The only shortcoming of this model is that the linear autoregressive parameter is not significant based on the standard t-test. Equation 10 can be rewritten as:

$$y_t = 0.976 y_{t-1} + 0.024 y_{t-2} \quad (11)$$

which is exactly the AR (2) specification of y_t , the deviation of MYR/JPY rate from its PPP equilibrium position. If we take into account the insignificance of the autoregressive parameter, Equation 10 would effectively be reduced to:

$$\Delta y_t = 0 \quad (12)$$

or its equivalent:

$$y_t = y_{t-1} \quad (13)$$

Equation 13 is simply the commonly used benchmark for the evaluation of exchange rate forecasting models, namely the simple random walk (SRW) models. With the availability of two benchmarks model, in particular the linear AR (2) model (Equation 11) and SRW model (Equation 13), this study proceeds to compare the forecast accuracy of the unrestricted and restricted ESTAR (2) models with the benchmark (AR(2) and SRW) models.

FORECAST PERFORMANCE

The models are used to generate out-sample forecasts and the forecasting performances of these models are evaluated. The out-sample performance of the estimated forecasting models over the forecast horizon of $n = 4, 8$ and 12 quarters during the period 1997:3 to 2000:2 are evaluated based on mean absolute forecast error (MAFE), mean absolute percentage forecast error (MAPFE) and root mean square forecast error (RMSFE). The overall forecasting performances are reported in Table 7. Generally, all accuracy criteria consistently suggest that all three forecasting models, namely the unrestricted ESTAR (2), restricted ESTAR (2) and AR (2) models outperformed the SRW model at all horizons. This implies that both the linear and non-linear time series models under this study improve over the SRW model in the short- and

TABLE 7
Comparison of out-sample forecast accuracy

Models	Unrestricted ESTAR (2)			Restricted ESTAR (2)			AR (2)		
	4	8	12	4	8	12	4	8	12
Simple Random Walk model as benchmark									
MAFE Ratio	0.721	0.919	0.954	0.671	0.880	0.934	0.721	0.919	0.954
MAFPE Ratio	0.587	0.838	0.890	0.668	0.876	0.923	0.712	0.901	0.935
RMSPE Ratio	0.731	0.846	0.851	0.804	0.903	0.908	0.825	0.950	0.962
Linear AR (2) model as benchmark									
MAFE Ratio	0.590	0.844	0.903	0.931	0.958	0.979			
MAFPE Ratio	0.824	0.930	0.952	0.938	0.972	0.988			
RMSPE Ratio	0.886	0.891	0.885	0.975	0.950	0.944			

medium-run.

It is interesting to know whether the non-linear models yield more accurate forecasts than the linear model. As a matter of fact, it is rational for one to expect the former to improve upon the latter, since the former is more involved. In view of the fact that the actual answer to this issue is important to the application of time series analysis, this empirical study proceeds further to contrast the forecast performance between these two competing models directly. The conclusion from this exercise is that both the unrestricted and restricted ESTAR (2) models predict better than linear AR (2) model on the basis of all accuracy criteria, for forecast horizon equals 4, 8 and 12 quarters. For instance, MAFE of unrestricted (restricted) ESTAR (2) model are 0.590 (0.931), 0.844 (0.958) and 0.903 (0.979) times smaller than the MAFE of AR (2) model, for $n = 4, 8$ and 12, in that order. These results are overwhelmingly supported by the MAFPE and RMSPE criteria. As such, our extra resource spent on the modelling of ESTAR model is at least paid off. Perhaps, more importantly, this study has provided evidence that the performance of ESTAR is superior to its linear competitor, the AR model.

CONCLUSION

The empirical performance of foreign exchange rate models has been frequently criticized in recent years. These critiques come from studies that have found exchange rate models predict poorly out of sample periods. In the foreign exchange market, central banks often intervene, in an effort either to attenuate or to amplify variations in the exchange rate. The Ringgit is no exception and this explained partly the poor-out of sample prediction of the exchange rate models in previous studies.

In this study, we demonstrate that the adjustment of the RM/YEN rate is in fact predictable based on time series model. The STAR model and AR model both outperform the random walk in the out sample forecasting at all horizons. The results also show that the STAR model outperforms the AR model, its linear competitor. Importantly, we demonstrate formally that the adjustment of the Ringgit to its long run equilibrium follows a non-linearity path. This suggests that there is a systematic predictable component in the movement of nominal RM/

YEN exchange rate.

Two major implications of this finding are: (1) non-linear ESTAR model should be given priority in modelling exchange rate time series; and (2) exchange rate forecasters could rely on the non-linear model as a more reliable forecasting tool.

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Interpretation of Gender in a Malaysian Novel: The Case of *Salina*

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Keywords: Gender differences, gender stereotype, literary text, speech styles

ABSTRAK

Kebanyakan karya bertulis yang dianggap kreatif, khususnya dari segi plot, latar dan watak terhasil dengan berdasarkan pemerhatian penulis terhadap realiti sekitarnya. Daripada tinjauan, didapati bahawa anggota sesuatu budaya dan masyarakat mempunyai persepsi atau pandangan yang stereotaip tentang tingkah laku lelaki atau wanita dari segi gaya berpakaian, aktiviti, kerjaya dan peranan sosialnya dalam masyarakat. Penulis yang berpegang kepada pandangan ini biasanya turut membuat pemerhatian secara umum dan stereotaip, serta mencurahkan ke dalam karya mereka khususnya melalui watak-watak ceritanya agar karya mereka boleh dianggap logik, realistik, dan berkesan. Kajian ini bertujuan untuk menganalisis gaya pertuturan watak lelaki dan wanita yang bercorak stereotaip yang tergambar melalui novel *Salina* karya A. Samad Said. Di samping itu, penelitian juga dilakukan terhadap dampak daripada perbezaan gender yang dipaparkan dalam novel ini. Dari aspek fitur linguistik, penggunaan bentuk sopan dan bentuk berkias turut diteliti untuk analisis ini. Analisis akan difokuskan kepada penggunaan fitur linguistik ini oleh watak-watak dalam novel yang dikaji. Dapatan kajian ini menunjukkan bahawa penggunaan fitur linguistik ini berbeza mengikut gender dan unik sebagai ciri masyarakat Malaysia semula jadi.

ABSTRACT

Most written products that are considered creative, particularly in terms of plots, contexts and characters are created based on the writers' observations of the reality of their surroundings. It has been observed that members of most cultures and societies have certain perceptions or stereotype views of the behaviour of men and women regarding styles in dressing, activities, career and social roles in society. Writers rely on these usually stereotyped and generalized observations and portray these traits in their writing especially in their characters in order to make their written products believable, real and effective. This study sets out to analyse the stereotyped characteristics of male and female speech styles as portrayed in a Malaysian novel, *Salina*, written by A. Samad Ismail. It also examines the effect of gender differences depicted in the novel. The linguistic features that are examined for the analysis are the use of super polite forms and hedges. The analysis focuses on the use of these features by the characters in the novel. The findings of the study suggest that there are gender differences in the use of these features and are uniquely Malaysian in nature.

INTRODUCTION

There have been numerous hypotheses formed on the relationship between people's general expectations and beliefs about men and women and the behaviour of members of these groups (Worrell 1978; Taylor and Hall 1982). In most societies, men and women see themselves as

conforming to the typical behaviour of their sex group. This might involve characteristics of gender-biased costumes, activities, areas of expertise and social roles in society as well as differences in ways of communicating.

Our constructs of masculinity and femininity influence our reactions to men and women.

The moment we have categorized someone as a male or female, 'our gender constructs come into play, providing us with judgmental standards against which to compare persons in forming impressions about their masculinity and femininity' (Smith 1985:28). Thus, in a particular society, men and women conform to the accepted and desired characteristics, as society's expectations and perceptions shape their behaviour in that society.

Various researchers have pointed out that there are differences in ways of communicating between males and females (Lakoff 1975; Spender 1975; Coates 1986; Tannen 1991; Jariah Mohd. Jan 1999). Most empirically based studies of differences between male and female speech styles have been dealt with in the naturally occurring or 'real life' conversations in the public sphere (Fishman 1983; Coates 1986; Jariah Mohd. Jan 1999). There has been very little evidence of studies on gender conversational styles in the written text particularly in novels, short stories, plays or screenplays. This study intends to examine male and female conversational styles with a focus on speech manifested in the language of the characters in the novel. The focus of attention is to explore whether these manifestations are indeed the writer's own perceptions and experience.

A general observation indicates that most written products that are considered creative, particularly in terms of plots, contexts and characters are created based on the writers' observations of the reality of their surroundings. It has been observed that members of most cultures and societies have certain perceptions or stereotype views of the behaviour of men and women regarding styles in dressing, activities, career and social roles in society. Writers rely on these usually stereotyped and generalized observations and portray these traits in their writing especially in their characters in order to make their written products believable and effective. For instance, the stereotyped view of gender characteristics in the society is portrayed by the differences in ways of communicating between men and women. As such, the speech styles that are associated with either male or female characters are often manifested by the writers in their stories in order to make their characters real and acceptable to the readers.

OBJECTIVE

This paper attempts to analyse the stereotyped characteristics of male and female speech styles and to examine the effect of gender differences as depicted in a novel, *Salina*, written by A. Samad Ismail who is a renowned Malaysian literary writer.

GENDERED BEHAVIOURAL CONSTRUCTS AND CONVERSATIONAL STYLES

In any society, men and women vary in the degree to which they see themselves as conforming to gendered typical norms of personality and behaviour. The cultural norms that are regulated in a society according to the social desire of that society itself are referred to as behavioural construct. These norms include gender (sex) roles in society, occupation, and language use.

Frank and Ashen (1983) note that language differences are partly due to our social expectations. For instance, since most behavioural constructs in terms of cultural norms are regulated in accordance with the values of men, we tend to respond to boys and girls differently. Our level of acceptance of their behaviour may differ. For example, it is generally accepted for men to be dominant, aggressive, independent and objective. Women, on the other hand, are more likely to be accepted as submissive, dependent, passive and subjective. As such, the fact that women are expected to 'act as ladies' and to 'respect' people around them reflects their inferior status, and thus, are expected to respect their superiors who are men. These behavioural constructs have empowered men while women are considered as one step below men or rather they hold a secondary status in the society. This encoding behaviour of men and women in the society has significant ramifications on the way they communicate and socialize in inter-gender interactions.

Inevitably, our social expectations and experiences may be a contributing factor to the language differences or differing linguistic styles between men and women at any time and in any situation.

There have been numerous studies that appear to support the idea of stylistic gender differences in conversation. Lakoff's observations (1975 and 1977) of women's language are

considered one of the earliest regarding the differences in speech styles between men and women.

According to Lakoff, the style of language which was typically used by women and thus denied them 'the means to express (themselves) strongly', and instead make them sound 'trivial' and 'uncertain' were as follows:

- i. The use of words connected with women's culture (colour terms, sewing terms) which are not in men's vocabulary, or are used disparagingly by men.
- ii. So-called "empty" adjectives, such as "divine" and "charming."
- iii. Tag questions and rising intonation used with grammatically declarative utterances.
- iv. The use of hedges to avoid being too assertive or direct.
- v. The use of "so" as an intensifier, as in "I like him so much."
- vi. Hypercorrect forms in pronunciation and grammar.
- vii. Being "superpolite."
- viii. Not telling jokes.
- ix. Speaking in *italics* (which presumably refers to women's stress patterns).

(Lakoff 1975:53-56)

Lakoff was working on the principle that women's speech patterns are worse than men's, in that they confirm women's subordinate social status and prevent them from being treated as equals. Women are interested in maintaining harmony and goodwill in their communication and sometimes can be misunderstood as being tentative and full of uncertainties. The use of modal auxiliaries in women's speech is said to reflect this perception.

In 1977, Lakoff further characterized her basic assumptions of women's speech styles under

three (3) main categories, namely lexical traits, phonological traits and syntactic-pragmatic traits (see Table 1).

This study will only focus on two linguistic features proposed by Lakoff (1977) in the analysis which are the use of super polite forms and hedges.

POLITE FORMS

According to Holmes (1995), 'politeness' refers to an expression of concern for the feelings of others. People may express concern for others' feelings in many ways, both linguistic and non-linguistic. Being polite means expressing respect towards the persons you are talking to and not offending them. In other words, politeness may take the form of an expression of goodwill or camaraderie, establishing rapport, as well as the more familiar non-intrusive behaviour which is labelled 'polite' in everyday usage.

Malaysians observe a politeness system that embodies specific codes of verbal and non-verbal behaviour in their interactions with others (Jamaliah Mohd. Ali 1995b: 65). They are generally receptive to those who display good manners in face-to-face interaction. In the Malay community, people are expected to be polite or demonstrate finesse in behaviour whenever they interact with others. This is evident especially in interactions that involve persons of a certain institutional or societal rank. Such behaviour indicates proper upbringing. In addition, the notion of relational distance, respect for elders, hierarchical position as well as status and authority are very much rooted in the Malay value system (Jariah Mohd. Jan 1999: 206).

Some aspects of behaviour that Malaysians consider finesse are as follows (Asmah Haji Omar 1992: 23-24):

TABLE 1
A summary of the characteristics of women's speech styles (Lakoff 1977)

No.	Female Speech Styles	Speech Characteristics
1.	Lexical Traits	<ul style="list-style-type: none"> • special lexicon • imprecise intensifiers • super polite forms
2.	Phonological Traits	<ul style="list-style-type: none"> • hypercorrect grammar • clear and precise pronunciation
3.	Syntactic-Pragmatic Traits	<ul style="list-style-type: none"> • epistemic modality and hedges • tag questions • direct quotations

- Not being forthright or assertive or aggressive;
- Not being blunt or direct in expressing one's views;
- Not causing interpersonal conflict or avoiding 'loss of face'.

When someone is being polite, there are many possible features of their use of the language that are being referred to. It is generally observed that polite people tend to phrase their utterances considerately, respond encouragingly and positively to others' talk, and express appreciation generously. They avoid confrontation, public displays of being too forceful or direct because these are all examples of behaviour which are regarded as impolite, coarse, rude, and may even suggest ill-breeding (Jamaliah Mohd. Ali 1991).

Lakoff (1975) observes that in women's speech, there is also a more frequent expression of emotions such as love, endearment, and grief, and avoidance of angry and hostile expressions. In doing so, women tend to use super polite forms and euphemistic forms such as '*would you mind...*', '*I'd appreciate it if...*', '*... if you don't mind.*', '*may*' and '*could*'.

Face

Jamaliah Mohd. Ali (1995b: 75) stipulates that the norms of society require that we abide by social rules in our daily interactions. 'Face' or '*jaga air muka*' is one of the most important factors that Malaysians should observe and adhere to in their daily interaction in order to maintain not only the stability of the interactants but that of the interaction as well.

In Malaysian communities, 'face-saving' means saving another person or oneself, from embarrassment. In other words, the speaker tries not to put the listener or himself in a position in which he or she might be embarrassed. The 'face' that a person maintains becomes important especially when it is subjected to risk and assumes significance particularly when events are being interpreted and evaluated. Therefore, it must be constantly attended to in the interaction.

Ostman (1981: 4) states that there are differences between 'face-saving' and politeness. She explains that the 'face-saving' aspect of verbal and (non-verbal) behaviour is characterised by an egocentric, direct and efficient expression of

wants and needs whilst the politeness aspect works at suppressing such potential egocentricity and prevents it from occurring overtly in behaviour.

In general, people try to build up each other's 'positive face' (the positive image that people have and want to be appreciated and approved by others) and avoid posing threats to the 'negative face' (where one's actions should not be impeded by others) in co-operative interaction.

Behaviour which avoids imposing on others or avoids 'threatening their face' is described as evidence of negative politeness, while sociable behaviour expressing warmth towards an addressee is positive politeness behaviour (Brown and Levinson 1987). According to this approach, any utterance which could be interpreted as making 'a demand or intruding on another person's autonomy can be regarded as a potential face-threatening act (henceforth FTA). Polite people avoid obvious FTAs, such as insults and orders. They usually attempt to reduce the threat of unavoidable FTAs such as requests or warnings by softening them, or expressing them indirectly; and they use positively polite utterances such as greetings and compliments where possible.

The mutual relationship between the participants in an interaction is very significant in deciding the degree of face threat. For instance, something that is fairly minimally face-threatening in private encounters, such as a friendly talk, becomes highly face-threatening in public encounters. Competent conversation participants often look for ways that can minimise the threat to face in one way or another. This of course requires an ability to reach each other's signals and to accommodate each other's wants. Furthermore, preserving each other's face in social interactions is very important in maintaining harmony and stability. Failure to do so may result in undesirable communicative consequences. As such, this phenomenon at times imposes further constraints on the conversational behaviour of the participants.

HEDGING – A STRATEGY

Hedging refers to the linguistic forms which speakers use to express their degree of commitment to the truth of a proposition. The forms that realise speakers' commitment are typically modal auxiliary verbs such as '*should*',

'would', 'could', 'may' and 'might'. Other linguistic forms that fulfil the same function are items such as 'perhaps', 'really', and also hedges such as 'sort of', 'I think' and 'kind of'.

According to Lakoff (1975: 53), hedges are "...words that convey the sense that the speaker is uncertain about what he or she is saying or cannot vouch for the accuracy of the statement." Speakers use hedges as a strategy to express their personal attitude in the conversation. On the other hand, Coates defines hedges by the function of items, rather than their grammatical category. According to Coates (1989: 113):

"Epistemic modal forms are defined semantically as those linguistic forms which are used to indicate the speaker's confidence or lack of confidence in the truth of the proposition expressed in the utterance. If someone says, *Perhaps she missed the train*, the use of the word perhaps indicates the lack of confidence in the proposition 'she missed the train'. Lexical items such as *perhaps*, *I think*, *sort of*, *probably*, as well as certain prosodic and paralinguistic features, are used in English to express epistemic modality."

Coates (Ibid: 113-14) also extends the functions usually associated with epistemic modal forms as those that are "used by speakers not just to indicate their lack of commitment to the truth of propositions, but also to hedge assertions in order to protect both their own and addressees' face."

She claims that women, especially in single-sex groups, exploit these forms more than men and they use them to mitigate the force of an utterance in order to respect the addressees' face needs. An illustration of this point is as follows:

(speaker describes an old friend she's recently bumped into)
she looks very *sort of* um (-) *kind of* matronly *I really*

(Coates 1989)

She claims that the italicised forms in the example given "hedge the assertion she looks matronly not because the speaker doubts its truth but because she does not want to offend her addressees by assuming their agreement" because describing a friend in unflattering terms is controversial, politeness as well (Coates Ibid).

The suggestion here is that the instances of epistemic modal forms above have one function of protecting the face of the speaker's addressees by permitting their dissent from the truth content of her proposition. However, according to Coates, the polypragmatic nature of forms also protects the speaker's face. In this instance, the speaker in the example can retreat from the proposition expressed if it turns out to be unacceptable. She emphasised that "Presumably such topics do not trigger the use of epistemic modal forms because they are not so face-threatening". In addition, hedges also function as politeness strategies often used by women in their interaction.

METHODOLOGY

The Malaysian novel, *Salina* written by A. Samad Said who is a renowned Malaysian literary writer was selected for this study. For the purpose of analysis, a translated version of *Salina* by Hawa Abdullah was used. Unlike many other translated versions, this is close to the original Malay version.

Salina is regarded as the line of demarcation which separates the early writers from the present ones (Hanna Sheikh Mokhtar 1993). The style used by the author differs from other writers in that it is told by means of dialogues or conversations among the characters, reflecting the social lifestyles and behaviour practiced by the society at that time. The language use in the dialogues directly or indirectly reflects the social expectations as depicted in the cultural norms and practices of the society.

The story depicts the struggles faced by women in order to survive in the male-dominated world. It could be said that women in *Salina* represent a new breed of women who were modernised by colonial rule and were toughened by Japanese occupation.

Five excerpts from *Salina* that featured the conversations of male and female characters portrayed by the writer were selected at random. The excerpts were randomly selected to avoid inclination towards the existence of the features of the speech styles if they were studied and analysed beforehand.

Analysis of the male and female speech styles in the selected excerpts is based on two linguistic features stipulated by Lakoff (1975) i.e. i) the use of super polite forms and ii) hedges. Examples were extracted and quoted

from the excerpts as evidence of the use of the linguistic features by the characters.

Aspects of the phonological traits of the discourse that include intonation and voice pitch were not included in the analysis. Table 2 summarizes the speech characteristics in the study.

ANALYSIS AND FINDINGS

The Use of Super Polite Forms

In general, analyses of the data indicate that most of the characters in *Salina* are polite to each other. The degree of politeness and impoliteness is difficult to measure as this varies from culture to culture.

Although politeness in the characters' speech is not clearly illustrated in terms of the use of special words, or phrase, it is found that both the men's and women's speech styles are consistent with Holmes' descriptions of politeness that is "polite people tend to phrase their utterances considerably, respond encouragingly and positively to others' talk, pay compliments, and express appreciation generously" (1995, 24-

25). This is a typical feature of the Malaysian culture that "... when talking, we need to moderate our voice, and not talk in a way that hurt others' feelings" (Shasel 1997). Except for two instances of the use of *please*, there is no other evidence of the use of other polite forms in speech among the female characters.

- Idah, *Please* sit down ... p 283
- *Please* light it, my hands are wet. p 212

The Use of Expletives

Analyses of the data show that expletives are used among male characters in *Salina*. The findings show that there is only one instance of strong expletive attributing to male style. The weak forms are those used by the male characters and these forms are attributed to the female style (Table 3).

The examples shown in Table 3 are utterances made by Abdul Fakar who is one of the male characters in *Salina*. His language reflects his flirtatious behaviour. He speaks gently

TABLE 2
Examples of linguistic features examined in *Salina*

No.	Female Speech Styles	Speech Characteristics	Examples
1.	Lexical Traits	Super polite forms Expletives • Strong expletives • Weak expletives	• <i>Would you mind ...</i> , • <i>Could you please...</i> , • <i>Damn, I'll be damn, Shit,Hell</i> • <i>My goodness...</i> • <i>Oh, dear...</i>
2.	Syntactic-Pragmatic Traits	Epistemic modality and hedges • Modal auxiliary • Modal adverbs • Qualifying adjectives • Egocentric sequences	• <i>May, might, could</i> • <i>Perhaps, possibly, may be</i> • <i>So, very,</i> • <i>I believe, I think, I guess</i>

TABLE 3
Strong and weak expletives used by male characters in *Salina*

Strong Expletives	Weak Expletives
<i>That wretched tramp! He doesn't know his place ...</i> p 76	<i>If you become dead wood in the house, <u>goodness</u>, the tramp will take advantage...</i> p 321
	<i>My! Oh my!</i> p 324
	<i>Lo and behold</i> after that, the clerk disappears for months. p 325
	<i>Very well! You say it is difficult ...</i> p 79

and appears to understand women very well.

The linguistic features used by Abdul Fakar indicate that his speech lacks male characteristics. As such, except for the strong expletive mentioned earlier, all the other expletives used are weak and considered to have feminine style.

Other expletives found in the excerpts are:

- *Oh dear, you shouldn't have troubled yourself, sis ...* p 47
- *Oh! Such a pity!* p 198
- *Praise be to God.* p 198

Another male character in *Salina* who uses these weak forms of expletives is Hilmi. He is portrayed as an educated person, as well as polite and respectful to others. His religious background and good upbringing influence his speech when interacting with others.

It appears that the female characters use more weak forms of expletives compared to the

male characters in *Salina*. Forms of endearment such as 'dear' and 'my sweet' are widely used in the text as indicated in Table 4.

The Use of Hedges

There are seven types of hedges used by both male and female characters in *Salina*. The use of this feature is tabulated in Table 5. Contrary to the assumptions that hedges are exclusively a female speech style, there is considerable evidence of the use of this feature in male speech as found in the selected excerpts from the novel, *Salina*.

The data in Table 5 shows that in contrast with the general expectations based on the perceptions of the gender speech styles, the male characters have been portrayed to use more hedges compared to the female characters. This finding on the use of hedges, contradicts the claim made by Lakoff (1975) and other researchers (Coates 1986; Githens 1991; Jariah

TABLE 4
The use of polite forms and expletives in *Salina*

Female Speech Styles	Male Speech Styles
<i>Dear me! Exercising so early in the morning?</i> p 36	<i>Dear me! If it is as you say, the landlord's simply squeezing money from us.</i> p 40
<i>Goodness! What a hope!</i> p 39	<i>Oh dear you shouldn't have troubled yourself, sis ...</i> p 47
<i>How long is it since he passed away?</i> p 45	<i>Oh dear! Why swear?</i> p 86
<i>Goodness, it's been going on for so long, how could you not know?</i> p 75	<i>Goodness! Tonight, I'll give you a treat.</i> p 89
<i>Goodness! Now you say: Praise be to God.</i> p198 p 90	<i>Good Gracious! You embarrass me, of course I have the money.</i>
<i>I am fond of you, my sweet.</i> p 210	<i>Dear me, what a shame!</i> p 247
<i>Idah, Please sit down ...</i> p 283	<i>Oh my sweet. You are clever to talk, aren't you?</i> p 288
<i>Please light it, my hands are wet.</i> p 212	<i>How clever you are, my sweet.</i> p 289
	<i>Oh dear, you shouldn't have troubled yourself, sis ...</i> p 47
	<i>Oh! Such a pity!</i> p 198
	<i>Praise be to God.</i> p 198
	<i>If you become dead wood in the house, goodness, the tramp will take advantage...</i> p 321
	<i>My! Oh my!</i> p 324
	<i>Lo and behold after that, the clerk disappears for months.</i> p 325
	<i>Very well! You say it is difficult ...</i> p 79

TABLE 5
Gender and distribution of hedges in *Salina*

No.	Types of Hedges	Male	Female	Total
A	Modal Adverbs			
1.	really	15	8	23
2.	perhaps	9	5	14
3.	surely	7	6	13
	Total	31	19	50
B	Modal Auxiliary			
1.	would	15	5	20
2.	should	6	2	8
3.	could	3	2	5
4.	must	10	2	12
	Total	34	11	45
C	Adjectives			
1.	too	6	1	7
2.	so	23	8	31
	Total	29	9	38
D	Egocentric			
1.	I know	16	6	22
2.	I do / I don't	24	15	39
3.	I think	8	1	9
4.	I hope	4	0	4
5.	I want	6	0	6
6.	I feel	2	0	2
	Total	60	22	82
E	Fillers			
1.	well	13	6	19
2.	of course	8	5	13
3.	you know	11	6	17
	Total	32	17	49
	Total (A+B+C+D+E)	186	78	264

Mohd. Jan 1991) that women use these features more than men do.

As can be seen in Table 5, the male characters in *Salina* use more hedges, especially the egocentric types such as *I do/I don't* (24 items) and *I know* (16 items), compared to the female characters. The assertive behaviour of the male characters is reflected in their use of hedges (60 items). On the other hand, the female characters appear to be less assertive (22 items) and seldom relate their needs and true feelings about matters that are of importance to them.

CONCLUSION

The findings of the study suggest that there are gender differences in the use of the super polite

forms and hedges. The speech styles portrayed in *Salina* exhibit clearly features of male and female language. However, unlike the previous claims (Lakoff 1975; Tannen 1990; Githens 1991; Jariah Mohd. Jan 1999), these linguistic features seem not to be exclusively used by one gender only. Both the male and female characters in the novel are portrayed as using them. Although the speech characteristics in this study have been claimed as associated with female speech style, the results of this study show that it is the particular requirement of the conversations that motivate the use by either a male or a female character. It is suggested that the occurrence of the styles portrayed in the male and female speech is not determined or influenced by the gender of a speaker, rather, the context itself

has a strong bearing on the choice of styles to be used.

In most studies, claims of gendered speech styles have been made based on the western perceptions. In *Salina*, however, both men and women characters have been pictured to have used similar linguistic features in their conversations. The characters are also sensitive to the behaviour of their conversational partners and thus adapt their speech style accordingly.

The findings suggest that the speech styles of male and female cannot be generalised for they differ from one cultural context or society to another. However, it is reasonable to conclude that writers, regardless of their culture and societal background, appear to perceive or conceptualise male and female speech as a collaborative social activity rather than being restricted to their personal traits. As such, when they write the speech for their characters in a novel, they take into account aspects such as the role and status of the characters within the particular society and the context of the conversation rather than gender.

Perhaps it would be best to conclude that the perception of the different speech styles between men and women lies in our own beliefs and perceptions. To a certain extent, we tend to exaggerate perceived differences in the verbal styles of men and women because we live in an environment that stresses differences rather than similarities.

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Penterjemahan Pragmatik dalam Konsep Masa Arab-Melayu: Satu Analisis Teori Relevan

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ABSTRAK

Masa itu emas. Masa itu seperti pedang. Begitulah konsep masa diungkapkan dalam budaya Melayu dan Arab bagi melambangkan pentingnya konsep masa itu. Dalam konsep masa ini, bangsa Melayu sering dikonotasikan negatif. Sering kedengaran ungkapan Janji Melayu yang melambangkan bangsa Melayu tidak begitu menitikberatkan kepentingan masa. Adakah perkara ini benar? Justeru, makalah ini cuba merungkai permasalahan konsep masa melalui pendekatan pragmatik, khususnya Teori Relevan (TR). Dengan menggunakan faktor-faktor bukan linguistik (ekstralinguistik) seperti faktor konteks, latar situasi, dan niat pengujar, TR dijangka mampu menghuraikan permasalahan ini secara tuntas. Dengan menggunakan data kata pinjaman Arab yang sudah diterima pakai dalam bahasa Melayu, khususnya melalui penterjemahan dan adaptasi, konsep masa Arab-Melayu ini akan cuba dibincangkan.

ABSTRACT

Time is gold. Time is like a sword. Both these proverbs are used in Malay and Arabic culture for showing the significance of time. Unfortunately, the concept of time in Malay culture has been presented negatively. The Malay race is regarded as a ethnic group that not take care about the importance of punctuality. Is it true? This article will try to explain that problem by using a pragmatic analysis especially through Relevance Theory (TR). Based on the TR concept that engaged factors such as context, co-text, and intended meaning, TR is capable of solving the problem of this misconception in Malay culture. In this articles there are some data that are used to discuss some foreign lexical items that were assimilated in Malay vocabulary. Actually, the chosen lexical items were adapted and translated into the Malay language.

PENGENALAN

Masa itu emas. Masa itu kehidupan. Begitulah beberapa ungkapan orang Melayu tentang peri pentingnya masa dalam kehidupan mereka. Malah dalam bahasa Arab juga terdapat madah pujangga yang mengungkapkan masa dalam kehidupan mereka. Antaranya seperti *Waktu itu seperti pedang; kalau tidak digunakan, pedang itu akan memenggal kepala kita*. Malah dalam Islam pun, kepentingan masa terakam dalam satu surah khas yang menceritakan kepentingan masa, iaitu surah al-'Asr. Keprihatinan tentang masa ini sebenarnya melambangkan pemikiran masyarakat yang menuturkan bahasa tersebut. Dengan kata

ini, ungkapan konsep masa sebenarnya melambangkan gaya pemikiran dan bahasa sesuatu bangsa (Reha Mustafa 1999).

Sebenarnya, ada banyak kajian dan tulisan yang membincangkan konsep masa khususnya kajian ilmiah yang dibuat oleh pengkaji tempatan seperti Asmah Hj Omar (1994), Reha Mustafa (1999) dan Nor Hashimah Jalaluddin (2001). Kajian mereka dibuat dari perspektif ilmu linguistik dengan cabang utamanya seperti nahu, sosiolinguistik, semantik, dan pragmatik. Bagaimanapun belum ada kajian yang dibuat dalam konteks penterjemahan. Dalam disiplin terjemahan, konsep masa diungkap dengan cara

yang agak berbeza sedikit kerana penterjemahan melibatkan dua bahasa dan budaya yang berbeza. Oleh itu, makalah ini mencuba untuk menganalisis konsep masa ini dengan beracukan satu teori terjemahan moden, iaitu teori relevan (TR).

PERNYATAAN MASALAH

Sesuatu kajian yang benar-benar ilmiah mestilah dilakukan dengan berdasarkan satu kerangka kerja atau teori yang mapan. Tanpa kerangka kerja ini, kajian itu bersifat awang-awangan. Oleh kerana aspek masa melibatkan bahasa dan pemikiran sesuatu bahasa dan bangsa maka baiknya kajian itu dianalisis dari sudut kerangka teoritis (Nor Hashimah Jalaluddin 2001). Misalnya ungkapan berikut :

Kes 1

Ahmad : Bila engkau nak beraya di rumah aku, Salim?

Salim : Lepas Maghrib nanti.

Dalam kes 1 di atas, perkataan *Maghrib* yang berasal daripada bahasa Arab adalah waktu yang bermula selepas gelincir matahari di kaki langit dan tamat apabila warna merah di ufuk barat hilang kesemuanya. Atau dengan kata lain, waktu *Maghrib* tamat apabila masuk waktu *Isyak*. Manakala dalam budaya Melayu, ungkapan *selepas Maghrib* itu mungkin selepas waktu *Isyak*. Sudah menjadi kelaziman orang Melayu, sering 'terlewat' dalam mengotakan janji waktunya hingga tercipta ungkapan *Janji Melayu* (Nor Hashimah Jalaluddin, 48). Memandangkan perbezaan makna masa dalam kedua-dua bahasa, budaya, dan pemikiran itu tadi berbeza maka TR cuba menganalisis interpretasi dan maksud sebenar ungkapan tersebut dan cara terbaik untuk menterjemahkannya. Lazimnya interpretasi ujaran itu akan dianalisis menurut perspektif ilmu pragmatik melalui TR. Menurut TR, ungkapan itu mengandungi beberapa andaian. Antaranya seperti :

- waktu itu betul-betul selepas sembahyang *Maghrib*, iaitu sebelum waktu *Isyak*.
- waktu itu mungkin selepas *Isyak*.
- waktu itu mungkin selepas *Maghrib*, tetapi hari yang berikutnya.

Kalau konteks menentukan bahawa Salim ini jenis orang yang menepati janji maka ungkapan Salim akan menghasilkan kesan

konteks, iaitu Salim akan datang tepat pada waktunya, betul-betul selepas *Maghrib* dan bukan selepas *Isyak*. Dan kalau sebaliknya maka andaian b) dan c) akan menjadi makna pada semantikanya sahaja, iaitu makna sebenar *Maghrib* itu tetapi juga berdasarkan konteks ia diujarkan. Begitulah TR menganalisis sesuatu ujaran secara deduksi bagi menghasilkan inferens (kesimpulan). Justeru, satu interpretasi tepat dapat dihasilkan.

Oleh itu kajian ini cuba mengkaji masalah seperti:

- Mencari maksud sebenar sesuatu ujaran yang mengandungi konsep masa dari perspektif bahasa, budaya, dan pemikiran orang Melayu dengan beracukan pendekatan TR. Gabungan ilmu semantik dan pragmatik penting dalam mencari makna sesuatu ujaran. Kebergantungan terhadap ilmu semantik sahaja tidak memadai.
- Menterjemah konsep masa yang dipinjam daripada bahasa Arab dengan menggunakan pendekatan terjemahan langsung (*direct translation*) seperti yang dicadangkan oleh TR. Pendekatan terjemahan langsung dianggap lebih selamat kerana konsep ini mengekalkan kesemua aspek teks sumber seperti konteks, kesan konteks dan stilistik. Tambahan pula, kejujuran dan kesamaan terhampir dapat dikekalkan dalam pendekatan ini. Oleh itu, ketepatan dalam terjemahan dapat dihasilkan melalui pendekatan terjemahan langsung.

OBJEKTIF KAJIAN

Antara objektif kajian ini ialah:

- Melihat konsep masa dari perspektif bahasa, budaya, dan pemikiran orang Arab.
- Meninjau penggunaan konsep masa dalam pemikiran dan budaya orang Melayu.
- Mencadangkan pendekatan terjemahan langsung dalam menterjemahkan konsep masa yang dipinjam daripada bahasa dan budaya asing khususnya bahasa Arab.

BATASAN KAJIAN

Kajian ini hanya melibatkan kata masa yang dipinjam daripada bahasa Arab dan konsep masa ini telah diterima pakai oleh orang Melayu. Kebanyakan kata pinjaman itu melibatkan istilah masa dalam agama Islam. Antara yang akan dianalisis adalah seperti istilah *al-Fajr* (Fajar), *al-Subh* (Subuh) dan *al-Sahr* (sahur).

KERANGKA KERJA

Kerangka kerja atau metodologi yang akan digunakan adalah bersifat kajian kepustakaan (*arm chair research*). TR akan digunakan dalam kajian ini kerana TR menekankan aspek kerelevanan sesuatu ujaran. Pendengar (dalam konteks terjemahan dipanggil pembaca kedua) diberi kebebasan untuk berfikir dalam mentafsirkan sesuatu ujaran yang didengar atau diterjemahkan. Hal ini bersesuaian dengan cara baru berkomunikasi yang menyatakan bahawa manusia ialah insan istimewa yang mampu berfikir dalam mentafsirkan sesuatu ujaran berdasarkan persekitaran kognitif dan konteks yang ada (Sperber dan Wilson 1995). Kemudian, TR akan diterapkan dalam beberapa kata pinjaman masa bagi dianalisis maksud sebenarnya dalam sesuatu ujaran orang Melayu selain menterjemahkan data pinjaman masa itu secara langsung.

DEFINISI KONSEP

Dalam kajian ini, terdapat beberapa istilah kosa ilmu yang perlu dijelaskan terutamanya konsep dan pengertian TR. Antaranya adalah seperti berikut:

Konsep Masa

Menurut Kamus Dewan (1992), masa bermaksud waktu dan ketika. Waktu itu mungkin sekejap, agak lama, lama atau tertentu sahaja. Perkataan *masa* berasal daripada bahasa Sanskrit yang bermaksud bulan. Manakala perkataan *waktu* pula berasal daripada bahasa Arab, iaitu *waqt* (Reha Mustafa 1999). Sebenarnya sukar bagi kita untuk mendefinisikan makna masa kerana ia bersifat relatif dan subjektif. Masa ialah suatu kontinum yang bukan ruang dan berlaku rentetan masa dari masa lepas, masa kini, dan masa depan. Oleh itu, masa tidak dapat diputarakan balik putarannya. Kontinum masa boleh dilihat daripada rentetan masa seperti saat, minit, hari, minggu, bulan, tahun, dekad, kurun, dan alaf. Nama-nama rentetan masa tadi adalah ciptaan manusia yang berkaitan dengan kehidupan mereka (Reha Mustafa, 16-17). Secara ringkasnya, masa bermaksud urutan peristiwa atau tempoh berlakunya peristiwa-peristiwa tersebut.

Teori Relevan

Sesungguhnya TR lebih menekankan bentuk komunikasi yang dapat difahami oleh penutur dan pendengar. Dalam hal ini, penutur (dalam terjemahan dipanggil penulis teks sumber) seharusnya menjamin apa yang dibualkan benar-benar relevan dan mudah difahami memahamkan pendengar (dalam terjemahan dipanggil pembaca kedua). Perbualan itu mesti mencapai kerelevanan yang optimal (Nor Hashimah 1992). Apabila sesuatu ujaran itu disampaikan maka menjadi tanggungjawab si penutur memahamkan pendengar (Nor Hashimah Jalaludin, 33). Bagi pendengar pula, dia mencuba memperoleh kesan konteks yang mencukupi dan kesan itu mestilah mudah diperolehi. Tujuannya adalah untuk menggalakkan usaha memproses maklumat yang tidak diperlukan. Hal ini seterusnya menghasilkan definisi TR yang sebenarnya, iaitu:

- 1) Dengan andaian segala perkara seimbang, semakin banyak kesan konteks maka ujaran itu semakin relevan.
- 2) Dengan andaian segala perkara seimbang, semakin sedikit usaha memproses maklumat maka ujaran itu semakin relevan.

Inferens

Menurut TR, komunikasi bukan setakat mengekod, memindah, dan menyalahkod maklumat tetapi memerlukan proses inferens iaitu proses membuat kesimpulan dan rumusan terhadap sesuatu maklumat yang ada (Gutt 1998). Misalnya contoh berikut :

Kes 2

Ani : Lama lagi ke si Karim tu?

Tijah : Dia sekarang sedang berurusan dengan Ali.

Dalam perbualan di atas, Tijah tidak menjawab secara langsung pertanyaan Ani. Tijah hanya memberitahu bahawa Karim sedang berurusan dengan Ali. Katakanlah si Ali itu seorang yang mudah berurusan dengannya maka dapatlah disimpulkan bahawa Karim tidak akan lama bersama dengannya. Daripada konteks yang dibekalkan, kita perlu membuat inferens terhadap sesuatu komunikasi seperti kes di atas. Dengan kata lain, menurut TR, makna ujaran mengikut konteks yang ada. Jadi untuk memastikan kejayaan sesuatu komunikasi, konsep membuat kesimpulan iaitu inferens perlulah dibuat (Gutt, 42).

Konteks

Dalam TR, konteks ialah binaan pemikiran yang bersifat psikologi dan kognitif (Gutt 1998). Ia merupakan segugus andaian pendengar atau pembaca kedua/pembaca sasaran (dalam disiplin terjemahan) terhadap alam dunia dan persekitarannya (Sperber dan Wilson 1986). Menurut takrifan ini, konteks meliputi hampir kesemua fenomena dan peristiwa yang dapat ditanggap oleh pemikiran manusia. Konteks juga bukan setakat terdapat pada persekitaran fizikal yang boleh dilihat dan dirasa tetapi juga meliputi ujaran dan ayat terdahulu (untuk maklumat dalam teks), andaian masa depan, hipotesis saintifik, kepercayaan agama, memori silam, budaya sejagat, dan persepsi manusia terhadap sikap dan mentaliti si penutur sesuatu komunikasi (Gutt, 43). Konteks boleh dibentuk dan dikembangkan. Pembentukan konteks boleh mempengaruhi pemahaman sesuatu maklumat. Misalnya manusia tidak mudah mengingati alat dan jenis permainan jika disuruh apatah lagi jika yang ditanya itu ialah warna alat permainan yang pertama sekali dibeli semasa hari jadi. Oleh itu, usaha mengingati maklumat dan keupayaan minda kita memproses maklumat mempunyai kaitan yang rapat. Kesemua itu terangkum dalam konsep dan pengertian konteks.

Konteks yang bersesuaian dapat dikembangkan jika maklumat baru ditambah. Setiap maklumat baru yang ditambah maka ia memerlukan konteks yang berbeza (Nor Hashimah Jalaluddin 1992). Pembinaan konteks adalah bahagian terpenting dalam interpretasi ujaran. Dalam interpretasi ujaran, pendengar akan menetapkan konteks yang sesuai bagi menghasilkan kesan konteks. Kesan konteks ialah andaian awal pendengar tentang ujaran yang didengarnya. Dalam perbualan misalnya, pendengar akan menggabungkan atau memperkuat atau menggugurkan konteks yang dikemukakan oleh penutur bagi menghasilkan kesan konteks. Misalnya contoh berikut:

Kes 3 (gabungan maklumat baru dan lama)

Zaiton bangun daripada tidur dengan andaian konteks seperti berikut:

1. Kalau azan subuh kedengaran, dia akan bangun untuk solat subuh.
(Kemudian dia bangun dan kedengaran :
(konteks sedia ada / lama)
2. Azan subuh sedang berkumandang (konteks baru)

Inferens (Rumusan atau kesimpulan):

3. Zaiton akan sembahyang subuh (gabungan konteks lama dan konteks baru)

Kes 4 (menguatkan konteks baru dan lama)

Zaiton bangun daripada tidur kerana terdengar bunyi suara di menara masjid. Lantas Zaiton membuat andaian iaitu:

1. Azan subuh sedang bergema (andaian awal/konteks lama).

Tetapi apabila Zaiton membuka matanya dan diamat-amati suara itu, rupanya ia merupakan:

2. Bacaan al-Quran yang dibaca oleh pak bilal di masjid (konteks sebenar— dengan menggugurkan andaian awal).

Begitulah cara sesuatu konteks dibentuk bagi menghasilkan kesan konteks yang sebenarnya. Dengan kata lain, konteks amat memainkan peranan yang cukup penting dalam menginterpretasi makna sebenar sesuatu ujaran.

Kerelevanan Optimal

Menurut Sperber dan Wilson (1986 dan 1995), faktor utama kejayaan sesuatu komunikasi adalah dengan mencapai kerelevanan optimal sama ada di pihak penutur mahupun pendengar. Kerelevanan optimal pendengar dicapai apabila 1) pendengar dapat memahami niat dan maksud sebenar penutur tanpa memerlukan usaha memproses yang berlebihan dan tidak sepatutnya, 2) makna yang diniatkan oleh penutur dapat ditangkap oleh pendengar setimpal dengan usahanya memproses maklumat tersebut. Makna atau 'faedah' yang dihasilkan oleh pendengar kerana usaha tadi adalah bersifat psikologi, iaitu berdasarkan kualiti dan kuantiti pengetahuan seseorang. Oleh itu, menurut TR, apabila seseorang ingin berkomunikasi, mereka mestilah memastikan bahawa ujarannya mencapai kerelevanan yang optimal (Gutt, 43). Hal ini penting kerana interpretasi yang tepat terhadap sesuatu ujaran dapat dicapai oleh pendengar. Justeru, penutur mestilah membekalkan maklumat dan konteks yang secukupnya sebelum berkomunikasi. Misalnya apabila seorang mahasiswa universiti (penutur) yang berbual dengan seorang nelayan (pendengar) maka perbualan mereka mestilah berkisar tentang hal ehwal kehidupan nelayan

seperti cerita tentang laut, ikan, pukut, dan sampan. Kalau diubah topik kepada hal ehwal dunia akademik di universiti maka nelayan itu tidak akan mendapat maklumat yang cukup tentang perkara yang dibincangkan. Lantaran itu perbualan mahasiswa tadi tidak mencapai kerelevanan yang optimal. Dengan kata lain, penutur mestilah memandu perbualannya agar komunikasinya dapat difahami oleh pendengar dengan mudah serta berjalan lancar. Dengan kata lain yang lebih mudah, kerelevanan yang optimal bermaksud setiap ujaran itu mempunyai kesan konteks yang maksimum yang dapat dirumuskan dalam masa sesingkat mungkin (Nor Hashimah Jalaluddin, 33).

Penggunaan Bahasa Secara Interpretif dan Deskriptif

Dalam TR, terdapat dua jenis penggunaan bahasa secara kognitif, iaitu penggunaan interpretif dan deskriptif. Penggunaan bahasa secara deskriptif bermaksud sesuatu ujaran komunikasi itu dianggap betul dalam sebarang dunia kemungkinan. Manakala penggunaan secara interpretif pula bermaksud sesuatu ujaran yang digunakan untuk menyatakan dan menjelaskan apa yang orang kata dan lafazkan. Misalnya ujaran berikut (contoh berikut diadaptasi daripada contoh Gutt: 44):

Kes 6

- a) Aminah : Ahmad dan isteri pertamanya telah bercerai.
 b) Aminah : Talib pernah memberitahu saya, Ahmad dan isteri pertamanya telah bercerai.

Kedua-dua contoh ujaran di atas mempunyai ujaran yang sama, iaitu *Ahmad dan isteri pertamanya telah bercerai*. Dalam ayat pertama (a), Aminah menganggap bahawa kenyataannya tentang penceraian Ahmad dan isteri pertamanya adalah benar. Dengan itu, kenyataan dan ujaran Aminah itu dianggap deskriptif. Bagaimanapun dalam ayat kedua (b), Aminah tidak menyatakan dan mendakwa bahawa Ahmad dan isterinya telah bercerai. Aminah hanya melaporkan dakwaan Talib yang berbunyi *Ahmad dan isteri pertamanya telah bercerai*. Dengan kata lain, Aminah hanya menyatakan semula secara penuh (memetik kata-kata) apa yang pernah dinyatakan oleh Talib. Oleh yang demikian, ujaran Aminah itu dianggap sebagai bersifat interpretif. Dalam

ayat kedua (b), ujaran Aminah tidak dianggap salah sekiranya Ahmad dan isterinya tidak bercerai. Tetapi Aminah akan dianggap bersalah sekiranya Talib tidak pernah berbuat kenyataan tentang penceraian Ahmad dan isterinya; seolah-olah Aminah menipu. Dalam ilmu komunikasi, aktiviti terjemahan dianggap sebagai aktiviti kebahasaan secara interpretif.

Kesamaan Interpretif dan Kejujuran dalam Penterjemahan

Faktor penting dalam penggunaan bahasa secara interpretif ialah hubungan antara kesamaan interpretif (*interpretive resemblance*) ujaran asal dengan pernyataan tentang ujaran itu (dalam disiplin terjemahan ialah kesamaan interpretif teks sumber dan teks sasaran). Kedua-dua ujaran itu (yang asal dan yang diujarkan semula oleh orang lain) berkongsi makna dan maklumat eksplikatur (tersirat) dan implikatur (tersurat). Perkara ini membayangkan bahawa kesamaan interpretif mempunyai tahap perbezaan (*degree*). Jika kedua-dua ujaran tadi mempunyai kesamaan interpretif yang lebih rapat, berkemungkinan maklumat tersurat dan tersiratnya sama. Petikan kata-kata secara penuh (*direct quotation*) dalam kes 6 (b) di atas menunjukkan kesamaan interpretif (persamaan makna dan maklumat) yang paling tinggi dan rapat dengan ujaran asal. Petikan kata secara penuh tadi pastinya dapat ditafsirkan dan diinterpretasi dalam konteks yang sama dengan konteks ujaran asal (Gutt, 44-45).

Sebaliknya ujaran yang bersifat huraian, ringkasan, tafsiran, agakan dan andaian dianggap mempunyai kesamaan interpretif yang berbeza (kurang sedikit) dengan ujaran asal berbanding ujaran yang bersifat petikan kata-kata secara penuh tadi. Misalnya jika seorang pelajar ditanya oleh kawannya (yang tidak hadir ke kuliah) tentang kandungan dan isi kuliah yang disampaikan oleh pensyarahnya, mungkin pelajar itu mempunyai beberapa pilihan untuk menjawab pertanyaan tersebut. Antaranya, dia akan menjawab seperti berikut:

1. Dia akan memberitahu secara terperinci isi kuliah tersebut hingga mungkin mencapai kesamaan interpretif yang tinggi dengan isi kuliah asal yang disampaikan oleh pensyarahnya.
2. Dia juga mungkin hanya melaporkan dan memberitahu sebahagian kecil isi kuliah secara terperinci; yang baki mungkin diringkaskan.

3. Dia mungkin hanya memberikan isi-isi utama kuliah tersebut secara ringkas sahaja.

Untuk mencapai kesamaan interpretif, pelajar itu perlu menyampaikan jawapan (1) kerana dia perlu jujur (*faithfulness*) dengan ujaran asal (dalam konteks ini ialah kuliah pensyarahnya). Hal ini kerana pelajar itu akan mencapai kerelevanan optimal semasa menjawab pertanyaan kawannya yang tidak hadir ke kuliah. Dengan kata lain, ujaran kita mestilah sejujur dan sehalapir mungkin dengan ujaran asal. Dalam penterjemahan yang tergolong dalam kelompok penggunaan bahasa secara interpretif maka konsep inilah yang sepatutnya ditonjolkan. Hal ini bersesuaian dengan pendapat Wilson dan Sperber (1988 : 137):

...The speaker guarantees that her utterance is a faithful enough representation of the original; that is, resembles it closely enough in relevant respect...

Bagaimanapun, TR yang menekankan konsep kerelevanan ujaran dan konteks maka pelajar itu masih boleh memberikan jawapan (2) atau (3) berdasarkan konteks dan kehendak kawannya yang tidak hadir ke kuliah tadi.

Penterjemahan Sebagai Penggunaan Bahasa Secara Interpretif

Menurut TR, penterjemahan tergolong dalam konsep penggunaan bahasa secara interpretif (Gutt, 46). Penterjemahan sebenarnya bermaksud menyatakan semula apa yang orang kata atau tulis tetapi dalam bahasa yang lain. Penterjemahan sering dibandingkan dengan konsep memetik dan melaporkan sesuatu ucapan dan dialog dalam sesuatu bahasa yang sama (*intra linguistic use*). Cuma yang membezakan kedua-dua jenis penggunaan bahasa ini ialah terjemahan melibatkan bahasa orang lain sedangkan petikan dan laporan hanya melibatkan teks dalam bahasa asal sahaja dan tidak melibatkan bahasa orang lain. Oleh sebab penterjemahan tergolong dalam penggunaan bahasa secara interpretif maka ia terpaksa mengamalkan konsep kejujuran (*faithfulness*) dalam menyampaikan warta mesejnya. Dengan kata lain, penterjemahan mestilah sedaya mungkin untuk setia dan jujur dengan teks sumber (Wilson dan Sperber 1998: 137).

Tipologi (Jenis) Teks Sebagai Pedoman Mencari Kerelevanan

Sebagaimana segala fenomena kehidupan yang berlaku di dunia ini maka komunikasi manusia juga mempunyai bentuk istilah-istilah tertentu berdasarkan jenis komunikasi yang diujarkan. Misalnya terdapat istilah atau laras bahasa yang berbeza dalam cerita rakyat, novel, cerita kartun, buku ilmiah, dan abstrak kajian ilmiah. Menurut teori komunikasi moden, bentuk dan tipologi teks tadi dapat membentuk niat penutur (dalam teks disebut penulis dan dalam terjemahan dipanggil penterjemah) menghasilkan karyanya. Khalayak (pembaca atau pendengar) dapat menjangkakan idea dan mesej yang ingin disampaikan berdasarkan tipologi teks tersebut. Misalnya jika penutur menyatakan ujaran dalam bentuk laporan maka dia dapat mengagak respons dan reaksi khalayaknya berbanding kalau dia menghasilkan ujaran berbentuk cerita komedi. Dalam TR, jenis dan tipologi teks sebegini akan memandu khalayak mencapai kerelevanan optimal dalam komunikasi mereka. Misalnya kalau komunikasi yang dipersembahkan itu berbentuk novel maka yang terbayang di kepala pembaca ialah konsep plot cerita, watak utama (protagonis), watak jahat (antagonis), dan nilai moral yang ingin disampaikan. Oleh itu pembaca tidak akan mempersoalkan ketepatan dan kerationalan kejadian peristiwa dalam novel dan tarikh-tarikh penting kerana teks itu bukan berbentuk teks sejarawi (Gutt). Justeru, kos memproses untuk memahami teks juga tidak banyak. Dan jika teks itu relevan dengan kehendak khalayak maka interpretasi sebenar teks yang dihasilkan oleh penulis itu dapat disingkap. Kesimpulannya tipologi teks akan membantu khalayak mendapatkan kerelevanan optimal dalam menginterpretasi sesuatu ujaran komunikasi sama ada komunikasi lisan seperti perbualan ataupun komunikasi bukan lisan seperti novel dan cerpen.

Penterjemahan Langsung

Dalam TR, penterjemahan langsung (*direct translation*) dianggap sebagai petikan kata-kata secara langsung (*direct quotation*). Oleh itu, aktiviti penterjemahan dikategorikan sebagai penggunaan bahasa secara interpretif. Petikan kata-kata secara langsung bermaksud satu contoh ujaran komunikasi yang dilafazkan atau ditulis bagi menyatakan kesamaan terhampir dengan

keaslian maksud teks asal (Sperber dan Wilson, 227). Antara keistimewaan petikan langsung adalah kesamaan dan ketepatannya dengan teks sumber (untuk penterjemahan) bukan setakat pada *apa yang dimaksudkan (makna)* tetapi merangkumi juga *cara bagaimana (stilistik) maksud itu dipersembahkan*. Dalam penterjemahan langsung, segala ciri linguistik teks sumber akan dikekalkan. Dengan itu, khalayak terjemahan mampu menstruktur semula makna teks sumber berdasarkan makna yang diniatkan oleh penulis asal. Hal ini kerana teks sumber mempunyai andaian kontekstual tersendiri yang perlu dikekalkan. Jadi biarlah konteks sumber itu juga dikekalkan dalam penterjemahan (Gutt 1991 : 162). Misalnya contoh berikut:

Kes 7

John eats like a pig. (John makan seperti babi).

Dalam ayat yang mengandungi bahasa figuratif di atas, konsep penterjemahan langsung harus dibuat. Sebenarnya, penulis asal ingin menyampaikan maksudnya kepada khalayak asal, iaitu orang Inggeris mengikut konteks asal teks sumber itu. Penulis asal mungkin tidak menjangka karyanya akan diterjemahkan. Dalam budaya Inggeris, ada beberapa andaian tentang maksud *makan seperti babi* (Gutt, 167). Antara andaian yang ingin dimaksudkan adalah seperti:

- 1) John makan terlalu banyak seperti seekor babi makan.
- 2) John makan gelojoh seperti seekor babi.
- 3) John makan terlalu bising seperti seekor babi hutan.
- 4) John makan terlalu kotor dan jijik seperti babi sedang makan.

Andaian-andaian di ataslah yang ditujukan khas oleh penulis teks sumber kepada khalayak asalnya, iaitu orang Inggeris. Terpulanglah kepada mereka untuk mentafsirkan interpretasi sebenar ujaran itu berdasarkan konteks masing-masing. Yang pasti perbuatan *makan seperti babi* itu adalah perbuatan yang tidak senonoh dan tidak sopan. Itulah kesan sebenar teks asal. Oleh itu, sebagai penterjemah kita terpaksa mengekalkan andaian-andaian dan kesan konteks asal tersebut kerana memang itulah kesan konteks yang ingin disampaikan oleh penulis asal. Maka kita tidak boleh menterjemahkan bahasa figuratif itu sebagai *makan seperti tikus* (dalam budaya Melayu) kerana tikus hanya

melambangkan sifat pengecut dan penakut. Jika adaptasi ini buat maka kesan konteks asal akan hilang. Jadi untuk mencari kerelevanan optimal dalam komunikasi maka konsep terjemahan langsung harus digunakan. Hal ini lebih selamat bagi penterjemah sekiranya mereka memandai untuk mentafsirkan makna sebenar takut terjebak kalau salah tafsir. Kalau salah tafsir maka salahlah terjemahan itu. Dengan kata lain, terjemahan langsung adalah langkah paling selamat untuk mengelakkan salah tafsir (Gutt, 165-167).

PEMAPARAN DATA

Seperti yang disebut dalam batasan kajian, terdapat beberapa kata masa bahasa Melayu yang dipinjam daripada bahasa Arab. Kata pinjaman ini telah sebatu dan diterima pakai oleh orang Melayu sejak sekian lama. Antara kata masa tersebut ialah :

al-Fajr (Fajar)

Dalam bahasa Arab, *al-fajr* bermaksud tamatnya waktu malam kerana munculnya cahaya Subuh (al-Nahw, Khalil 1991 : 370). Manakala dalam pengertian syariah Islam (hukum fekah) *al-fajr* bermaksud satu waktu tatkala terpancar cahaya dari celah kegelapan malam kemudian cahaya tersebut tersebar di ufuk timur. Cahaya ini dinamakan fajar Sadiq (Reha Mustafa, 86). Fajar Sadiq akan muncul dahulu sebelum masuknya waktu sembahyang subuh. Waktu fajar dianggap sebagai salah satu waktu yang paling diberkati kerana ibadat pada waktu ini akan disaksikan oleh para Malaikat dan mendapat pahala yang besar daripada Allah Ta'ala. Menurut tradisi ilmu Islam, waktu fajar ialah waktu yang paling sesuai untuk mengulang kaji pelajaran kerana ketenangan dan keheningan waktu fajar itu. Inilah makna sebenar Fajar dalam bahasa Arab dan agama Islam.

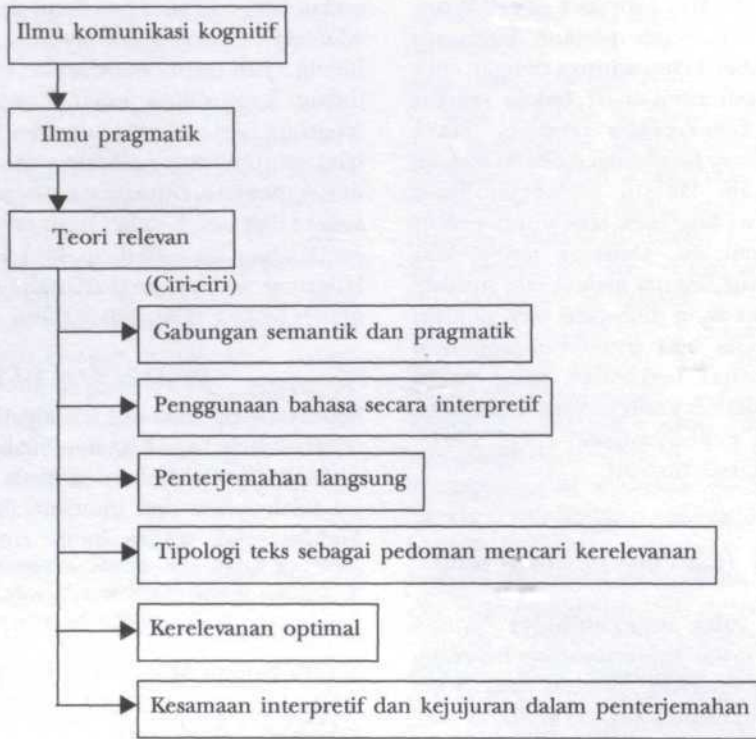
Orang Melayu sudah menerima pakai perkataan Fajar ini. Cuma apabila konsep masa ini digunakan dalam bahasa dan budaya Melayu maka ia telah diasimilasikan menurut budaya tempatan. Misalnya contoh berikut:

Kes 8

Jali : Bila engkau nak pergi menoreh?

Samad : Sebelum fajar menyingsing.

Dalam kes 8 di atas, apakah yang dimaksudkan oleh ungkapan *Sebelum Fajar menyingsing?* Menurut TR, ungkapan itu



Rajah 1: Ciri dan gagasan kemunculan teori relevan

mempunyai beberapa andaian. Antaranya seperti:

- a. Betul-betul sebelum waktu Subuh.
- b. Sebelum terbit Fajar Sadiq.
- c. Sebelum ayam berkokok.
- d. Awal pagi, iaitu dinihari (selepas tengah malam).

Dalam hal ini, konteks akan menentukan interpretasi sebenar waktu yang dimaksudkan oleh Samad. Kalau Samad lazimnya pergi ke kebun untuk menoreh getah sebelum ayam berkokok maka Jali akan memahami waktu sebenar Samad keluar dengan mudah tanpa kos memproses maklumat yang tinggi. Dalam hal ini juga, jawapan Samad dianggap telah mencapai kerelevanan optimal dengan syarat Jali telah dibekalkan maklumat yang secukupnya. Maksudnya, Jali tahu benar tentang waktu kerja Samad (mungkin mereka berdua kawan rapat). Kalau konteks menentukan Jali selalu pergi ke kerja pada waktu begitu maka Samad akan membuat inferens (rumusan) seperti dalam andaian c) tadi. Penentuan konteks penting kerana ruang lingkup dan tempoh masa dalam budaya orang Melayu terlalu luas, sukar

ditentukan waktunya secara tepat. Justeru sikap beginilah yang menghasilkan pepatah *Janji Melayu*. Bagaimanapun, TR dapat menyingkap makna sebenar ujaran di atas dengan berdasarkan konteks ayat.

Dan mungkin juga maksud Samad waktu itu awal pagi (andaian-d). Hal ini kerana pokok getah akan mengeluarkan hasilnya dengan banyak pada dinihari. Kemudian si penoreh akan berehat untuk solat subuh sebelum menyambung semula kerja untuk mengumpul getah yang telah ditoreh. Jawapan tepat waktu yang dinyatakan oleh Samad itu adalah berdasarkan konteks, iaitu rutin kerja Samad yang sebenarnya. Apa pun dalam budaya Melayu, makna implisit *sebelum fajar menyingsing* ialah waktu terlalu awal dan lazimnya sebelum waktu subuh. Ciri implisit dalam ujaran di atas agak mudah difahami kerana orang Malayu faham benar akan maksud *sebelum fajar menyingsing*. Oleh itu, usaha memproses maklumat ini rendah di samping konsep konteks yang dapat mencari interpretasi sebenar ujaran tersebut. Jika usaha memproses maklumat rendah dan kesan konteks yang banyak maka ujaran itu akan lebih relevan (Nor Hashimah 2001).

Untuk menterjemahkan perkataan *al-fajr* maka pendekatan TR, iaitu penterjemahan langsung harus digunakan. Penterjemah langsung akan menghasilkan kesamaan dan konteks yang paling hampir dengan teks sumber (Gutt 1991). Oleh itu, kalau teks sumber berbunyi *Zahabtu ila al-hadiqah Fajran* maka terjemahan langsungnya ialah *Saya pergi ke kebun pada waktu Fajar*. Perkataan *fajar* di sini tidak boleh diterjemahkan *pagi* ataupun *Subuh* kerana kedua-dua perkataan ini mempunyai pengertian yang berbeza dalam bahasa Arab. Begitu juga makna dari segi bahasa tadi (*terbitnya Fajar Sadiq*) diberikan maka ini pun tidak dibenarkan. Lagipun istilah Fajar sudah sebatik dan diterima pakai oleh orang Melayu sejak sekian lama.

al-Subh (Subuh)

Dalam bahasa Arab *al-Subh* bermaksud awal permulaan hari siang (al-Nahw, Khalil 1991 : 281). Manakala dalam syariat Islam, Subuh bererti waktu solat Subuh yang bermula apabila terbit Fajar Sadiq (Reha Mustafa, 87). Terdapat perbezaan antara waktu Subuh dan waktu Fajar. Waktu fajar merupakan waktu merupakan waktu pemisah antara malam dengan siang atau antara suasana gelap dengan terang. Manakala waktu Subuh disandarkan pada solat Subuh itu sendiri, iaitu waktu yang terbit selepas waktu fajar (Reha Mustafa, 87). Dengan kata lain, waktu Fajar dan waktu Subuh pasti tidak akan tertembung selamanya.

Dalam bahasa dan budaya Melayu, pengertian dan penggunaan istilah Subuh itu masih sama seperti dalam makna asalnya dalam bahasa Arab. Bagaimanapun oleh kerana orang Melayu terkenal kerana 'Janji Melayunya' maka persepsi penggunaan waktu Subuh agak berbeza sedikit. TR akan mencuba menganalisis masalah ini. Misalnya lihat ujaran berikut:

Kes 9

Syed : Bila engkau nak pergi pasar?

Jamal : Lepas Subuh nanti.

Dalam contoh untuk kes 9 di atas, TR membuat beberapa set andaian tentang maksud masa dalam ujaran itu. Antaranya seperti:

- Betul-betul selepas solat subuh, iaitu selepas sarapan pagi.
- Selepas mentari pagi naik segalah, iaitu pada waktu duha.

- Mungkin juga sebelum masuk waktu Zohor, iaitu sebelum matahari condong sedikit ke arah barat dan menghasilkan bayang-bayang sebarang objek di bumi.

Oleh sebab, penggunaan konsep waktu dalam budaya Melayu tidak tetap maka agak sukar menentukan masa sebenar waktu yang dinyatakan oleh Jamal itu. Tetapi bagi TR ujaran masih boleh difahami dengan berdasarkan konteks. Kalau Jamal ini jenis orang yang menepati janji dan masa (*punctuality*) maka andaian a) akan menjadi interpretasi sebenar ujaran. Lantaran itu, Syed akan membuat kesimpulan (inferens) bahawa Jamal akan pergi ke pasar betul-betul selepas waktu subuh, lebih kurang pukul 7 – 8 pagi. Sebaliknya juga jika Jamal dikenali di kalangan rakannya sebagai jarang menepati masa maka andaian c) mungkin menjadi interpretasi tepat bagi ujaran Jamal tadi.

Selain itu, konteks masa dan waktu pasar itu dibuka juga menentukan waktu sebenar pemergian Jamal ke pasar. Kalau pasar itu dibuka pada pukul 8 pagi maka andaian a) relevan untuk menjadi interpretasi sebenar ujaran Jamal. Dan jika pasar itu dibuka pukul 10 pagi (kebanyakan pasar raya dibuka pada waktu ini) maka andaian b) merupakan maksud sebenar ujaran Jamal. Dengan kata lain, dalam TR penutur mestilah membekalkan maklumat yang secukupnya kepada pendengar. Penutur mestilah memandu perbualan tersebut agar kerelevanan optimal dapat dicapai. Konteks atau set andaian tadi perlu ada agar kesan konteks dapat dihasilkan. Menurut TR kalau semakin banyak konteks dibekalkan maka kesan konteks mudah difahami tanpa usaha memproses maklumat yang tinggi. Dan jika usaha dan kos prosesnya rendah sedangkan kesan konteksnya tinggi maka ujaran itu lebih relevan (Nor Hashimah Jalaludin, 51).

Selain itu, terdapat satu ungkapan dalam peribahasa Melayu iaitu, *Subuh gajah*. Dalam ilmu semantik, bahasa figuratif itu akan ditafsirkan secara eksplisit, iaitu setakat makna leksikal dan logiknya sahaja ; *subuh* - waktu selepas terbit Fajar Sadiq dan *gajah* - spesies binatang mamalia darat yang terbesar. Itu sahaja yang dapat ditafsirkan oleh ilmu semantik. Tetapi dalam ilmu pragmatik dengan tunjangnya konsep TR maka peribahasa itu harus dianalisis mengikut konteks. Lazimnya orang Melayu akan faham bahawa peribahasa itu masih melibatkan

waktu dan solat subuh. Makna implisit peribahasa ini ialah sembahyang Subuh di luar waktu sebenarnya dan lazimnya pada waktu duha. Dengan kata lain, *Subuh gajah* itu ialah mengqada solat Subuh kerana terlewat bangun tidur dengan tidak sengaja. Dan qada' itu perlu ditunaikan sebaik sahaja kita terbangun daripada tidur. Untuk tujuan analisis, lihat perbualan berikut.

Kes 10

Fauzi : Engkau Subuh gajah ke, Jalil?

Jalil : Apa boleh buat, dah terlewat bangun.

Dalam kes 10 di atas, Jalil masih memahami maksud si Fauzi kerana dia tahu tentang makna implisit peribahasa itu. Lebih-lebih lagi konteks si Jalil yang sememangnya terlewat bangun tidur. Maka Jalil faham benar apa yang dimaksudkan oleh Fauzi. Menurut TR ujaran peribahasa Fauzi mencapai kerelevanan optimal kerana ia peka konteks. Penutur sengaja bertanya dalam ungkapan sebegini mungkin kerana memperli (ironi) ataupun cakap berlapik kerana menjaga hati kawan. Yang pasti makna implisit peribahasa itu masih boleh difahami. Selain itu, kesan konteks yang dihasilkan juga tinggi kerana pendengar memang berada dalam situasi terlewat bangun. Pendengar tidak sukar memahami ujaran itu kerana pertanyaan Fauzi memang dalam konteks yang sepatutnya. Dengan kata lain, konteks yang dibekalkan pada pendengar sememangnya cukup. Cukup dalam erti kata bahawa peribahasa itu memang difahami oleh orang Melayu khususnya golongan muda. Jadi tidak ada masalah bagi pendengar menginterpretasi maksud sebenar ujaran itu.

Dalam konteks terjemahan, TR mengamalkan konsep kejujuran dan kesamaan interpretif. Maksudnya bagaimana teks sumber dinyatakan dan ditafsirkan maka teks terjemahan pun begitu juga. Oleh itu, untuk mencapai kesamaan interpretif maka konsep kejujuran mestilah diamalkan. Kejujuran dalam pengertian TR ialah segala bentuk dan ciri teks sumber mesti dikekalkan (Gutt, 11). Antara ciri yang perlu dikekalkan adalah seperti ciri linguistik (semantik dan sintaksis), statistik (gaya pengolahan), konteks, dan kesan konteks. Oleh itu, penterjemahan ungkapan masa dan waktu ini pun harus menggunakan pendekatan terjemahan langsung. Misalnya perkataan *sabahun* yang bermaksud permulaan siang atau waktu subuh

maka makna itu perlu dinyatakan. Dalam konteks ini, terjemahan makan *pagi* kurang sesuai digunakan kerana ruang lingkup dan kontinumnya terlalu luas. Begitu juga ungkapan *Sabah al-khayr* (selamat pagi) yang merupakan kata sapaan yang diucapkan sewaktu bertemu sesiapa sahaja pada waktu pagi. Bentuk sapaan begini merupakan satu penghormatan kepada orang yang disapa. Dalam budaya Arab, kata sapaan ini boleh ditujukan kepada sesiapa sahaja, tidak kira orang Islam ataupun bukan Islam. Hal ini berbeza dengan ungkapan *assalamualaikum* yang dikhususkan untuk orang Islam. Padanan yang tepat untuk masa *sabah al-khayr* ialah *selamat pagi* dan *Salam Sejahtera*. Manakala ungkapan *assalamualaikum* tidak boleh diterjemahkan menjadi *Salam Sejahtera* kerana konsep penterjemahan langsung mestilah bersifat interpretif dan petikan penuh (*direct quotation*).

Al-Sahr (Sahur)

Dalam kamus Arab, *al-sahr* bermaksud fasa terakhir waktu malam, iaitu waktu malam yang akan tamat sebaik sahaja terbit Fajar Sadiq (*al-Nahw, Khalil 1991 : 233*). Dalam syariat Islam waktu sahur ini ialah bahagian terakhir malam, iaitu terletak 1/3 terakhir setiap malam (Reha Mustafa, 100). Waktu ini sangat elok untuk *qiyamullayl* (bangun malam) dan solat tahajjud (sembahyang tengah malam). Pada waktu ini, amal ibadat kita mudah diterima oleh Allah Ta'ala.

Dalam budaya Melayu, waktu sahur sering dikaitkan dengan makan sahur semasa bulan Ramadan. Sebenarnya, sahur itu tergolong dalam kategori masa dan waktu. Makan sahur itu bermaksud menjamah makanan atau meneguk segelas dua air pada waktu terakhir setiap malam Ramadan (dalam budaya Melayu, selepas jam 12 tengah malam dianggap pagi), iaitu sebelum terbit Fajar Sadiq. Orang Islam tidak boleh makan dan minum apabila Fajar Sadiq telah terbit. Dengan kata lain, apabila masuk waktu subuh maka orang Islam dilarang makan dan minum. Begitulah pengertian sebenar *Sahur* dalam bahasa Arab dan syariat Islam. Cuma dalam budaya Melayu ada sedikit asimilasi pengertian itu tetapi masih lagi ada kenamengena dengan makna sebenar sahur itu. Justeru bagaimana TR menganalisis konsep sahur ini dalam pengertian budaya Melayu akan terlihat dalam contoh berikut:

Kes 11

Ibu : Bila engkau nak habiskan kari ayam ni Mat?

Mamat : Waktu sahur nanti emak?

Waktu sahur dalam pengertian orang Melayu ada kalanya bermula selepas jam 12 tengah malam, sedangkan waktu sebenarnya ialah pada detik-detik terakhir sebelum menjelang fajar. Sering kedapatan orang muda yang malas bangun dan masak pada awal pagi akan bersahur pada tengah malam, iaitu sekitar jam 12 tengah malam hingga 3 pagi. Jadi waktu sahur orang Melayu cukup lama, lebih kurang 4-5 jam. Oleh itu, ujaran waktu sahur itu mengandungi beberapa andaian. Antaranya seperti :

- a. Waktu 1/3 terakhir setiap malam, iaitu sekitar 1 jam sebelum masuk waktu Subuh. Waktu ini adalah paling afdal untuk bersahur.
- b. Waktu imsak, iaitu waktu kritikal untuk bersahur. Umat Islam tidak digalakkan bersahur pada waktu ini kerana takut terlajak makan.
- c. Waktu tengah malam, iaitu awal pagi bagi pengertian orang Melayu. Bersahur pada waktu begini kurang mendapat fadilat sahur.

Dalam kes 11, kalau lazimnya keluarga Mamat akan bersahur pada waktu a) maka si ibu akan memahami ujaran Mamat itu. Dalam hal ini, jawapan Mamat akan dikira mencapai kerelevanan optimal jika si ibu dibekalkan konteks yang mencukupi, iaitu si ibu tahu waktu sahur keluarganya sendiri. Ujaran Mamat dikira peka konteks kerana Mamat tahu bila ibunya akan bangun memasak dan bersahur. Si ibu pula akan mudah memproses ujaran Mamat kerana maklumat dan konteks yang dibekalkan mencukupi. Dalam TR, jika konteks yang dibekalkan cukup maka kesan konteks tinggi. Justeru, ujaran itu dikira bermanifestasi (jelas) dan relevan (Gutt 1991). Begitu juga jika waktu sahur keluarga Mamat seperti pada andaian b) maka ujaran Mamat tetap relevan buat si ibu kerana si ibu dibekalkan konteks yang secukupnya, iaitu dalam erti kata si ibu memang tahu waktu sahur keluarganya. Tetapi orang lain seperti jiran atau kawan Mamat mungkin sukar memahami waktu sebenar keluarganya bersahur kerana tidak dibekalkan konteks yang secukupnya. Maksudnya kawan Mamat tidak tahu waktu sahur keluarga Mamat. Begitulah TR

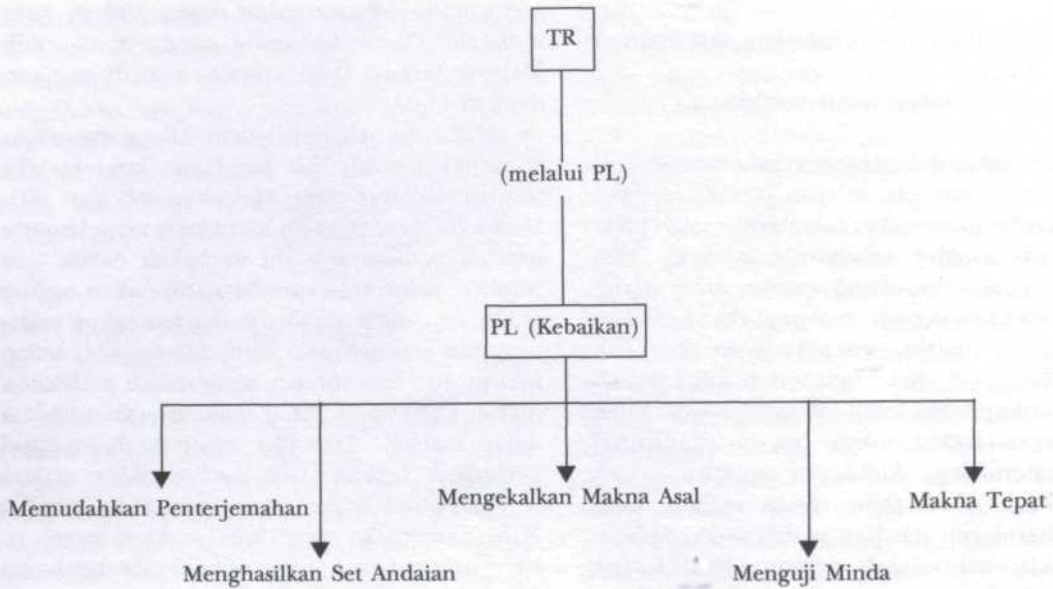
menganalisis ujaran waktu orang Melayu yang sedia dimaklumi bahawa konsep waktu orang Melayu terlalu 'luas' dan sukar ditentukan dengan tepat.

Dalam konteks terjemahan, TR mengamalkan konsep kejujuran dan kesamaan konteks teks sumber (seperti yang dijelaskan sebelum ini). Untuk itu, penterjemah harus tahu akan konteks sebenar sesuatu ayat itu diujarkan dalam teks sumber. Kalau teks sumber menyatakan makna waktu dan masa seperti perkataan sahur maka nyatakan maksud masa, iaitu 1/3 terakhir setiap malam. Jika teks sumber menyatakan perbuatan makan pada waktu sahur maka nyatakan makna setiap malam. Dan jika sahur itu bermaksud perbuatan makan pada 1/3 terakhir malam sebelum subuh tetapi bukan dalam konteks bulan Ramadan maka nyatakan makna tersebut. Dengan kata lain, konteks asas teks sumber harus dkekalkan dalam penterjemahan langsung. Pengekalan konteks asal amat ditekankan dalam TR kerana penterjemahan diklasifikasikan sebagai penggunaan bahasa secara interpretif. Dalam penggunaan bahasa secara interpretif ini, terdapat konsep kesamaan interpretif (*interpretive resemblance*) yang menjadi ciri utama penterjemahan TR (Gutt 1991).

KESIMPULAN

Sebagai kesimpulan, konsep masa dalam pemikiran bahasa dan budaya Melayu terlalu luas. Terlalu luas maksud bahawa ketepatan masa orang Melayu tidak menentu. Mereka jarang berpegang pada ketepatan masa mereka hingga tercipta ungkapan *Janji Melayu*. Hal ini berbeza dengan orang Jepun yang terlalu berpegang pada ketepatan masa mereka hingga kebanyakan majlis dan aktiviti harian mereka ditentukan dengan konsep masa seperti minit dan jam. Lazimnya kita terdengar mesyuarat orang Jepun bermula pada pukul 8.15 pagi dan tamat pada jam 10.15 pagi berbanding orang Melayu yang suka menggunkan konsep jam sahaja seperti pukul 8 pagi, 10 pagi dan 12 pagi.

Bagaimanapun ketidaktentuan masa dalam budaya Melayu ini dapat diselesaikan dengan pendekatan TR yang mampu menginterpretasi masa dan waktu sebenar dalam komunikasi dan ujaran orang Melayu (*Rajah 2*). Dengan berbekalkan konteks, kesan konteks dan usaha memproses maka TR berjaya mencari makna sebenar ujaran orang Melayu.



Rajah 2: Kebaikan TR dalam penterjemahan konsep masa Arab-Melayu

Selain itu, konsep TR juga dapat diterapkan dalam penterjemahan melalui pendekatan langsungnya. Penterjemahan langsung sesuai digunakan dalam menterjemahkan konsep masa Arab-Melayu meskipun konsep penggunaan masa dalam budaya dan bahasa Melayu agak rumit kerana sifatnya yang luas dan tidak menentu. TR lebih menekankan konteks asal yang terdapat dalam teks sumber kerana itulah sememangnya yang diniatkan oleh penulis asal. Melalui TR, kesamaan interpretif dan kesan konteks yang sama dengan teks dapat dikekalkan dalam teks terjemahan.

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Tingkah Laku Keibubapaan dan Penyesuaian Tingkah Laku Anak dalam Keluarga Berisiko di Luar Bandar

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ABSTRAK

Kajian ini bertujuan untuk menentukan perkaitan di antara faktor latar belakang keluarga (pendidikan ibu, pendapatan keluarga dan bilangan anak) dan kualiti tingkah laku keibubapaan dengan penyesuaian tingkah laku anak (resiliensi, estim diri dan pencapaian akademik) dalam keluarga berisiko. Seramai 201 pasangan ibu-anak berbangsa Melayu dari kawasan luar bandar negeri Kelantan, Kedah, Selangor dan Johor yang telah memenuhi kriteria (miskin dan mempunyai sekurang-kurangnya seorang anak berumur 7-12 tahun) kajian dipilih sebagai responden kajian. Responden telah ditemu bual secara bersemuka dengan menggunakan borang soal selidik. Kualiti tingkah laku keibubapaan telah diukur menggunakan skala 'Supportive Parenting' (Simons *et al.* 1992). Tahap resiliensi anak pula diukur menggunakan skala 'Resiliency Attitudes Scales' (Bischoe & Harris 1994). Tahap estim diri anak diukur berdasarkan 'Hare Self-Esteem Scale' (Hare 1985). Pencapaian akademik anak diukur berdasarkan skor lima mata pelajaran terpilih: Bahasa Melayu, Bahasa Inggeris, Sains, Matematik dan Agama Islam. Hasil kajian menunjukkan bahawa kualiti tingkah laku keibubapaan dan tahap penyesuaian tingkah laku anak adalah rendah. Pendidikan ibu didapati berkait secara signifikan dengan estim diri anak ($r=0.18$, $p \leq 0.05$) dan pencapaian akademik ($r=0.19$, $p \leq 0.05$). Keluarga yang berisiko tinggi dan mempunyai bilangan anak yang ramai didapati mempunyai anak yang rendah tahap pencapaian akademik dan resiliensi. Bilangan anak dalam keluarga didapati mempunyai perkaitan yang negatif dan signifikan ($r=-0.16$, $p \leq 0.05$) dengan tahap resiliensi anak. Hasil kajian juga menunjukkan tahap risiko keluarga mempunyai perkaitan yang signifikan dengan pencapaian akademik anak ($r=-0.26$, $p \leq 0.01$). Kualiti tingkah laku keibubapaan juga mempunyai perkaitan secara positif dan signifikan dengan tahap estim diri anak ($r=0.17$, $p \leq 0.05$). Analisis regresi berganda menunjukkan tahap pendidikan ibu ($\beta=0.16$, $p \leq 0.05$) dan tingkah laku keibubapaan ($\beta=0.15$, $p \leq 0.05$) menyumbang secara unik terhadap estim diri anak ($F=5.55$, $p \leq 0.05$). Hasil kajian juga menunjukkan tahap pendidikan ibu ($\beta=0.18$, $p \leq 0.05$) menyumbang secara unik ke atas pencapaian akademik anak ($F=2.87$, $p \leq 0.05$). Kajian ini memberi implikasi bahawa pendidikan ibu dan tingkah laku keibubapaan mempengaruhi penyesuaian tingkah laku anak dalam keluarga berisiko di luar bandar.

ABSTRACT

This study aims to determine the relationships between family background factors (mother's educational level, family income and number of children) and quality of parental behavior with children behavioral adjustment (resiliency, self-esteem and academic achievement) in at-risk families. A total of 201 Malay mother-child dyads from rural areas in Kelantan, Kedah, Selangor and Johor who fulfill the selection criteria (poor and have at least one child aged 7-12 years) were selected as respondents for the study. Respondents were interviewed face-to-face using questionnaire. Parental behavior was measured using *Supportive Parenting Scale* (Simons *et al.* 1992). Child's resiliency is measured using *Resiliency Attitudes Scales* (Bischoe & Harris 1994) while Hare (1985) *Self-Esteem Scale* was utilized to measure child's self-esteem. The children's academic achievement is indicated by their score on five selected subjects, namely, Bahasa Melayu, English, Science, Mathematics and the Islamic Study. Results show that parental behavior and behavioral adjustment of the children are low. Mothers' education is significantly related to child self-esteem

($r = 0.18, p \leq .05$) and academic achievement ($r = 0.19, p \leq .05$). Families with higher level of risk and with greater number of children are found to have children with low levels of academic achievement and resiliency. Number of children have negative and significant relationship ($r = -0.16, p \leq .05$) with child's resiliency. Findings also reveal that level of risk correlate significantly with child's academic achievement ($r = -0.26, p \leq .05$). In addition the quality of parental behavior is positively related to the level of child's self-esteem ($r = 0.17, p \leq .05$). Multiple regression analyses indicate that mother's education ($\beta = 0.16, p \leq .05$) and quality of parental behavior ($\beta = 0.15, p \leq .05$) are unique predictors of child's self-esteem ($F = 5.55, p \leq .05$). The findings also reveal that mother's education ($\beta = 0.18, p \leq .05$) determines child's academic achievement ($F = 2.87, p \leq .05$). The study imply that mother's education and quality of parental behavior influence behavioral adjustment of children in rural at-risk families.

PENGENALAN

Faktor berisiko merupakan keadaan atau variabel yang memberi impak negatif kepada kesihatan, kesejahteraan dan perlakuan sosial individu (Voydanoff & Donnelly 1998). Selain itu, faktor risiko yang dihadapi oleh keluarga didapati boleh mempengaruhi kualiti tingkah laku keibubapaan dan seterusnya kualiti kesejahteraan anak (Stern, Smith & Jang 1999; Gerard & Buehler 1999; Rozumah *et al.* 1999a). Menurut Dumka dan Roosa (1995) faktor berisiko merupakan variabel yang boleh mendorong anak mengalami perkembangan negatif. Ini kerana kehadiran faktor berisiko tidak menjamin kesan yang negatif secara langsung, tetapi berpotensi untuk memudahkan kesan tersebut berlaku (Small & Luster 1994). Kajian oleh Murry dan Brody (1999) mendapati semakin meningkat bilangan faktor risiko yang wujud dalam keluarga semakin kurang tahap penyesuaian tingkah laku anak. Faktor risiko yang dihadapi oleh keluarga boleh wujud dalam pelbagai bentuk seperti tahap pendidikan yang rendah, pendapatan keluarga yang sedikit dan tidak menentu serta persekitaran rumah yang tidak selamat.

Walaupun terdedah kepada beberapa faktor risiko, terdapat keluarga yang masih boleh menjalankan fungsinya dengan berkesan. Namun, apabila terdapat banyak faktor risiko yang wujud dalam keluarga secara serentak, hanya segelintir keluarga yang mampu untuk menjalankan fungsinya dengan berkesan. Terdapat bukti menunjukkan ibu bapa dari keluarga berisiko berkecenderungan mempunyai masalah tekanan psikologi yang tinggi (Voydanoff & Dolley 1998; Mayhew & Lempers 1998; Voydanoff 1990). Oleh yang demikian adalah tidak mustahil jika didapati ibu bapa dari keluarga berisiko kurang memberikan sokongan, lebih mengamalkan hukuman fizikal untuk mengawal dan mendisiplinkan anak, gemar

memberikan arahan tanpa penjelasan dan kurang memberikan tindak balas terhadap keperluan emosi anak (Mayhew dan Lempers 1998; Hashima dan Amato 1994; Small dan Luster 1994). Di samping itu, ibu bapa dari status sosioekonomi yang rendah didapati kurang menyediakan persekitaran rumah yang kondusif untuk pembelajaran anak dan mempunyai jangkaan yang rendah terhadap pencapaian anak (Shumow *et al.* 1998; Miller dan Davis 1997; Solis-Camara dan Fox 1996; Luster dan McAdoo 1994; Garret, Ng'andu dan Feron 1994; Dodge, Pettit dan Bates 1994).

Anak-anak daripada keluarga berisiko didapati mengalami kemurungan, gagal dalam akademik, mempunyai estim diri yang rendah dan terlibat dengan tingkah laku antisosial (Rozumah *et al.* 1999b; Shumow *et al.* 1998; Mayhew dan Lempers 1998; Hartos dan Power 1997). Bagaimanapun jika anak daripada keluarga berisiko mempunyai ciri resiliensi seperti mempunyai kemahiran menyelesaikan masalah, kemahiran interpersonal, mempunyai jangkaan yang tinggi, motivasi yang tinggi dan proaktif mereka akan mampu membuat adaptasi terhadap perubahan, tekanan dan kekecewaan dalam kehidupan untuk meneruskan kehidupan yang lebih produktif (Franco dan Levitt 1998; Waxman dan Huang 1996; Gordon 1996; Fagen and Cowen 1996).

Kajian ini dijangka dapat menjana maklumat tentang sejauh mana proses dalam keluarga berisiko terutamanya tingkah laku keibubapaan ibu memainkan peranan dalam mempengaruhi tahap penyesuaian anak (resiliensi, estim diri dan pencapaian akademik). Maklumat seperti ini dijangka dapat mendedahkan proses yang wujud dalam keluarga berisiko di samping membantu memperluas kefahaman tentang kesan daripada pengalaman hidup dalam keluarga berisiko terhadap pembangunan insan.

KERANGKA KERJA KONSEPTUAL KAJIAN

Kajian ini memfokuskan kepada faktor yang dijangka boleh mempengaruhi tahap penyesuaian tingkah laku anak daripada keluarga berisiko di luar bandar. Teori Ekologi Manusia yang dipelopori oleh Bronfenbrenner (1979) telah dipilih sebagai salah satu panduan di dalam membina kerangka kerja konseptual kajian ini. Bronfenbrenner menyatakan bahawa pembangunan kanak-kanak dipengaruhi bukan hanya oleh personalitinya tetapi juga oleh gabungan pelbagai faktor dan konteks di mana kanak-kanak itu berada. Kajian ini juga telah menggunakan model kecekapan, model resiliensi, model faktor risiko dan perkembangan kanak-kanak dan model faktor pelindung dan perkembangan kanak-kanak sebagai panduan untuk menganalisis impak proses keluarga khususnya keibubapaan ke atas tahap penyesuaian anak (resiliensi, estim diri dan pencapaian akademik). Huraian setiap model ini dibentangkan dalam perenggan seterusnya.

Model Kecekapan

Model kecekapan untuk fungsi keluarga (Waters dan Lawrence 1993) dipilih kerana boleh menerangkan bagaimana proses ibu dan bapa melibatkan diri di dalam mendidik dan membesarkan anak menjadi seorang individu yang cekap dan berpotensi. Andaian model ini ialah tingkah laku keibubapaan merupakan salah satu sumber yang boleh digunakan untuk beradaptasi terhadap persekitaran yang mencabar. Ibu bapa secara semula jadinya telah dimotivasikan untuk bertingkah laku bagi 'memastikan dunia mereka berjalan dengan lancar, membesar dan berubah' (Waters dan Lawrence 1993). Berdasarkan kepada model kecekapan, kajian ini menggambarkan tingkah laku keibubapaan sebagai manifestasi penguasaan sepenuhnya terhadap persekitaran. Kajian ini melihat masalah tingkah laku keibubapaan sebagai percubaan untuk beradaptasi terhadap persekitaran yang berisiko dengan sedikit kawalan daripada menggambarkan keluarga sebagai tidak berfungsi. Model ini juga mengandaikan ibu yang tinggal di dalam persekitaran mencabar mempunyai kekuatan yang boleh digunakan bagi menerangkan variasi kecekapan di kalangan kanak-kanak.

Model Resiliensi

Resiliensi ditakrifkan sebagai kuasa atau kebolehan untuk mengatasi kesakitan, tekanan atau kesulitan. Risiko merupakan konsep utama di dalam model resiliensi yang berasal dari bidang perubatan bagi mengkaji berkenaan wabak dan penyakit. Kajian ini mengandaikan bahawa masalah boleh dielakkan dengan mengenal pasti proses yang dapat mengurangkan kejadian risiko. Pendekatan faktor-risiko adalah amat berguna untuk memahami pembangunan Manusia kerana ia menyatakan kewujudan faktor risiko dalam diri individu, keluarga dan persekitaran boleh mengurangkan proses perkembangan akan datang (Bogensneider 1996). Di samping itu, para saintis sosial menunjukkan hasil kajian yang sama dengan model perubatan apabila mereka mendapati semakin meningkat timbunan faktor risiko yang wujud kemungkinan ketidakfungsian akan berkurangan (Murry dan Brody 1999; Luster dan McAdoo 1994). Dengan kata lain, kombinasi faktor risiko (contoh: miskin, tinggal dalam keluarga induk tunggal dan mempunyai ahli keluarga yang berpenyakit kronik) akan menghadkan potensi kanak-kanak untuk berjaya.

Bagi menerangkan kenapa penimbunan faktor risiko mempunyai impak yang berlainan terhadap perkembangan anak, para saintis sosial telah mula mengkaji kanak-kanak yang tinggal dalam persekitaran yang merugikan dengan menggabungkan proses faktor pelindung dan faktor risiko. Proses perlindungan ditakrifkan sebagai 'individu dan persekitaran yang boleh meningkatkan keupayaan kanak-kanak untuk bertahan terhadap kejadian yang negatif dan mempromosikan adaptasi dan kecekapan (Steinberg, Mounts, Lamborn & Dornbusch 1991).

Apa yang akan diterangkan seterusnya merupakan gambaran kasar berkenaan keluarga berisiko yang menekankan kepada faktor pelindung dan risiko berhubung dengan estim diri dan pencapaian akademik di kalangan kanak-kanak. Estim diri merupakan satu komponen resiliensi kerana dengan mempunyai persepsi yang tinggi terhadap pencapaian dan tanggapan yang positif terhadap diri mampu mewujudkan perhubungan dengan orang lain dan memperoleh kejayaan dalam kehidupan secara amnya (Burnett 1996; Lawrence 1996). Pencapaian akademik yang baik akan

merangsang aspirasi anak untuk terus menjadi seorang pelajar yang lebih cemerlang dan secara tidak langsung boleh meningkatkan estimasi diri (Filozof dan Albertin 1998; Fuligni 1997; Schreiber dan Schreiber 1995). Oleh yang demikian, kanak-kanak yang mempunyai pandangan yang positif terhadap keupayaan diri sendiri mampu mengawal emosi dan keupayaan mental untuk menghadapi persekitaran yang negatif dan tidak stabil. Ketidakeupayaan untuk mengawal emosi, perhatian dan mental boleh menyebabkan kanak-kanak menjadi murung atau menunjukkan tingkah laku bermasalah (Rozumah *et al.* 1999b).

Faktor Risiko dan Perkembangan Kanak-kanak

Risiko merupakan konsep yang biasa digunakan oleh bidang perubatan dan menyifatkannya sebagai potensi untuk mendatangkan hasil yang negatif (Jens dan Gordon 1991). Secara tradisinya, faktor risiko telah digambarkan sebagai keadaan yang meningkatkan hasil yang negatif dan tidak diinginkan seperti *morbidity* dan *mortality*. Bagaimanapun pada masa sekarang, definisi risiko telah diperluas lagi dengan melibatkan tingkah laku yang berkaitan kesihatan, kesejahteraan dan sosial individu. Kanak-kanak dalam keluarga berisiko mempunyai peluang yang tinggi untuk terlibat dengan masalah tingkah laku, mudah terpengaruh dengan ajakan negatif rakan sebaya dan mempunyai estimasi diri yang rendah. Kajian terdahulu juga menunjukkan latar belakang keluarga (contoh: pendidikan ibu, pendapatan keluarga dan bilangan anak) boleh mempengaruhi perkembangan kanak-kanak dan fungsi sosial (Fuligni 1997; Pungello *et al.* 1996; Garret *et al.* 1994). Kanak-kanak keluarga status sosioekonomi yang rendah didapati mempersembahkan pencapaian yang kurang baik di sekolah dan mempunyai lebih banyak masalah sosial dan kognitif jika dibandingkan dengan kanak-kanak keluarga status kelas pertengahan dan atasan (Shumow *et al.* 1998; Dodge *et al.* 1994; Small dan Luster 1994). Kanak-kanak keluarga berpendapatan rendah kebiasaannya tinggal dan bersekolah di kawasan yang miskin dan mempunyai kadar jenayah yang tinggi (Connell dan Spencer 1994). Keluarga yang berpendapatan rendah juga cenderung untuk mengalami lebih banyak tekanan hidup dan keterpencilan sosial. Keadaan ini akan menambahkan lagi tekanan psikologi yang

dihadapi oleh ibu bapa dan seterusnya mengakibatkan pertengkaran dan konflik di antara ibu bapa-anak meningkat (McLoyd 1990). Pertengkaran dan konflik yang wujud di antara ibu bapa-anak akan mengurangkan penyesuaian tingkah laku anak dalam keluarga berisiko (Vosler dan Proctor 1990).

Faktor Pelindung dan Perkembangan Kanak-kanak

Kajian tentang faktor pelindung terhasil daripada pengkaji yang berminat dengan proses perkembangan anak yang terdedah pada psikopatologi dan memfokuskan ke atas variabel yang boleh menjadi penahan (*buffer*) untuk membantu mereka mengatasi penyakit mental. Faktor pelindung dicirikan sebagai semua tingkah laku dan perihal yang mengurangkan kejadian atau hasil yang tidak diinginkan dari aspek kemahiran, kebolehan dan sumber yang dimiliki oleh ibu bapa dan keluarga (Murry dan Brody 1999). Faktor pelindung mungkin termasuk kawalan peribadi atau sosial (contoh: pengawasan ibu bapa dan kepercayaan agama). Faktor pelindung mungkin mempunyai kesan secara langsung ke atas perkembangan anak dengan merangsang anak untuk menentang faktor risiko yang wujud dalam keluarga atau mengubahsuai hubungan di antara risiko dan hasil perkembangan. Perbezaan dari segi tahap perkembangan anak mungkin terjadi antara keluarga yang mempunyai banyak faktor risiko dan faktor pelindung berbanding keluarga yang berisiko tinggi diiringi faktor pelindung yang rendah.

Kajian terdahulu menunjukkan tingkah laku keibubapaan yang positif dalam keluarga berisiko mampu menjadi faktor pelindung kepada anak (Franco dan Levitt 1998; Lamborn, Dornbusch dan Steinberg 1996). Ibu bapa status sosioekonomi rendah yang mengamalkan peneguhan disiplin secara konsisten, kawalan dan sokongan yang tinggi serta mempunyai komunikasi yang positif didapati mempunyai anak yang kurang bermasalah dari segi penyesuaian tingkah laku.

METODOLOGI

Sampel

Sampel kajian terdiri daripada 201 responden pasangan ibu-anak (berumur 11 tahun), berbangsa Melayu dan tinggal bersama. Sampel kajian ini merupakan subset sampel kajian IRPA "Ekologi Keluarga Berisiko: Proses Interaksi dan Perkembangan Resilien Anak" yang berjumlah

1262 responden pasangan ibu dan anak yang berumur 11 tahun, 14 tahun dan 16 tahun. Responden ibu yang mempunyai keluarga berisiko telah dikenal pasti secara rawak melalui senarai nama ketua isi rumah termiskin yang diperoleh daripada Daftar dan Profil Keluarga Termiskin 1995/96, Kementerian Pembangunan Luar Bandar. Kajian ini telah dijalankan di negeri Kelantan, Kedah, Selangor dan Johor.

PENGUKURAN ANGKUBAH KAJIAN

Angkubah Bebas

Latar belakang keluarga yang telah diukur di dalam kajian ini ialah taraf pendidikan ibu, pendapatan keluarga dan bilangan anak. Taraf pendidikan adalah jumlah tahun pendidikan yang diterima oleh responden ibu. Jumlah pendapatan keluarga dalam sebulan adalah gabungan pendapatan suami, isteri dan pendapatan sampingan yang diperoleh keluarga sebulan. Bilangan anak pula diukur berdasarkan jumlah bilangan anak responden.

Tahap risiko telah diukur berdasarkan jumlah faktor risiko yang kemungkinan wujud dalam sesebuah keluarga. Terdapat 19 faktor risiko yang telah disenaraikan di dalam borang soal selidik. Antaranya ialah keluarga induk tunggal, tiada bilik tidur, keadaan rumah membahayakan dan mempunyai ahli keluarga berpenyakit kronik. Keluarga yang terlibat dalam kajian mestilah mempunyai sekurang-kurangnya satu faktor risiko. Skor risiko responden kajian ini menjulat dari 1 hingga 11. Skor risiko dibahagikan kepada dua tahap iaitu 'Rendah dan 'Tinggi'. Pembahagian dua tahap ini adalah berdasarkan kepada nilai purata yang diperoleh keluarga responden iaitu 5.3. Jumlah risiko yang melebihi daripada nilai purata menunjukkan tahap keluarga berisiko tinggi. Manakala jumlah risiko yang rendah daripada nilai purata menunjukkan tahap keluarga berisiko rendah.

Kualiti tingkah laku keibubapaan responden ibu diukur menggunakan skala 'Supportive Parenting' oleh Simons *et al.* (1992) yang mengandungi sembilan (9) item positif. Nilai koefisien alpha bagi skala tingkah laku keibubapaan ini dari perspektif ibu ialah 0.79. Skor bagi setiap kenyataan yang dikemukakan kepada responden ialah 1 = Tidak pernah, 2 = Hampir tidak pernah, 3 = Kadang-kadang, 4 = Hampir selalu dan 5 = Selalu. Jumlah skor dikira dengan mencampurkan semua skor yang didapati oleh responden bagi setiap item yang

dikemukakan. Jumlah skor minimum yang boleh diperoleh responden adalah 9 dan skor maksimum adalah 45. Semakin tinggi skor yang diperoleh ibu, semakin tinggi sokongan yang diberikan kepada anak. Sokongan yang diberikan menunjukkan ibu mengambil berat tentang perasaan anak, berminat dalam aktiviti harian, menyatakan perasaan sayang dan penerimaan, menggalakkan tingkah laku yang bersesuaian, membantu menyelesaikan masalah, dan memberi pengukuhan terhadap pencapaian.

Angkubah Sandar

Tahap resiliensi anak telah diukur menggunakan skala 'Children's Resiliency Attitudes Scales' (C.R.A.S) (Bischoe dan Harris 1994). Instrumen ini mengandungi tujuh subskala iaitu celik akal, berdikari, hubungan, inisiatif, kreativiti dan kejenakaan, moraliti dan resiliensi umum. Instrumen ini mengandungi 28 item dengan 14 item positif dan 14 item negatif. Setiap subskala mengandungi empat item (2 item positif dan 2 item negatif). Responden dikehendaki menjawab salah satu daripada jawapan yang dikemukakan iaitu 1=sangat tidak setuju, 2=tidak bersetuju, 3=tidak dapat diputuskan, 4=setuju dan 5=sangat setuju. Setiap kenyataan negatif akan dikodkan semula iaitu dari 5= sangat tidak setuju hingga 1= sangat setuju. Jumlah skor keseluruhan bagi skala resiliensi dikira dengan membahagikan jumlah keseluruhan yang diperoleh responden dengan 140 (jumlah skor maksimum yang boleh diperoleh untuk skala resiliensi) didarabkan dengan 100. Oleh itu skor minimum yang boleh diperoleh responden ialah 20 dan skor maksimum ialah 100. Jumlah skor keseluruhan dianalisis mengikut dua tahap yang ditentukan berdasarkan kepada nilai min yang diperoleh responden. Nilai skor yang tinggi daripada min menunjukkan tahap resiliensi adalah tinggi. Manakala nilai skor yang rendah daripada min menunjukkan tahap resiliensi adalah rendah. Nilai koefisien alpha bagi skala resiliensi anak dalam kajian ini adalah 0.64.

Tahap estim diri anak telah diukur menggunakan skala 'Hare Self-Esteem Scale' (HSS) oleh Hare (1985). Skala ini mengandungi 3 subskala yang mengkhususkan 3 elemen yang berkaitan dengan estim diri iaitu rakan sebaya, sekolah dan rumah. Terdapat 30 item (15 item positif dan 15 item negatif) dalam skala ini. Pilihan jawapan adalah berdasarkan kepada 1=sangat tidak setuju, 2=tidak setuju, 3=setuju

dan 4=sangat setuju. Setiap kenyataan negatif akan dikodkan semula iaitu 1=4, 2=4, 3=2 dan 4=1. Skor maksimum yang boleh diperoleh responden ialah 120 dan skor minimum ialah 30. Nilai skor yang tinggi daripada min menunjukkan tahap estim diri yang tinggi. Nilai koefisien alpha bagi skala ini ialah 0.76.

Pencapaian akademik dinilai berdasarkan jumlah lima (5) mata pelajaran terpilih iaitu Bahasa Melayu, Bahasa Inggeris, Matematik, Sains dan Agama Islam. Pencapaian akademik telah diperoleh daripada rekod keputusan peperiksaan akhir tahun 4. Bagi setiap subjek, markah tertinggi yang boleh diperoleh responden anak ialah 100 dan markah terendah adalah 0. Skor markah maksimum yang boleh diperoleh responden anak ialah 500. Semakin tinggi skor markah yang diperoleh, semakin tinggi pencapaian akademik yang diperoleh responden anak.

HASIL KAJIAN

Ciri Latar Belakang Keluarga

Jadual 1 menunjukkan maklumat latar belakang keluarga yang dikaji. Purata umur responden ibu yang terlibat adalah 39.8 tahun dengan sisihan piawai 6.9. Majoriti (92.5%) responden yang terlibat dalam kajian ini adalah keluarga lengkap, manakala 7.5% lagi adalah induk tunggal. Purata jumlah tahun pendidikan yang diterima oleh responden ialah 5.4 tahun, dengan kebanyakan (48.3%) responden mendapat pendidikan di antara darjah 1 hingga darjah 6. Pendapatan bulanan keluarga responden secara puratanya adalah sebanyak RM505.3 iaitu berada di bawah tahap garis kemiskinan (RM510) yang dinyatakan dalam Rancangan Malaysia Kelapan (Unit Perancang Ekonomi 2001). Kajian ini mendapati kebanyakan (66.7%) responden kajian tidak bekerja, iaitu merupakan suri rumah sepenuh masa. Purata bilangan anak responden adalah 5.7 orang.

Tahap Risiko Keluarga

Berdasarkan hasil yang telah diperoleh, kajian ini mendapati hampir separuh (44.8%) responden kajian datang daripada keluarga berisiko tinggi. Manakala sebanyak 55.2% responden datang daripada keluarga berisiko rendah. Secara umumnya, kebanyakan faktor risiko yang wujud dalam keluarga adalah seperti responden ibu tidak mempunyai pekerjaan tetap (81.1%), keadaan rumah membahayakan (73.1%), pendidikan responden kurang daripada

SRP (72.6%) dan pendapatan bulanan kurang daripada RM 516.

Kualiti Tingkah Laku Keibubapaan

Secara keseluruhannya lebih separuh (55.2%) responden mempunyai kualiti tingkah laku keibubapaan yang rendah. Jika diteliti mengikut subsampel keluarga berisiko rendah dan subsampel keluarga berisiko tinggi juga, didapati lebih daripada separuh responden mempunyai kualiti tingkah laku keibubapaan yang rendah iaitu masing-masing 55.9% dan 54.4%. Keadaan ini amat membimbangkan kerana tingkah laku keibubapaan yang berkualiti merupakan elemen penting dalam membentuk perkembangan sosioemosi dan perkembangan kognitif anak terutama pada peringkat awal kanak-kanak. Analisis data menunjukkan responden ibu yang mempunyai kualiti tingkah laku keibubapaan yang tinggi adalah sebanyak 44.8%. Bagi subsampel keluarga berisiko rendah didapati kualiti tingkah laku keibubapaan yang tinggi adalah sebanyak 44.1%. Manakala subsampel keluarga berisiko tinggi pula, sebanyak 45.6% responden mempunyai kualiti tingkah laku keibubapaan yang tinggi.

Penyesuaian Tingkah Laku Anak

Penyesuaian tingkah laku anak dalam kajian ini merujuk kepada aspek resiliensi, estim diri dan pencapaian akademik. Secara umumnya, tahap penyesuaian tingkah laku anak dalam membuat adaptasi terhadap faktor-faktor risiko yang wujud dalam keluarga berisiko kurang memuaskan (Jadual 2).

Secara keseluruhannya, lebih daripada separuh (55.7%) responden anak mempunyai tahap resiliensi yang rendah. Situasi ini amat membimbangkan kerana anak yang mempunyai tahap resiliensi mudah terpengaruh dengan anasir negatif apabila meningkat dewasa kelak. Walau bagaimanapun masih ramai lagi kanak-kanak dalam keluarga berisiko mempunyai tahap resiliensi yang tinggi iaitu sebanyak 44.3%. Keadaan ini menunjukkan bahawa anak dari keluarga berisiko tinggi masih mampu memantul semula daripada kehidupan dan pengalaman yang sukar (Bland dan Sowa 1994) untuk menjadi seorang insan produktif.

Kajian mendapati peratusan (54.4%) responden anak daripada subsampel keluarga berisiko tinggi yang mempunyai tahap estim diri rendah adalah lebih tinggi jika dibandingkan

JADUAL 1
Maklumat latar belakang responden (N=201)

Pemboleh ubah	n (%)	Purata	s.p	min.	mak.
Umur					
<35 tahun	51 (25.4)				
35-45 tahun	106 (52.7)				
46-55 tahun	43 (21.4)				
>55 tahun	1 (0.5)	39.8	6.9	27	63
Taraf Pendidikan					
Tidak bersekolah	47 (23.4)				
Darjah 1-6	97 (48.3)				
Tingkatan 1-2	1 (0.5)				
SRP	30 (14.9)				
SPM	22 (10.9)				
STPM	1 (0.5)				
Sijil	3 (1.5)				
Jumlah Tahun Pendidikan					
<6 tahun	68 (33.9)				
6-10	109 (54.2)	5.4	3.7	0	13
>10 tahun	24 (11.9)				
Pekerjaan					
Bekerja	67 (33.3)				
Tidak bekerja	134 (66.7)				
Pendapatan Bulanan Responden					
RM0	133 (66.7)				
RM100-500	64 (31.8)	RM84.6	RM152.4	RM0	RM1000
RM501-RM1000	3 (1.5)				
Pendapatan Bulanan Keluarga					
<RM500	95 (47.3)				
RM500-RM1000	103 (51.2)	RM505.3	RM220.5	RM150	RM1700
>RM1000	3 (1.5)				
Bilangan Anak					
<6 orang	109 (54.2)				
6-10	86 (42.8)	5.7	2.2	1	15
>10 orang	6 (3.0)				
Bilangan Ahli Isi rumah					
3-6 orang	77 (38.3)				
7-10 orang	115 (57.2)	7.3	1.9	3	15
>10 orang	9 (4.5)				

Nota: s.p=sisihan piawai, min=minimum, mak=maksimum, SRP=Sijil Rendah Pelajaran, SPM=Sijil Pelajaran Malaysia, STPM=Sijil Tinggi Pelajaran Malaysia

dengan peratusan (46.8%) responden anak daripada subsampel keluarga berisiko rendah. Hasil kajian menunjukkan secara keseluruhannya pencapaian akademik anak adalah memuaskan dengan lebih daripada separuh (57.7%) responden anak memperoleh jumlah markah melebihi nilai purata. Walau bagaimanapun, masih ramai lagi (42.3%) responden anak mempunyai pencapaian akademik yang rendah.

Keadaan ini amat membimbangkan kerana anak yang mempunyai pencapaian akademik yang rendah dikhuatiri berpotensi terlibat dalam pelbagai masalah sosial sama ada di sekolah atau di tempat lain.

Perkaitan di Antara Latar Belakang Keluarga dengan Penyesuaian Tingkah Laku Anak

Hasil analisis korelasi Pearson menunjukkan

JADUAL 2
Kualiti tingkah laku keibubapaan dan penyesuaian tingkah laku anak mengikut tahap risiko keluarga

Variabel	n (%)		
	Keseluruhan (N=201)	SSKR (n=111)	SSKT (n=90)
Kualiti Tingkah laku Keibubapaan			
Tinggi	90 (44.8)	49 (44.1)	41 (45.6)
Rendah	111 (55.2)	62 (55.9)	49 (54.4)
Purata:	32.4	32.6	32.0
s.p:	5.2	4.5	5.9
minimum:	17	21	17
maksimum:	44	42	44
Tahap Resiliensi Anak			
Tinggi	89 (44.3)	48 (43.2)	41 (45.6)
Rendah	112 (55.7)	63 (56.8)	49 (54.4)
Min:	53.9	54.2	53.6
s.p:	6.4	6.4	6.4
minimum:	34.3	34.3	34.3
maksimum:	80.7	80.7	70.7
Tahap Estim Diri Anak			
Tinggi	101 (50.2)	59 (53.2)	41 (45.6)
Rendah	100 (49.8)	52 (46.8)	49 (54.4)
Purata:	83.6	83.9	83.2
s.p:	7.9	8.1	7.8
minimum:	61	61	66
maksimum:	105	105	105
Tahap Pencapaian Akademik Anak			
Tinggi	116 (57.7)	61 (55.0)	50 (55.6)
Rendah	85 (42.3)	50 (45.0)	40 (44.4)
Purata:	284.1	304.2	259.2
s.p:	76.5	66.6	80.8
minimum:	56	96	56
maksimum:	439	439	411

Nota: SSKR = Subsampel keluarga berisiko rendah
SSKT = Subsampel keluarga berisiko tinggi
s.p = sisihan piawai

wujud perkaitan yang signifikan dan positif di antara pendidikan yang diperoleh ibu dengan estim diri ($r=0.18$, $p \leq 0.05$) dan pencapaian akademik ($r=0.19$, $p \leq 0.01$) responden anak keseluruhan (Jadual 3). Dalam Jadual 3, estim diri anak mempunyai perkaitan yang signifikan dengan tingkah laku keibubapaan ($r=0.32$, $p \leq 0.01$) dalam keluarga berisiko tinggi. Kajian juga mendapati pendapatan bulanan keluarga tidak mempunyai perkaitan yang signifikan dengan penyesuaian tingkah laku anak. Kajian mendapati bilangan anak yang terlalu ramai boleh mengurangkan tahap resiliensi responden anak secara keseluruhan ($r=-0.16$, $p \leq 0.05$). Hasil

yang sama juga diperoleh dalam subsampel keluarga berisiko rendah iaitu bilangan anak mempunyai perkaitan yang signifikan dan negatif ($r=0.27$, $p \leq 0.01$) dengan resiliensi anak. Analisis data menunjukkan bahawa tahap estim diri dipengaruhi oleh bilangan anak ($r=0.21$, $p \leq 0.05$) dalam subsampel keluarga berisiko tinggi.

Perkaitan di Antara Tahap Risiko Keluarga dengan Penyesuaian Tingkah Laku Anak

Hasil analisis pekali korelasi Pearson menunjukkan terdapat perkaitan yang signifikan dan negatif ($r=-0.26$, $p \leq 0.01$) di antara tahap risiko dengan pencapaian akademik anak. Ini

JADUAL 3

Perkaitan di antara latar belakang keluarga, tahap risiko, tingkah laku keibubapaan dan penyesuaian tingkah laku anak (resiliensi, estim diri dan pencapaian akademik)

Variabel	Resiliensi			Estim Diri			Pencapaian Akademik		
	Keseluruhan	SSKR	SSKT	Keseluruhan	SSKR	SSKT	Keseluruhan	SSKR	SSKT
Latar belakang Keluarga									
Pendidikan ibu	0.05	0.10	-0.03	0.18*	0.06	0.32**	0.19**	0.19	0.18
Pendapatan Keluarga	0.02	0.07	-0.10	0.06	0.06	0.03	0.08	-0.04	0.05
Bilangan anak	-0.16*	-0.27**	-0.04	0.06	0.21*	-0.07	-0.07	-0.05	0.08
Tahap risiko	-0.06	-0.11	0.03	-0.07	-0.04	-0.09	-0.26**	-0.09	-0.00
Tingkah laku Keibubapaan	0.05	0.18	-0.08	0.17*	0.11	0.23*	0.02	-0.10	0.08

Nota: SSKR= Subsampel keluarga berisiko rendah

SSKT= Subsampel keluarga berisiko tinggi

* $p \leq 0.05$ ** $p \leq 0.01$ *** $p \leq 0.001$

menunjukkan bahawa persekitaran keluarga yang berisiko tinggi akan menjejaskan prestasi akademik anak. Walau bagaimanapun, tahap risiko didapati tidak memberi pengaruh yang signifikan ke atas tahap estim diri dan resiliensi anak.

Perkaitan di Antara Kualiti Tingkah Laku Keibubapaan dengan Penyesuaian Tingkah Laku Anak

Hasil yang diperoleh menunjukkan kualiti tingkah laku keibubapaan yang tinggi mampu meningkatkan tahap estim diri responden anak keseluruhan ($r=0.17$, $p \leq 0.05$). Analisis data juga menunjukkan tingkah laku keibubapaan mempunyai perkaitan yang signifikan ($r=0.23$, $p \leq 0.05$) dengan estim diri anak bagi subsampel keluarga berisiko tinggi. Walau bagaimanapun, tingkah laku keibubapaan didapati tidak memberi pengaruh yang signifikan ke atas tahap resiliensi dan pencapaian akademik anak.

Prediktor Penyesuaian Tingkah Laku Anak

Analisis regresi berganda mendapati tahap pendidikan ibu ($\beta = .16$, $p \leq .05$) dan tingkah laku keibubapaan ($\beta = .15$, $p \leq .05$) mempunyai perkaitan secara kelainan dengan estim diri anak keseluruhan ($F=5.55$, $p \leq 0.01$) (Jadual 4). Kajian mendapati tahap pendidikan ibu ($\beta = .18$, $p \leq 0.05$)

juga menyumbang secara unik ke atas pencapaian akademik anak ($F=2.87$, $p \leq 0.05$).

KESIMPULAN

Berdasarkan hasil yang telah diperoleh, kajian ini membuat kesimpulan bahawa hampir separuh (44.8%) responden kajian datang daripada keluarga berisiko tinggi. Manakala sebanyak 55.2% responden datang daripada keluarga berisiko rendah. Kajian mendapati lebih daripada separuh (55.2%) responden ibu mempunyai kualiti tingkah laku keibubapaan yang rendah. Secara umumnya, penyesuaian tingkah laku anak dalam keluarga berisiko yang dikaji berada pada tahap yang agak membimbangkan. Analisis data menunjukkan hampir separuh responden anak mempunyai tahap estim diri (49.8%) dan pencapaian akademik (42.3%) yang rendah. Manakala lebih daripada separuh (55.7%) responden anak mempunyai tahap resiliensi yang rendah.

Bronfenbrenner (1979) mengandaikan bahawa penyesuaian tingkah laku anak (resiliensi, estim diri dan pencapaian akademik) boleh dipengaruhi oleh faktor dan konteks di mana anak tinggal seperti persekitaran keluarga (pendidikan ibu, pendapatan keluarga, bilangan anak, tahap risiko dan tingkah laku keibubapaan). Sebahagian daripada hasil kajian

JADUAL 4
Prediktor penyesuaian tingkah laku anak

Angkubah	Penyesuaian Tingkah Laku Anak									
	Resiliensi,β			Estim Diri,β			Pencapaian Akademik,β			
	N(201)	SSKR(111)	SSKT(90)	N(201)		SSKR(111)	SSKT(90)	N(201)	SSKR(111)	SSKT(90)
Latar belakang Keluarga	Model 1	Model 1	Model 1	Model 1	Model 3	Model 1	Model 1	Model 1	Model 1	Model 1
Pendidikan	.02	.08	-.04	.19*	.16*	.08	.31**	.18	.02	.19
Pendapatan keluarga	.03	.11	-.10	.04		.03	.04	.06	-.03	.04
Bilangan anak	-.16*	-.28**	-.04	.09		.21*	-.03	-.03	-.05	.10
	R ² =0.03 F=1.87	R ² =0.09 F=3.67*	R ² =0.01 F=0.37	R ² =0.04 F=2.93*		R ² =0.05 F=1.96	R ² =0.10 F=3.25*	R ² =0.04 F=2.87*	R ² =0.00 F=0.15	R ² =0.04 F=1.32
Latar belakang Keluarga dan Tingkah laku Keibubapaan	Model 2	Model 2	Model 2	Model 2		Model 2	Model 2	Model 2	Model 2	Model 2
Pendidikan	.02	.06	-.03	.17*		.06	.29**	.19	.04	.18
Pendapatan keluarga	.03	.11	-.09	.04		.04	.02	.06	-.03	.03
Bilangan anak	-.16*	-.26**	-.06	.12		.23*	.01	-.04	-.07	.12
Tingkah laku Keibubapaan	.02	.14	-.08	.17*	.15*	.13	.19	-.02	-.12	.08
	R ² =0.03 F=1.41	R ² =0.11 F=3.30*	R ² =0.12 F=0.41	R ² =0.07 F=3.63**	R ² =0.05 F=5.55**	R ² =0.07 F=1.97	R ² =0.14 F=3.40*	R ² =0.04 F=2.16	R ² =0.02 F=0.48	R ² =0.05 F=1.11

Nota: Model 3 tidak dibina untuk resiliensi, estim diri dan pencapaian akademik anak subsampel keluarga berisiko rendah dan subsampel keluarga berisiko tinggi kerana tiada variabel yang didapati signifikan dalam Model 1 dan Model 2.

*p≤.05, **p≤0.001

N = Sampel Keseluruhan

SSKR = Subsampel Keluarga Berisiko Rendah

SSKT = Subsampel Keluarga Berisiko Tinggi

ini adalah konsisten dengan andaian yang dibuat oleh Bronfenbrenner. Penyesuaian tingkah laku anak dalam keluarga berisiko didapati dipengaruhi oleh pendidikan ibu, bilangan anak, tahap risiko dan tingkah laku keibubapaan. Walau bagaimanapun pendapatan bulanan keluarga didapati tidak mempunyai perkaitan yang signifikan dengan mana-mana aspek penyesuaian tingkah laku anak yang dikaji.

Secara keseluruhan, kajian mendapati wujud perkaitan yang signifikan dan negatif antara bilangan anak dengan resiliensi kanak-kanak. Pola yang sama juga ditunjukkan dalam subsampel keluarga berisiko rendah. Kajian mendapati bilangan anak yang ramai dalam subsampel keluarga berisiko rendah memberi kesan negatif kepada perkembangan resiliensi anak. Hasil kajian ini adalah konsisten dengan model faktor risiko dan perkembangan kanak-kanak (Shumow *et al.* 1998; Dodge *et al.* 1994; Sumow dan Luster 1994; Jens dan Gordon 1991) yang dibincangkan dalam kerangka kerja konseptual. Model ini mengandaikan bilangan anak yang ramai merupakan faktor risiko yang boleh memberi impak negatif kepada perkembangan resiliensi anak. Berdasarkan kepada model resiliensi (Murry dan Brody 1999; Luster dan McAdoo 1994; Bogenschneider 1996) tahap resiliensi kanak-kanak dalam keluarga berisiko boleh ditingkatkan dengan kehadiran faktor pelindung. Bagaimanapun dalam kajian ini didapati tidak ada satu pun variabel yang dikaji boleh dijadikan faktor pelindung untuk membantu anak memantul semula dari tekanan hidup. Keadaan ini menjelaskan sebab tahap resiliensi anak yang terlibat dalam kajian adalah rendah.

Estim diri responden anak keseluruhan didapati dipengaruhi oleh pendidikan yang diterima oleh ibu dan tingkah laku keibubapaan. Bilangan anak pula didapati mempunyai perkaitan yang signifikan dengan estim diri hanya dalam subsampel keluarga berisiko rendah. Analisis regresi berganda menunjukkan tahap pendidikan ibu dan tingkah laku keibubapaan mempunyai perkaitan yang signifikan secara kelainan dengan estim diri anak. Model kecekapan (Waters dan Lawrence 1993) dan model faktor pelindung dan perkembangan kanak-kanak (Murry dan Brody 1999; Franco dan Levitt 1998; Lamborn Dornbusch dan Steirnerberg 1996) mengandaikan pendidikan

ibu dan tingkah laku keibubapaan boleh dijadikan sumber dan faktor pelindung untuk meningkatkan tahap estim diri anak di kalangan keluarga berisiko. Oleh yang demikian, hasil kajian ini adalah konsisten dengan kedua-dua model tersebut.

Hasil analisis korelasi Pearson menunjukkan pencapaian akademik anak keseluruhan dipengaruhi oleh tahap risiko dan pendidikan yang diterima oleh ibu. Analisis regresi berganda pula menunjukkan tahap pendidikan ibu menyumbang secara unik ke atas pencapaian akademik anak. Oleh yang demikian tahap pendidikan ibu merupakan sumber kekuatan yang dipunyai oleh ibu untuk membantunya mendidik dan membesarkan anak dalam persekitaran keluarga yang berisiko. Maka hasil kajian ini menyokong andaian model kecekapan yang telah dibincangkan sebelum ini.

IMPLIKASI

Hasil kajian ini adalah konsisten dengan Teori Ekologi Manusia (Bronfenbrenner 1979) dan juga kajian terdahulu yang mendapati bahawa faktor latar belakang keluarga dan tingkah laku keibubapaan boleh mempengaruhi perkembangan emosi dan kognitif anak. Kajian ini juga menyokong andaian model kecekapan (Waters dan Lawrence 1993) yang menyatakan ibu yang tinggal dalam persekitaran yang mencabar mempunyai sumber kekuatan dalaman diri yang boleh digunakan untuk membentuk anak yang cekap dan berpotensi. Oleh yang demikian kajian ini memberi implikasi bahawa pendidikan yang diterima oleh ibu merupakan sumber kekuatan diri yang boleh mempengaruhi tahap estim diri dan pencapaian akademik anak dalam keluarga berisiko di luar bandar.

Ibu bapa yang berpendidikan tinggi kebiasaannya melihat hubungan anak sebagai dua hala, bersifat timbal balik (Dekovic dan Gerris 1992), banyak melibatkan diri dalam aktiviti pembelajaran anak dan mengamalkan komunikasi yang positif dan terbuka. Komunikasi yang terbuka membolehkan ibu bapa menunjukkan kasih sayang melalui sentuhan, kemesraan dan sokongan. Adalah menjadi fitrah manusia untuk disayangi dan menyayangi. Tanpa kasih sayang, seseorang itu mungkin menghadapi pelbagai masalah emosi (Kamarudin 1996). Justeru itu, ibu bapa perlu mempelajari bagaimana untuk menjadi seorang pendengar

yang aktif dan juga mengesahkan keperluan dan permasalahan anak-anak mereka (Rak dan Patterson 1996).

Andaian model faktor risiko dan perkembangan kanak-kanak (Shumow *et. al.* 1998; Dodge *et al.* 1994; Small dan Luster 1994; Jens dan Gordon 1991) yang telah dibincangkan sebelum ini adalah konsisten dengan hasil kajian ini. Kajian mendapati bahawa bilangan anak yang ramai memberi impak negatif ke atas tahap resiliensi anak. Ini kerana bilangan anak yang ramai boleh mengurangkan perhatian dan kasih sayang yang diberikan oleh ibu bapa kepada anak. Di samping itu, ibu bapa yang mempunyai anak yang ramai lebih cenderung menggunakan pendekatan autoritarian dan permisif dalam mendidik dan membesarkan anak yang memberi impak negatif ke atas perkembangan anak (Luster dan McAdoo 1994; Menaghan dan Parcel 1991; McLoyd 1990). Hasil kajian juga menunjukkan kualiti tingkah laku keibubapaan mempengaruhi tahap estim diri anak. Justeru itu, program intervensi yang inovatif dan komprehensif bagi meningkatkan kemahiran tingkah laku keibubapaan dan fungsi keluarga perlu diadakan bagi membantu ibu bapa menjana kemahiran dalam merangsang perkembangan anak.

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Preparation of Manuscript

Typing and Paper

The manuscript should be typed double spaced on A4 paper with 4cm margins on all sides. It should be limited to 25 pages including tables, illustrations and references.

Title page

The title of the paper, name of author and full address of the institution where the work was carried out should appear on this page. A short title not exceeding 60 characters should be provided for the running headlines.

Abstract

English and Bahasa Melayu abstracts of 200 words each should follow the title page. Papers from outside Malaysia may be submitted with an English abstract only.

Keywords

About six to ten keywords are required and these should be placed directly above the abstract.

Tables

Tables should be typed on separate pages and numbered using Arabic numerals. Each table should be referred to in the text, has a brief title and include explanatory notes, if necessary, below it. Vertical rules should not be used. Footnotes in tables should be designated by symbols or superscript small italic letters. Tables should conform to page size.

Equations

These must be clearly typed, triple-spaced. They should be identified by numbers in square brackets placed flush with the right margin.

Illustrations & Photographs

Illustrations including diagrams and graphs are to be referred to in the text as 'figures' and photographs as 'plates' and numbered consecutively in Arabic numerals. All photographs (glossy black and white prints) should be supplied with appropriate scales.

Illustrations should be of print quality; output from dotmatrix printers is not acceptable. Illustrations should be on separate sheets, about twice the size in print. All letters, numbers and legends must be included on the illustration with the author's name, short title of the paper, and figure number written on the verso. A list of captions should be provided on a separate sheet.

Spelling & Measurements

The Oxford English Dictionary should be consulted for spelling. Metric units must be used for empirical measurements.

Citations and References

Citations to the literature in the text should be indicated by the author's name and year of publication in parentheses, e.g. (Barnett and Lewis 1982). If an author is quoted in the text, the year of publication should immediately follow in parentheses, e.g. Barnett and

Lewis (1982) state that "....." Citation of a particular page follows the date and is preceded by a comma, e.g. Humphrey 1990, p. 26-27.

For works with multiple authors, the first author's surname is used followed by *et al.* The full form of citation is used for two authors.

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When several authors are cited, they are to be arranged in chronological order and separated by semicolons, e.g. Zaharah 1960; Yong 1980; Lewis 1990.

Serials are to be abbreviated as in the *World List of Scientific Periodicals*. The abbreviation for *Pertanika Journal of Social Science and Humanities* is *Pertanika J. Soc. Sci. Hum.*

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Book

Shamsher Mohamed, Shamsuddin Ismail & Annuar Mohd. Nassir. 1989. *Asas Belanjawan Modal*. 197p. Serdang: Universiti Pertanian Malaysia Press.

Chapter in Edited Book

Zahid Emby. 1990. The Orang Asli Regrouping Scheme-converting swiddeners to commercial farmers. In *Margins and Minorities - The Peripheral Areas and Peoples of Malaysia*, ed. V. T King & M.J.G. Parnwell, p. 94-109. Hull: Hull University Press.

Unpublished Materials (e.g. theses, reports, documents) Shahwahid, H.O. 1989. Price competitiveness and demand behaviour of Malaysia Meranti lumber and hardwood plywood in the United States' import market. Ph.D. Dissertation, State University of New York. Syracuse.

Ministry of National Unity. 1973. A socio-economic survey on the new villages in Perak and Melaka. 67p. Malaysia.

Serials

Noran Fauziah Yaakub. 1990. A multivariate analysis of attitude towards teaching. *Pertanika* 13(2): 267-273.

Conference Proceedings

Amir Awang. 1992. Counselling, human resources development and counseling services. In *Proceeding of Asia Pacific Conference on Human Resource Development*, ed. Sulaiman M. Yassin, Yahya Mat Hassan Kamariah Abu Bakar, Esah Munji and Sabariah Mohd Rashid, p. 243-246. Serdang: Universiti Pertanian Malaysia.

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