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ACHIEVEMENT MOTIVATION AND ACADEMIC PERFORMANCE

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SINOPSIS

Satu percubaan dibuat untuk mencari pertalian diantara penggerakan pencapaian dan pencapaian akademik. Dua skil untuk mengukur penggerakan pencapaian yaitu Mehabian Achievement Scale (MAS) dan Russell's Achievement Motivation Scale (RAMS) diujikan kapada pelajar-pelajar Melayu yang mengikuti kursus Saikoloji Asas disalah sebuah universiti di Malaysia. Keputusan menunjukkan ada korilasi positif dan yang bererti diantara kedua-dua skil itu dan diantara MAS dan kerja kursus dalam pelajar-pelajar perempuan sahaja. Kerja kursus didapati mempunyai korilasi positif dan yang bererti dengan keputusan peperiksaan akhir dalam pelajar-pelajar laki-laki sahaja. Perbedzaan yang bererti juga terdapat dalam penggerakan pencapaian diantara laki-laki dan perempuan. Perbedzaan-perbedzaan didalam keputusan adalah dibincangkan.

SYNOPSIS

An attempt was made to relate achievement motivation to academic performance. Two scales for measuring achievement motivation i.e. Mehrabian Achievement Scale (MAS) and Russell's Achievement Motivation Scale (RAMS) were administered to Malay students attending Basic Psychology course at one of the universities in Malaysia. The results indicated a positive significant correlation between the two scales and between MAS and course work in female subjects only. Course work was found to have positive correlation with final examination in males only. A significant difference in achievement motivation was also found between males and females. The differences in the results were discussed.

It is generally agreed that a major variable affecting academic performance is motivation. The importance of motivational variables in helping to understand, predict and control academic performance is always assumed but it has not led to any theory of academic motivation. However, Atkinson[1]

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1 J.W. Atkinson, ' Motivational Determinants of Risk Taking Behaviour" *Psychological Review*, Vol. 64, 1957, pp. 359–373.

and Atkinson and Feather[2] have formulated a theory of achievement motivation that has provided a productive approach to variety of behavioural phenomena. It has also been suggested by Atkinson[3] and Weiner[4] that it may also be useful to educationally relevant research.

Essentially, the theory deals with the tendency to perform an achievement-oriented act (Ta) which is conceptualised as the resultant of conflict between success approach and failure avoidance tendencies. The theory could be summarised as follows:

$$Ta = (Ms \times Ps \times Is) - (Maf \times Pf \times If)$$

Ms and Maf represent the motive to strive for success or to avoid failure respectively. Ps and Pf represent the subjective probability that the action contemplated will result respectively, in success or failure to attain a given goal. It is assumed that Pf and Ps are complementary, thus $Pf = (1 - Ps)$ and that Is and If are related to the perceived degree of difficulty of the task and to be linear complements of Ps and Pf respectively. That is, $Is = (1 - Ps)$ and $If = (1 - Pf)$

The major hypothesis that could be generated from this theory is that, in achievement situations, individuals for whom $Ms > Maf$ (achievement-oriented individuals) will exhibit greatest tendency to approach achievement-oriented behaviour in situations where Ps is of intermediate levels ($Ps = 0.5$) and greatest tendency to avoid that behaviour where Ps is very low or very high (e.g. $Ps = 0.1$ or 0.9). Individuals in whom $Maf > Ms$ (failure-threatened individuals) will show least avoidance behaviour at Ps of 0.1 or 0.9 and greatest avoidance behaviour at $Ps = 0.5$.

Maehr and Sjogren[5] in a review article have noted that the major hypothesis regarding this theory is supported in a variety of situations in which at least some form of social competition in eliciting achievement is implied. However, the results have been less clear in case of performance data; this may be explained by the more complicated nature of performance.

Russell[6] has developed an objective instrument for measuring achievement motivation in classroom situation. It is claimed that for the sample used the instrument is reliable and has validity for the prediction of willing-

2 J.W. Atkinson and N.T. Feather, *A Theory of Achievement Motivation.* New York: Wiley, 1966.

3 J.W. Atkinson, "Mainsprings of Achievement Oriented Activity". In J.D. Krumbolts (Ed.), *Learning and the Educational Process.* Chicago: Rand McNally, 1966.

4 B. Weiner, "Implications of the Current Theory of Achievement Motivation for Research and Performance in the Classroom". *Psychology in the Schools,* Vol. 4, 1967, pp. 164–171.

5 M.L. Maehr and D.D, Sjogren, "Atkinson's Theory of Achievement Motivation: First Step toward a Theory of Academic Motivation," *Review of Educational Research,* Vol. 41, No. 2, 1971, pp. 143–161.

6 I.V. Russell, "Motivation for School Achievement: Measurement and Validation," *Journal of Educational Research,* Vol. 62, No. 6, 1969, pp. 263–266.

ness to try and desire to compete. The results also indicate there is a significant positive correlation between achievement motivation and California Achievement Test scores. The findings have some significfince forthe development of a theory of academic motivation. It would be useful to carry out a similar study in Malaysia using Russell's instrument to see if it could be applicable to Malaysian situation.

The purpose of this study is to explore the relationships of achievement motivation as measured by Russell's instrument and another scale which has been tried in Malaysia (i.e. Mehrabian Achievement Scale) with each other and academic performance.

METHOD

Subjects

The subjects were 73 Malay students (59 male and 14 female) taking Basic Psychology at a University in Malaysia. They were in 19–21 age range.

Instruments and procedure

The instruments used in this study were the Mehrabian Achievement Scale (MAS)[7] and Russell's Achievement Motivation Scale (RAMS).[8]

There are two forms of MAS—the male and female forms. Both consists of 26 items, 13 positive and 13 negative items. The male form of MAS has been described in an earlier study.[9] An example of a positive item for female form of MAS is:

"I would rather cook for a couple of gourmet eaters than for a couple who simply have huge appetites."

An example of a negative item for the female form of MAS is:

"I would rather share in the decision-making process of a group than take total responsibility for directing the group's activities."

The RAMS consists of 30 items and questions with 18 positive and 12 negative items and questions. An example of a positive item is:

"You should select your friends from among those whose goals are generally as high as your own".

An example of a negative item is:

"Rewards should be given regardless of effort or achievement".

7 A. Mehrabian, "Male and Female Scales of Tendency to Achieve," *Educational and Psychological Measurement*, Vol. 28, 1968, pp. 493–502.
8 Russell, "Motivation for school achievement".
9 Wan Rafaei Abdul Rahman, "An Exploratory Comparative Study in Achievement Motivation Between Malay and Australian Secondary School Students", *Akademika*, No. 1, 1972, pp. 105–110.

A modification of the scoring system was made to conform to the 9-point scale as in MAS. The word "school" in RAMS was changed to "university".

The MAS was given first followed by RAMS. Total time taken to complete both scales was about 30 minutes. The scales used were the translated versions of MAS and RAMS. The translation followed the procedure by Brislin.[10]

The scores for academic performance consisted of marks obtained in course work and final examinations. The marks for course work comprised of marks from terminal tests and assignments.

RESULTS

Table 1 shows the intercorrelations between MAS, RAMS, course work and final examination results.

TABLE 1

INTERCORRELATIONS BETWEEN VARIABLES IN MALE AND FEMALE STUDENTS

	MAS	RAMS	CW	FE
MAS	—	.563*	.612*	−.130
RAMS	−0.60	—	.453	−.150
CW	−.020	.007	—	.275
FE	−.141	.080	.561**	—

Correlation for females top right
CW = course work
FE = final examinations
*P<0.05
**p<0.01

For female subjects the two achievement motivation scales correlated positively and significantly with each other and there was positive significant correlation between MAS and course work while there was no significant correlation between RAMS and course work and between course work and final examinations. For male subjects there was only one significant correlation, i.e. a positive correlation between course work and final examinations.

Table 2 shows the means and standard deviations in the two scales of achievement motivation and academic performance. It is evident from the table that males and females differed in achievement motivation scores with higher MAS score for males compared with females and lower RAMS

10 R.W. Brislin, "Back Translation of 'Cross-Cultutal Research", *Journal of Cross-cultural Psycnology*, Vol. 1, 1970, pp. 185–216.

TABLE 2

MEANS AND STANDARD DEVIATIONS IN MAS, RAMS, CW AND FE AND VALUES OF t

	males (n=59)		females (n=14)		
	M	SD	M	SD	t
MAS	53.34	16.21	40.57	17.80	2.38*
RAMS	43.98	15.24	53.00	13.28	2.15*
CW	18.22	2.25	17.54	5.27	0.46
FE	58.12	7.60	53.71	16.86	0.92

*$p<0.05$

score for males compared with females. No substantial differences were shown between males and females in academic performance. t—tests between means in males and females revealed significant differences in MAS and RAMS only.

DISCUSSION

For female subjects the positive correlation between MAS and RAMS could suggest that they measure similar achievement strivings with MAS measuring achievement strivings in socially competitive situations and RAMS in classroom competitive situations. RAMS would therefore be expected to correlate with academic performance. Though the results do not support this expectation nevertheless, the correlation between RAMS and course work is quite substantial though not significant.

The finding regarding the positive and significant correlation between MAS and course work has great significance for the understanding of academic achievement. It may be possible to use MAS to predict classroom behaviour. However, the findings have to be taken with some caution as the number of subjects involved is small. More studies are required to confirm this positive correlation.

The lack of significant correlations among MAS, RAMS, and academic performance in males may suggest that the two groups are different from each other. In one aspect at least this is supported by results in Table 2 which shows that males and females differ significantly in achievement motivation on both scales. The differences between the two groups may be due to sex differences. This possibility should be explored in further studies.

The lack of correlation between academic performance and achievement scales (excepting between MAS and course work in females) and the lack of significant differences between males and females in course work and final examination results may suggest the need for an improve-

ment in the grading system for course work and final examinations so that they really measure the academic performance of the students.

Another significant finding of this study deals with the correlation between course work and final examinations. The finding tends to suggest that boys may be more consistent in their studies than girls.