

A STUDY OF ACHIEVEMENT MOTIVATION AMONG ADOLESCENTS IN TRINIDAD AND TOBAGO: PERSONAL AND SYSTEMIC FACTORS

Peter Kutnick

Achievement motivation has been critically studied for personal and social factors that explain its varied occurrence in society in both developed and developing countries. This study focuses on a country which hopes to use an expanding educational system to provide for increasingly democratic access to educational achievement (strongly correlated to achievement motivation) for national development. The study questions whether achievement motivation is better explained by individual/family factors or the broad stratification found in society and its schools.

Five hundred and fifty eight fifth form pupils were surveyed from 8 government-funded schools. Schools represented the stratified hierarchy of secondary schools in Trinidad and Tobago. Data collected from each pupil included achievement motivation score, rank in class, age, sex, religion, birth place, paternal and maternal occupations, and subjects studied. Significant differences in achievement motivation scores were found due to paternal occupation, type of school attended, and subject studied. Regression and path analyses showed paternal occupation significantly affected school (and school type) attended, and both paternal occupation and school attended affected achievement motivation.

Students' achievement motivation has been associated with their academic success within school. At the same time, a range of personal variables affect achievement motivation. These personal variables are, in turn, affected by the culture in which children are brought up. Motivation generally, and achievement motivation in particular, is of concern to educators in any country; it often describes the extent to which success occurs within the school system. Within developing countries that have thrown off the yoke of their colonial past, learning and achievement motivation are particularly important. Educational planners and others often expect that increased motivation will lead to increased school success and national development; assuming that pupils will show enhanced motivation if provided the opportunity of advanced schooling.

Evidence of this assumption can be found in national statements of educational policy and planning (Trinidad and Tobago. Ministry of Education, 1985). Post-colonial countries, though, may not be in a position to realize the 'democratic' and motivational ideal. Payne (1986) found a lack of motivation and underachievement in most pupils in Barbados. This finding was "directly attributable to the persistence of colonial-style educational systems that are inconsistent with, and often, irrelevant to the nature and needs of West Indian cultures" (p. 159-60).

The question asked in this paper is whether achievement motivation (or lack of it) may best be explained by personal factors of pupils which are controlled by broad disparities in the stratification of society, biological dispositions or socially engineered characteristics of an imposed, compulsory schooling. The study focuses on achievement motivation in the southern Caribbean Republic of Trinidad and Tobago. Since independence (1962), Trinidad and Tobago expanded opportunity for access to primary and secondary schooling for the total population. Expansion of the school system proposed to "equalize educational opportunity" and provide for the "democratization of secondary education" (Trinidad and Tobago, 1985). Yet, in expanding access to schooling in the mid-1970s, the Ministry of Education did not substantially alter the stratified structure of its post-colonial school system (Harvey, 1988); it simply added on to the existing system. Currently, types of secondary schools funded by the government include: 1) church-managed, traditional, prestige 5- and 7-year schools; 2) government-managed, traditional 5- and 7-year schools; and 3) newly expanded, government-managed junior secondary (1st through 3rd form) and senior comprehensive (4th through 6th form) schools.

Comparisons between the school types show a marked and disproportionate variation in school success, particularly at the fifth form level. Overwhelming examination failure and low motivation characterizes government run senior comprehensive schools. High examination success characterizes church-managed, traditional schools (Jules & Kutnick, 1990; Osuji, 1987). Underlying these extremes of examination success and failure are, undoubtedly, extremes of achievement motivation. Yet, no previous educational study has explored for variations in achievement motivation in a developing country such as Trinidad and Tobago; especially comparing personal/biographic factors that characterize the student and systemic factors characteristic of a post-colonial and

stratified school system (although Cassidy & Lynn, 1991 undertook a similar comparison in the UK).

The choice of achievement motivation was made as it is a functional and comparative measure. Achievement motivation, functionally, brings together personal, systemic and cross-cultural concerns that may be compared and linked with success in education. While not a 'taught' aspect of schooling, achievement motivation relates to the schooling process; it determines and is determined by schooling. Achievement motivation receives its earliest consideration in Weber's (1930) work on the Protestant Work Ethic (PWE) which described individual levels of productivity, differentiated by culture. McClelland (1961) operationalized the PWE into achievement motivation, which he claimed underlies personal achievement and drive for success in all societies and cultures. As described by Maehr (1974), McClelland's definition of achievement motivation includes: a standard of excellence by which success or failure could be evaluated; that individuals are seen to be (in some way) responsible for their own actions; and, challenge and uncertainty are involved. McClelland's definition has not been universally accepted. Critics note: 1) an overemphasis on personality as the major factor for level of achievement motivation limits the role of societal and other systemic factors; and 2) its ethnocentric definition of 'individual' success, responsibility and challenge (that other societies may bring to fruition in more collaborative ways) limits performance by non-Caucasian racial groups, females and working class (see Castenell, 1984; Maehr & Nicholls, 1980; and others).

Achievement motivation measures (there are various methods for assessing it) must be valid and reliable for the chosen society of study. Studies that have met these criteria show that achievement motivation correlates with many factors. Entwistle (1968) found achievement motivation correlated to school performance and attainment, more so than reasoning ability. Mischel (1961), in an early study undertaken in (still colonial) Trinidad, found achievement motivation significantly and positively correlated to delay of gratification and occupational aspiration; findings in keeping with those generated in the United States at the time. Individual variations in achievement motivation scores show: males generally scoring higher than females; first-born children scoring higher than later-born, and differentiation due to upbringing practices and parental values (according to Turner, 1977). Group variations are found

in cross-cultural comparisons (Institute of Development Studies, 1987), type of school attended (Clarke, 1985; Eyo, 1984; Neel, Tzeng, & Baysal, 1986), racial group and social class (McClelland, Atkinson, Clark, & Lowell, 1953). International studies of achievement motivation show: 1) subcultural variation; Turkish students attending an English-speaking university scored higher than comparable students attending a Turkish-speaking university (Neel et al., 1986); and 2) no sex differences in developing countries especially among 5th form pupils in Nigeria (Eyo, 1984) and university students in Kuwait (Torki, 1985).

Achievement motivation is a useful and differential measure showing individual and systemic factors that relate to success in school. In Trinidad and Tobago, early measures and correlates of achievement motivation paralleled those in the United States. With Trinidad and Tobago's current belief that 'democratization' of society can be achieved through increased access to education (Trinidad and Tobago, 1985) we might expect that achievement motivation will be evenly distributed across schools and pupils and accountable by personal factors. On the other hand, with a stratified, post-colonial school structure still in existence, we would hypothesize that achievement motivation is more highly associated with the type of school to which pupils have access rather than personal and within-school comparative factors.

This study tests for the distribution of achievement motivation among a particular pupil population (5th formers) in relation to their personal backgrounds, their position in within-classroom success, and placement in a stratified educational system.

Method

Sample: Information was elicited from 558 fifth formers (average age 16 years) from a representative sample of school types and locations in Trinidad and Tobago. Eight schools were selected in total. Two tutor classes per school were surveyed. Classes were randomly chosen from all 5th form tutor classes in each school. These classes were of mixed ability pupils and included pupils taking a wide range of subjects. Each pupil provided information on: age, sex, religion, birth placement in family, father's occupation, mother's occupation, curriculum subjects currently being studied. Form teachers provided information on within-

class performance (based on teacher generated tests). From this measure pupils were assigned to a quartile position of attainment in their own class. It should be noted demographically that: children whose fathers were in professional or managerial positions were significantly more likely to attend traditional (7- and 5-year) schools ($F(3,508)=16.1698$; $p<0.00$); pupils taking science courses were more likely to attend 7-year schools, arts courses to attend 5-year schools, and pre-technical and craft courses to attend senior comprehensive schools ($F(3,558)=77.4197$; $p<0.00$); there were no birth placement or sex differences in the type of school attended or within-class quartile rank attained.

Apparatus: A search of the literature had already found that achievement motivation, as characterized in 'developed' countries, was evident in Trinidad (Mischel, 1961). The search also noted that the traditional thematic apperception test took much time and problems of reliability in non-Western cultures arose. Smith (1973) constructed a new instrument to meet the mentioned criticisms (see Appendix). The instrument is "a ten-item scale rated on a true-false scale. The scale is balanced, has high validity, and a satisfactory reliability (split half consistency coefficient of .56). The test has been known to correlate significantly positively with other measures of need achievement and related measures" (Furnham & Rose, 1987, p. 564) including the PWE (Mirels & Garrett, 1971). Smith's measure has been used in the UK (Clarke & Youngman, 1987), Australia (Jardine & Winefield, 1984), and tested for its validity and reliability in developing countries (Opolot, 1977).

Results

Analysis of scores obtained on the Smith questionnaire showed a mean of 5.753 and a standard deviation of 1.522. These scores compare well with UK results (see Clarke & Youngman, 1987). Reliability was good (Cronbach alpha = 0.505). Results also correlated significantly with the PWE scale.

Analyses of variance (two- and three-way) tested for differences due to personal and systemic factors. Personal results showed no significant differences due to birth position, maternal occupation, sex, religion or attainment within class. Significant differences found included: father's occupation ($F_{5,494}=2.503$; $p<0.05$)--children whose fathers were in

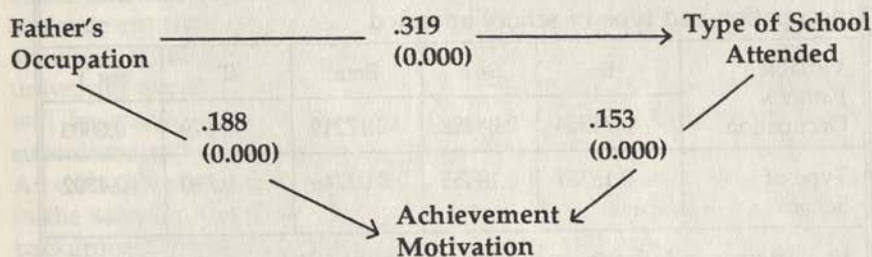
managerial occupations scored higher than those in skilled, semi-skilled and unskilled occupations; type of school attended ($F_{2,556}=6.732$; $p<0.001$)--those attending 7-year schools scoring highest followed by 5-year and senior comprehensive; and management (church or government) of school type ($F_{2,556}=9.379$; $p<0.001$)--those attending the traditional, church-run schools scored highest (6.17), followed by traditional government-run schools (5.65), and government-run senior comprehensive schools (5.39). No significant difference was found concerning actual subject studied. Collapsing subject studied into academic (arts/humanities and science) versus vocational (pre-technical and craft) categories showed a significant difference ($F_{1,556}=3.6$; $p<0.05$)-- academic pupils scored higher than vocational. There were no significant interactions between factors.

Selective analyses questioned whether these findings were characteristic of coeducational schools only, traditional schools only, and whether general social class differences were characteristic of within individual school scores as well. Within their coeducational schools, boys and girls scored approximately the same in achievement motivation and significant paternal occupation differences were evident. Within the traditional 5- and 7-year schools an apparent 'equalizing' function took place. There were no significant one-way or two-way differences due to father's occupation, subject studied or other personal and systemic variables. A further analysis tested whether achievement motivation scores were affected by type of school attended for pupils of working class and middle class parentage separately; no significant differences were found.

A simple model for path analysis was constructed (see Figure 1) which assumed that father's occupation was the significant factor affecting both school attended and achievement motivation. The figure shows strong and significant correlations: 1) between father's occupation and type of school attended (.319); 2) between father's occupation and achievement motivation (.188), and 3) between type of school attended and achievement motivation (.153).

Figure 1:

**Path Analysis With Correlations Between Major Contribution Variables in Achievement Motivation
(Level of significance in brackets)**



Regressions were undertaken among these three variables (see Table 1). Only father's occupation explained a significant amount of the achievement score variance in the full comparison. In the regression between father's occupation and type of school attended, type of school attended accounted for a significant amount of the variance in father's occupation. Thus, there is good cause to believe that: father's occupation is the basic explanatory factor in achievement motivation; it affects motivation directly and indirectly through entry into and attendance at a particular type of school.

Table 1
Explanation of Regression for Path Analysis

a: Variance in achievement motivation contributed by father's occupation and type of school attended					
Variable	B	St B	Beta	T	Sig T
Father's Occupation	-0.31364	0.08428	-0.17219	-3.629	0.0003
Type of School	0.15361	0.19455	0.03746	0.790	0.4302
b: Variance in father's occupation contributed by type of school attended					
Variable	B	St B	Beta	T	Sig T
Type of school	-0.71741	0.09759	-0.31869	-7.351	0.0000

Discussion

Previous studies of achievement motivation have shown distinct effects of personal and systemic factors. These studies take little account of the comparative influence of these factors, especially in developing countries. Classical interpretation of achievement motivation by McClelland posed that personality and upbringing practices were the predominant influences. Cultural and cross-cultural critiques placed greater emphasis on the role of society and social structure on the quality and occurrence of achievement motivation.

Results in Trinidad and Tobago show that father's occupation was the only 'personal' variable associated with a significant difference in achievement motivation scores. Parental occupation was also a main factor identified in selection of secondary school type; the main systemic factor in the variation of achievement motivation scores. The hierarchical structure of the secondary school system paralleled highly stratified achievement scores. Pupils who scored highest on achievement motivation attended the traditional, church-managed schools and studied arts and science subjects. Interestingly, upon entry into one of these elite

schools differences due to parental occupation disappeared; a democratizing process at the highest level. Paternal occupation appears to set life chances for the pupil both in attitudes toward motivation and school placement.

These findings relate well to the existing international literature on achievement motivation. Hierarchical stratification of the type of school attended coincides with reported stratified differences in type of university attended in Turkey (Neel et al., 1986). A longitudinal study will be necessary to answer whether these are characteristics of the subculture generally or whether school attended is the determining factor. As with other international studies there were no sex differences found in the sample. The lack of sex differences is not explained by religious background (which may prevent women's full participation in education), nor by birth order (which tends to discriminate in favour of first-born males in Western countries). Given the high levels of female academic achievement in Trinidad and Tobago (Jules & Kutnick, 1990) one might expect female supremacy in achievement motivation scores, yet this was not found.

The cumulative results show differences in the distribution of achievement motivation that characterize a stratified educational system. Two distinct types of results can be commented upon:

- 1) achievement motivation was not associated with the assessment outcomes that might have been expected; a finding that differs from some international studies (Institute of Development Studies, 1987). If children are selected for secondary school placement in the final year of their primary schooling, this may be the point of academic and motivational differentiation. Drawing upon Castenell's (1984) assertion that achievement motivation in various cultures and subcultures may be a collective responsibility, the Trinidad collectivity may be found at the level of type of secondary school attended.
- 2) achievement motivation characterized by the stratified school system must be seen to relate to existing examination results. Common Entrance Examination results (taken at 11 years) are the basis of entry into the stratified secondary schools. Within these secondary schools, 5th form pupils attending traditional schools

attain higher grades and more examination passes than those in senior comprehensive schools. 'Access' to secondary education does not necessarily allow 'equal opportunities' in motivation and attainment in education, especially if there is the persistence of a colonial-style educational system. On the other hand, the 'cultural' action of attending a high status, traditional school does overcome and 'equalize' motivational opportunity among pupils from the full range of parental background; a democratization among the elite.

Appendix

Smith's Quick Measure of Achievement Motivation

Name: _____ Sex: _____
Date: _____ Age: _____

INSTRUCTIONS

Read each of the following statements. If you think that it is true underline the TRUE. If you think that it is false underline the FALSE.

Please do not miss out any statements. Even though it may be difficult, you must decide one way or the other.

- | | | | |
|-----|------------------------------------------------------|------|-------|
| 1. | I am not clear about the instructions for this test. | TRUE | FALSE |
| 2. | When I was young I enjoyed the feeling of accom | TRUE | FALSE |
| 3. | The feeling of a job well done is a great | TRUE | FALSE |
| 4. | I don't think I'm a good trier | TRUE | FALSE |
| 5. | I would sooner admire a winner than win myself | TRUE | FALSE |
| 6. | If it's worth doing, it's worth doing well | TRUE | FALSE |
| 7. | Failure is no sin | TRUE | FALSE |
| 8. | Incentives do more harm than good | TRUE | FALSE |
| 9. | In an unknown situation it doesn't pay to be | TRUE | FALSE |
| 10. | I dislike red tape | TRUE | FALSE |
| 11. | I work best when I have a job that I like | TRUE | FALSE |
| 12. | It's never best to set one's own challenges | TRUE | FALSE |
| 13. | I don't care what others do, I go my own way | TRUE | FALSE |
| 14. | Even a good poker player can't do much with a poor | TRUE | FALSE |
| 15. | Modern life isn't too competitive | TRUE | FALSE |
| 16. | You can try too hard sometimes, it's best to let the | TRUE | FALSE |
| 17. | Most people want success because it brings respect | TRUE | FALSE |

Please check back to make sure that you haven't missed any out.

References

- Cassidy, T., & Lynn, R. (1991). Achievement motivation, educational attainment, cycles of disadvantage, and social competence: Some longitudinal data. *British Journal of Educational Psychology*, 61, 1-12.
- Castenell, L. (1984). A cross cultural look at achievement motivation research. *Journal of Negro Education*, 53, 435-43.
- Clarke, M. J. (1985). GCE performance of FE and 6th form college students. *Educational Research*, 27, 169-178.
- Clarke, M. J., & Youngman, M. B. (1987). Dispositional associates of GCE performance in 6th form and further education college students. *British Journal of Educational Psychology*, 57, 191-204.
- Entwhistle, N. J. (1968). Academic motivation and school attainment. *British Journal of Educational Psychology*, 38, 181-188.
- Eyo, I. E. (1984). Relationships between need to appear desirable, achievement motivation and attribution of academic outcomes in secondary school students. *Psychological Reports*, 55, 247-252.
- Furnham, A., & Rose, M. (1987). The relationship between the wealth, welfare, work and leisure ethic. *Human Relations*, 40, 561-574.
- Harvey, C. (1988). Educational change and its impact on national development in Trinidad and Tobago, 1962-1987. In S. Ryan (Ed.), *Trinidad and Tobago: The independence experience 1962-1987* (pp. 345-380). St. Augustine: Institute of Social and Economic Research.
- Institute of Development Studies. (1987). *Why do students learn: A six country study of student motivation*. Brighton: IDS Publications. (IDS Research Reports; 17).
- Jardine, E., & Winefield, A. H. (1984). Performance differences following exposure to predictable and unpredictable noncontingent outcomes in high and low achievers. *Journal of Research in Personality*, 18, 508-521.
- Jules, V., & Kutnick, P. (1990). Determinants of academic success within classrooms in Trinidad and Tobago: Some personal and systemic variables. *Educational Studies*, 16, 217-235.
- McClelland, D. C. (1961). *The achieving society*. New York: Van Nostrand.
- McClelland, D. C., Atkinson, J. W., Clark, R. A., & Lowell, E. L. (1953). *The achievement motive*. New York: Appleton-Century-Croft.
- Maehr, M. L. (1974). *Sociocultural origins of achievement*. Monterey, CA: Brooks-Cole.
- Maehr, M. L., & Nicholls, J. G. (1980). Culture and achievement motivation: A second look. In N. Warren (Ed.), *Studies in cross cultural psychology* (vol 2, pp. 221-269). New York: Academic Press.
- Mirels, H., & Garrett, J. (1971). The Protestant ethic as a personality variable. *Journal of Consulting and Clinical Psychology*, 36, 40-44.

- Mischel, W. (1961). Delay of gratification, need for achievement and acquiescence in another culture. *Journal of Abnormal and Social Psychology*, 62, 543-552.
- Neel, R. G., Tzeng, O. C., & Baysal, C. (1986). Need achievement in a cross-culture contact study. *International Review of Applied Psychology*, 35, 225-229.
- Opolot, J. A. (1977). Reliability and validity of Smith's quick measure of achievement motivation scale. *British Journal of Social and Clinical Psychology*, 16, 395-396.
- Osuji, R. (1987). *The effect of socio-economic status on the educational achievement of Form V students in Trinidad*. St. Augustine: Institute of Social and Economic Research.
- Payne, M. (1986). Importance and attainment of educational objectives in a developing country: Views from secondary teachers and students in Barbados. *International Journal of Educational Development*, 6, 159-169.
- Smith, J. M. (1973). A quick measure of achievement motivation. *British Journal of Social and Clinical Psychology*, 12, 136-143.
- Torki, M.A. (1985). Achievement-motivation in college-women in an Arab culture. *Psychological Reports*, 56, 267-271.
- Trinidad and Tobago. Ministry of Education. (1985). *Education plan 1985-1990*. Port of Spain: Ministry of Education.
- Turner, J. (1977). *Psychology for the classroom*. London: Methuen.
- Weber, M. (1930). *The Protestant ethic and the spirit of capitalism* (T. Parsons, Ed. and Trans.). New York: Scribner.