



UNIVERSITI PUTRA MALAYSIA

**ECOLOGICAL DETERMINANTS OF ACADEMIC ACHIEVEMENT:
BACKGROUND FACTORS, MATERNAL PRACTICES AND
ADOLESCENT ACADEMIC SELF-ESTEEM**

**AIDA BT. ABDULLAH
@
SIM BIOW LUAN**

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**AIDA BT. ABDULLAH
@
SIM BIOW LUAN**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfillment of the Requirements for Degree of Master of Science**

March 2002



**Abstract of the thesis presented to the Senate of Universiti Putra Malaysia in
fulfillment of the requirement for the degree of Master of Science**

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Chairman: Dr. Rumaya Juhari

Faculty: Human Ecology

The current study attempts to address the paucity of research in examining the combined effects of adolescent and maternal background factors, maternal parenting influences as well as the inherent adolescent academic self-esteem (in particular the self-efficacy and the locus of control orientation) on the academic achievement of the adolescent. From an ecological perspective, demographic data on the adolescent and his mother elucidated further the nature of the parent-child dyad. Parenting attributes of demandingness and responsiveness were respectively used to gauge the levels of maternal control and monitoring, and maternal warmth. A third parenting dimension, involvement (Paulson, 1994) was added to detect the degree of maternal interest and participation in the academic pursuits of the adolescent. The information pertaining to the perceptions of parenting, self-efficacy and locus of control were gathered using a group-administered questionnaire.

The sample of 280 respondents (145 boys and 135 girls) from intact families were chosen to represent adolescents studying in non-residential schools in the Kuala Lumpur region. Those selected were from two age cohorts (140 Form Two and 140 Form Four students).

In the present study, it was of noteworthy importance to state that self-efficacy and locus of control orientation of the adolescent possessed cogent influences on achievement. In addition, the family size and the age of the adolescent also significantly predicted the academic achievement of the adolescent. In essence, as it had been established that the self-perceptions and age of the adolescent as well as family size produced potent effects on achievement, these findings have far-reaching consequences on efforts aimed at enhancing the academic success of adolescents.

**Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk Master Sains**

**PENENTU EKOLOGIKAL BAGI PENCAPAIAN AKADEMIK:
FAKTOR LATAR BELAKANG, AMALAN KEIBUAN DAN ESTIM DIRI
AKADEMIK REMAJA**

oleh

AIDA BT ABDULLAH

Mac 2002

Pengerusi: Dr. Rumaya Juhari

Fakulti: Ekologi Manusia

Kajian ini cuba mengisi kekosongan penyelidikan yang menelusuri gabungan kesan daripada faktor latar belakang remaja dan ibu, pengaruh amalan keibubapaan ibu termasuk juga estim diri akademik semula jadi remaja (terutamanya efikasi-diri dan orientasi lokas kawalan) terhadap pencapaian akademik remaja. Dari perspektif ekologi, maklumat demografi tentang remaja dan ibunya menjelaskan lagi jenis perhubungan antara ibu dan anak. Sifat keibubapaan seperti "demandingness" dan "responsiveness" masing-masing mengukur tahap kawalan dan pemantauan keibuan, dan perapatan keibuan. Dimensi keibubapaan yang ketiga iaitu penglibatan (Paulson, 1994), ditambah agar dapat mengesan tahap minat dan penyertaan ibu dalam kegiatan akademik remaja. Maklumat tentang persepsi terhadap keibubapaan, efikasi-diri dan juga lokas kawalan diperoleh melalui soal selidik yang dikendalikan secara berkumpulan.

Sampel ini yang mengandungi seramai 280 orang responden remaja (145 lelaki dan 135 perempuan) keluarga lengkap yang sedang belajar di tiga buah sekolah harian di sekitar Kuala Lumpur. Mereka yang terpilih adalah daripada dua kumpulan umur yang berbeza (140 pelajar Tingkatan Dua dan 140 pelajar Tingkatan Empat).

Dalam kajian ini, didapati bahawa efikasi diri dan orientasi lokas kawalan remaja mempunyai pengaruh yang kuat terhadap pencapaian. Tambahan pula, saiz keluarga dan umur remaja juga berupaya meramal pencapaian akademik remaja. Namun pada dasarnya, oleh kerana pengaruh persepsi diri dan umur remaja serta keluarga memberi pengaruh yang ketara terhadap pencapaian, dapatan kajian ini akan memberi kesan yang meluas terhadap usaha ke arah mempertingkatkan lagi kejayaan akademik remaja kelak.

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AIDA BT. ABDULLAH

This thesis submitted to the Senate of Universiti Putra Malaysia has been accepted as fulfilment of the requirement for the degree of Master of Science.

**AINI IDERIS, Ph.D.
Professor
Dean of Graduate School
Universiti Putra Malaysia**

Date:

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CHAPTER 1

INTRODUCTION

As children enter the adolescent years, landmarked by the abrupt shift from the relatively sheltered confines of the elementary school to the more complex milieu of the secondary school, they struggle to adjust to the novel demands and expectations of an increasing number of school-related as well as personal goals. From the developmental perspective, by taking into account not only the biological and physiological changes that adolescents experience but differences in the environmental context, there exists an issue of stability in adolescence.

Keeping in mind that adolescence signifies a period of preparation for development and maturity in the personal, interpersonal, and social domains, the progress of adolescents toward adulthood is constantly monitored and measured by several indicators. Conceivably, as indicators such as academic achievement and developmental achievement (or psychological maturity) become increasingly critical in determining later educational and occupational success, adolescents often face heightened levels of emotional stress which in turn affects their ability to make realistic evaluations of their own cognitive competence. In light of renewed importance of the looking glass self during adolescence, reliance on the judgement of others in evaluating the self become increasingly eminent.

The evaluative feedback, which the adolescent receives from his¹ social environment elicits a variety of reactions, which ultimately affects his psychological well being and his performance in the academic realm. Cumulatively, it is these sources of information that the adolescent utilizes that may cloud judgements of self-competence and self-worth. So far, a substantial body of research has given a priori attention to the plummeting self-esteem experienced by adolescents, attributing it to contextual correlates including familial influences (Mandara & Murray, 2000; Hertz & Gullone, 1999). Although parallel to these studies, there has been an increased interest in the relationship between familial influences and achievement (Rozumah & Luster, 1998; Lam, 1997); a preponderance of recent works converges on parental influences, ignoring the adolescent characteristics of individuality.

The current study attempts to address the paucity of research in this area by exploring the interplay between familial influences, in particular the maternal characteristics and the adolescent characteristics on his academic self-esteem, a facet of self-esteem pertinent to cognitive development. Consistent with Belsky's (1984) model of competent parenting, demographic data on the mother and the adolescent will illuminate the understanding of the dynamic nature of the parent - child dyad.

¹ The male reference to the adolescent in this study is used to represent both gender.

Grounding in Belsky's contention that "the characteristics of the children seem to shape the quantity and quality of the parental care they receive" (p.86), this study also hopes to highlight any pronounced differences in parenting practices when predisposed itself to certain adolescent personality traits simply because of the order and placement of the adolescent within the family ranks. Prior research on birth order focussed almost exclusively on academic achievement (Travis & Kohli, 1995; Romeo, 1994; Goh, 1994; Cherry, 1990), personality (Steward, 1994; Jowell, 1994) or self-esteem (Lee, 1995; Benton, 1992; Gates, Lineberger, Crocket, & Hubbard; 1988). However, scant attention in research relating parenting practices or the more global parenting styles to birth order (Musun - Miller, 1991) evidenced the need for further investigation in this area.

Before any endeavour to address this shortfall, the question of distinguishing between global parenting styles and specific parenting practices needs to be answered. While Steinberg, Elmen and Mounts (1989) viewed parenting styles as constellations of distinct parenting practices, later assertions by Darling and Steinberg (1993) claimed that a parent's global parenting style only affects a child's behaviour and characteristics whereas specific parenting practices have a direct influence on the child. They attested that parenting practices act as mechanisms through which parents attempt actively to socialize their children. Results that derive from global parenting style studies then, cannot help the researcher to pinpoint the parenting characteristic that is associated with higher (or lower)

scholastic performance (Linver & Silverberg, 1997). Taken together, the results of the studies suggest the use of parenting practices as a better tool for identifying parental variables necessary to predict adolescent outcomes.

While sound studies (Fletcher, Steinberg & Sellers, 1999; Paulson, Marchant, & Rothlisberg, 1998; Bogenschneider & Small, 1997) have congruously found significant etiological ties between parenting practices and achievement, few (Mandara & Murray, 2000; Hertz & Gullone, 1998) ever probe into the connections existing between parenting practices (or parenting styles) and the self-esteem of adolescents. In addition, research on the parental correlates of the academic component of self-esteem is still at the embryonic stage.

The pursuit of research in this direction is further warranted as Rosenberg (1979) highlighted the discrepancy of assessing an individual's attitude toward his specific characteristics and then summing these responses in order to arrive at global self-esteem score; a practice adopted in many studies. In the studies conducted by Bierer and Harter (1981), the overall results on the relationship between achievement and self-evaluation suggest that achievement impact self-evaluation, provided that judgements focus on the academic realm. By taking into consideration these findings, the validity of efforts in comprehending causal relationships between self-esteem and achievement will be deeply enhanced if such studies concentrate only on the academic realm of self-esteem. Proceeding

along these lines of reasoning, it is then befitting to make the association of scholastic achievement with academic self-esteem rather than with the global aspect of self-esteem. By zeroing in on two primary elements in the academic self-esteem; that is self-efficacy and the locus of control orientation, the wealth of knowledge generated that is related to academic cognition and behaviour will enlighten researchers on the process of attaining educational success.

1.1 Statement of the Problem

The metropolitan lifestyle in a city like Kuala Lumpur can be very alluring for an adolescent who is barely out of his troubles in coping with the stressors of his age. With his academic performance as measure of his coping skills in life, he is judged irrespective of the contextual circumstances in which he is raised. While the media reports of academic excellence amongst many urban adolescents, it did not fail to highlight the ugly side of a good number of them. What then causes these adolescents differ so distinctly? An investigation into the primary social environment provided by their families as well as the psycho-cognitive makeup of these adolescents will probably elucidate the understanding of the behaviour of urban adolescents and its consequential effect on their achievement.

Principally, the main purpose of the study is to determine the liaisons between the two dimensions of the academic self-esteem of adolescents and ecological factors