

SEX DIFFERENCES IN EDUCATIONAL ENCOURAGEMENT AND ACADEMIC ACHIEVEMENT¹

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Summary.—Sex differences in educational encouragement and their predictive-ness of academic achievement were examined among 442 secondary school students (M age = 13.2 yr., SD = 1.9). Education-related encouragement received from mothers, fathers, friends, and teachers was assessed. Academic achievement was based on student self-reports and grades. Female adolescents reported receiving statistically significantly more educational encouragement from their mothers, fathers, friends, and teachers than did male adolescents. In regression, sex and educational encouragement from parents, friends, and teachers were found to be significant predictors of academic achievement.

Academic accomplishments have become key criteria for judging the potential capabilities of an individual. Efforts devoted to improving student achievement and underscoring the value placed on academic credentials are among the most successful strategies for supporting the attainment of diplomas and the reduction of educational inequities. Previous studies have examined the connections between academic achievement and several factors that likely affect success, including motivation, parental involvement (Steinberg, Lamborn, Dornbusch, & Darling, 1992; Fan & Williams, 2010; Othman & Leng, 2011), encouragement (Evans, 1997), encouragement with respect to education in particular (Catsambis, 1998; Ries, Voorhees, Gittelsohn, Roche, & Astone, 2008), and numerous other variables (Keef, 1992; Minnaert & Janssen, 1992), including the contributions of families, social networks, and peers (Collins, Moles, & Cross, 1982; Larson, 2000; Ryabov, 2011).

Dreikurs (1971) suggested that the ability to encourage a child constituted the most important element in raising a child. Experiences with receiving encouragement are important contributors to the ability to interact successfully in both personal and professional domains (Dinkmeyer & Losoncy, 1996). Evans (2005) described encouragement as positive feedback directed primarily at the effort or improvement demonstrated by an individual rather than at the outcome *per se*, this focus on process over content is thought to promote self-worth, regardless of the actual results of a particular endeavor. Although many studies have focused on

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the effect of parental encouragement and involvement on the academic achievement of adolescents (Steinberg, *et al.*, 1992; Kao, 1995), adolescents may receive educational encouragement from other sources, such as teachers and friends. Moreover, most studies have examined the involvement and encouragement by the parents of students in elementary schools (Milne, Meyers, Rosenthal, & Ginsburg, 1986), but have neglected the role of other family members and the role of encouragement among students in secondary school. Moreover, the previous focus has been largely on test scores, and thus unduly emphasized outcomes over effort in students' perceptions of their academic achievement.

Prior studies have indicated the benefits of parental engagement in academic outcomes (Lee, 1994; Domina, 2005; Jeynes, 2005). Moreover, parents specifically contribute to their children's success by such actions as helping with homework, guiding students in their choice of courses, and implicitly and explicitly encouraging school success by setting and maintaining high standards. The role of parental encouragement has been shown in research based on the Wisconsin Status Attainment Model (e.g., Sewell & Hauser, 1980), which found that the connection between children's academic success and socioeconomic status is mediated by differences in parental involvement.

Understanding whether educational encouragement contributes to academic success is important not only to those who study adolescent socialization in general, but also to educators interested in the development of programs to enhance the school performance of adolescents. The effects of sources of encouragement for pursuing higher education have been relatively neglected. Thus, the present research was designed to improve understanding of the effects of different sources of educational encouragement on adolescents' perceptions of their academic achievement. For this purpose, educational encouragement was categorized into four types: encouragement from mothers, encouragement from fathers, encouragement from friends, and encouragement from teachers. In this way, the different effects of each component were identified and compared. The following hypotheses were addressed:

Hypothesis 1: There will be significant differences among male and female students on educational encouragement and academic achievement.

Hypothesis 2: Sex and educational encouragement will be strong predictor of academic achievement.

METHOD

Participants and Procedure

The study was conducted in 2011 among 442 adolescents (197 boys, 245 girls, 12 to 17 years of age) who were randomly selected from a few

public secondary schools in Federal Territory Kuala Lumpur; 374 (84.6%) of the participants lived in urban areas, and 68 (15.4%) lived in rural areas. Of these 442 adolescents, 354 (80.1%) were Chinese, 64 (14.5%) were Malay, and 17 (3.8%) were Indian. The remaining seven adolescents belonged to other races.

Prior to data collection, consent from all participants and permission from the principals of the secondary schools were obtained. Participants were briefly verbally informed about the purpose of the study and how to respond to the questionnaire. To minimize any potential perceived bias, participants were asked to complete the questionnaire anonymously and were informed that the data would be used only for the purpose of research. Participants generally took 15 minutes to complete the questionnaire.

Measures

Academic achievement.—The primary dependent variable was the students' self-reported academic achievement based on responses to the following question: "How would you rate your achievement thus far?" Participants used a scale of 1: Very poor to 5: Very good.

Educational Encouragement Scale.—The Educational Encouragement Scale (Dreikurs, Grunwald, & Pepper, 1982; Evans, 1995; Gloria & Rodriguez, 2000) consists of 22 mixed items of two educational encouragement scales measuring four sources of educational encouragement provided by fathers (6 items), mothers (6 items), friends (5 items), and teachers (5 items), for example, "I think you can do it." The 5-point rating scale had anchors of 1: Strongly disagree to 5: Strongly agree. Scores on each category of support were added. Possible range of scores was from 22 (low educational encouragement) to 110 (high educational encouragement). Thus, higher scores indicated more educational encouragement. The scale showed good internal consistency, as evidenced by an alpha coefficient of .89 in the present study.

Data Analysis

Student *t* test, multivariate analysis of variance (MANOVA), and regression analysis were used to analyze the data.

RESULTS

About half of the sample perceived their academic achievement as average (51.6%; boys = 19.4%, girls = 32.2%). The percent of adolescents describing their academic achievement as good (22.3%; boys = 9.0%, girls = 13.3%) was higher than the proportion describing their academic achievement as poor (13.2%; boys = 8.1%, girls = 3.1%) or very good (8.4%; boys = 2.2%, girls = 6.2%). A very small percentage of adolescents perceived their academic achievement as very poor (4.6%; boys = 3.9%, girls = 0.7%).

TABLE 1
SEX DIFFERENCES IN SCORES ON EDUCATIONAL ENCOURAGEMENT
FROM MOTHERS, FATHERS, FRIENDS, AND TEACHERS

Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>	Cohen's <i>d</i>
Educational encouragement from mother						
Boys	244	14.41	4.12	4.36	< .01	-0.29
Girls	194	15.61	4.02			
Educational encouragement from father						
Boys	244	15.34	4.12	4.35	< .01	0.24
Girls	194	14.59	5.26			
Educational encouragement from friends						
Boys	244	11.72	4.16	4.32	< .01	-0.39
Girls	194	13.34	4.00			
Educational encouragement from teachers						
Boys	244	12.82	4.30	4.26	< .01	-0.16
Girls	194	13.50	4.32			

Note.—Dependent variable is academic achievement. Wilks' Lambda = .039, $F_{2,422} = 8.89$, $p < .001$.

The results of an independent-samples *t* test in Table 1 revealed significant differences in the educational encouragement received by male and female adolescents from their fathers, mothers, friends, and teachers. Such differences also appeared with respect to the educational encouragement received from their fathers by males and females. Additionally, female adolescents reported significantly higher educational encouragement from friends than did male adolescents. Similarly, female adolescents reported more educational encouragement from teachers than did male adolescents. These results suggest that female adolescents received more educational encouragement than did male adolescents from mothers, fathers, friends, and teachers.

As seen in Table 1, significant multivariate effects were obtained for academic achievement ($F_{2,422} = 8.89$, $p < .001$, Wilks' lambda = .04), indicating that students' sex significantly influenced academic achievement

TABLE 2
PREDICTORS OF ACADEMIC ACHIEVEMENT: SEX AND EDUCATIONAL
ENCOURAGEMENT FROM MOTHERS, FATHERS, FRIENDS, AND TEACHERS

Model	B	SEM	Standard- ized β	<i>t</i>	<i>p</i>
Construct					
Sex	-0.06	.02	.22	-3.19	< .001
Educational encouragement from mothers	-0.06	.02	-.22	-3.15	.002
Educational encouragement from fathers	0.01	.02	.06	0.88	.38
Educational encouragement from friends	0.02	.02	.07	1.21	.23
Educational encouragement from teachers	-0.004	.01	-.03	-0.45	.65

among secondary students. In Table 2, the beta weights indicate relative contributions of each of the predictor variables on the prediction of students' academic achievement; sex and educational encouragement from mothers, fathers, teachers, and friends were found to be the significant predictors of perceived academic achievement.

DISCUSSION

The present study sought to clarify and expand the existing knowledge about the role of educational encouragement from mothers, fathers, friends, and teachers on academic achievement among students in secondary schools. The results of this study revealed that nearly half of the adolescents perceived their academic achievement to be average, and a small percentage of them classified their academic achievement to be very good. The results showed that female adolescents experienced more educational encouragement than did male adolescents from their mothers, fathers, friends, and teachers. Female adolescents preferred to speak with their mothers, whereas male adolescents are inclined to favor their friends in discussing the issue (Economic and Social Commission for Asia and the Pacific, 2002).

The results also revealed that effectiveness of the predictor variables of gender and educational encouragement from mother, father, friends, and teachers in predicting students' academic achievement. It was also found by Hammer (2003) that home environment is as important as school in predicting achievement outcome. Therefore, overall encouragement from family, teachers, and friends plays a very important role in academic achievement (Wang, Wildman, & Calhoun, 1996).

Approaches that rest on mutual respect and dignity focus on strengths rather than weaknesses and incorporate encouragement as a necessary component of a stimulating learning environment that leads to achievement. Indeed, the role of encouragement in fostering academic achievement has gained wider recognition in recent years (Codjo, 2007; Muol, 2010). Parents and teachers who value social interest and academic achievement have tended to focus on strengths, on what's "right" with students rather than on weaknesses or what is "wrong." Teenagers need to know that their efforts are more important than the outcomes and that trying is important, irrespective of the objectively measured success, for example, effort promotes gaining the trust of others and adapting to learning situations.

Most research has focused on the positive effects of parental encouragement on students' achievement, frequent contacts with school or parent-teacher conferences (Muller, 1993; Lee, 1994), and frequent talks with children (Astone & McLanahan, 1991) to promote academic achievement. There is need, in future, for cross-cultural studies to assess the applicability of educational encouragement to different cultures. More research is

necessary to verify the measures used in this study, although it appears to be a reliable instrument. In addition, the study was conducted in the public schools and it might be that students in private schools would have different perspectives.

Conclusion

In this era many adolescents feel discouraged, without hope, and unable to make efforts for success. As a result, their academic achievement suffers. Encouragement is desperately needed to improve achievement. Current findings indicate that educational encouragement from parents, friends, and school teachers facilitate academic achievement.

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