

Family involvement and academic self efficacy as a factors in children's academic engagement

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Abstract

The main goal of the present study is to examine the effect of family involvement and academic self-efficacy toward children academic engagement. Sample of this research 97 children from 5rd to 6th grade of elementary school. Data-collection Tools used were questionnaire form of academic engagement scale (35 items), family involvement scale (28 items), and academic self-efficacy scale (40 items). Based on the analysis of research data, it was found that the obtained R square value of 0.35 with a significance level of p.

Keywords: academic engagement, family involvement, academic self efficacy.

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Introduction

Academic engagement has a long-term impact on academic achievement (Finn, 2014). Students who actively participate in learning activities in the classroom to have higher academic achievement (Connell, Spencer, & Lawrence, 1994; Finn & Rock, 1997; Skinner, Wellborn, and Connell, 1990; Ryan, 2000). Finn (2014) concluded that students who drop out of school not occur suddenly, but it is a long process and the culmination of the failure of students to participate and be actively involved in academic activities in the classroom. Previous researchers consider that academic achievement and potential dropouts are influenced by the level of students' academic engagement. Therefore, efforts to improve academic achievement and reduce the potential for dropouts can be done by knowing the factors that affect academic engagement.

Previous research has found major predictor of academic success is intelligence (Duckworth, Peterson, Matthews & Kelly, 2007). Intelligence has been shown to affect a student's academic achievement seen from the average value of the school, but not all children with high intelligence have high academic achievement. There are other factors that also have a great influence that perseverance and hard work (Duckworth, et al, 2007). Numerous studies have been conducted to determine the factors that affect academic engagement. A number of studies emphasize internal factors and attributes of the student as a predictor of academic engagement (Martin & Liem, 2010; Reschly, Huebner, Appleton & Antaramian, 2008; Elmore, 2010), while a number of other studies further emphasize the contextual factors that schools, teachers and peers (Dotterer & Lowe, 2012; Martin & Liem, 2011; Perdue, Manzeske & Estell, 2009; Reyes, Brackett, Rivers, White & Salovey, 2012; Klem and Connell, 2004).

Contextual factor of academic engagement with the most attention of researchers is the teacher (Frederick et al, 2004, Roorda, et al, 2011). In addition to teachers, previous studies also showed that academic engagement is also influenced by parental social support, the level of parental income, and parental educational level (Furrer & Skinner, 2003; Wang & Eccles, 2012; Finn & Rock, 1997). In addition to teachers and parents, friends also proved influential in academic engagement. Positive social relationships with friends would increase active participation in learning activities (French & Conrad, 2001).

Although many studies have identified family influences on academic engagement, but previous studies only concentrate on family demographic characteristics, such as socioeconomic status. Clearly, the research findings have not been consistent, and there is a need for empirical research in order to understand fully the influence of the family on academic engagement.

Self-efficacy is key concept in the achievement motivation literature. Bandura defined self-efficacy as an individual's perceptions of his or her ability to perform adequately in a given situation. In this study, I focused to academic self-efficacy refers to an individual's belief (conviction) that they can successfully achieve at a designated level on an academic task or attain a specific academic goal (Bandura, 1997; Eccles & Wigfield, 2002).

The first goal was to examine a set of hypotheses about the link between family involvement and academic self-efficacy and academic engagement. Second, family involvement was expected to predict engagement apart from the effects of academic self-efficacy. Perceptions of self-efficacy, ability, academic competence, and control are robust self-system predictors of children's engagement in school and their eventual learning, academic performance, and achievement. If family involvement showed a unique effect on children's engagement apart from academic self-efficacy, it would establish family involvement as a basis of motivation in its own right. Third, I expected family involvement and academic self-efficacy to predict changes in children's engagement varians by gender.

Method

The sample for this study was 97 participants (51 girls and 46 boys) included children from fifth to sixth grades. Students completed self-report questionnaires administered by trained interviewers in three 45-minute sessions. In their normal classrooms, students marked answers to questionnaire items as they were read aloud by one interviewer; a second interviewer monitored understanding and answered questions. Each scale contained positively and negatively worded items. Composite scores were determined by calculating the average of the positive and negative items, reverse coding the negative items' average, and averaging the positive items' average with the reverse-coded negative items' average. Resulting scores ranged from 1 to 4, with higher scores indicating more of the respective construct.

Academic engagement

Students completed 35 self-report items tapping academic engagement. Academic engagement scale adapted from Engagement Versus Disaffection With Learning: Student-Report of Skinner, Furrer, Marchand & Kindermann (2008). Examples of items include in class, I work as hard as I can, When I'm in class, I participate in class discussions, When we work on something in class, I feel interested, When we work on something in class, I get involved. The results of the analysis of reliability test showed a fairly high level of reliability with an alpha value of 0,877.

Academic Self Efficacy

Students completed 40 self-report items tapping academic self-efficacy. Examples of items include Some kids are better than me in science, I am good in math, my parent proud of my academic achievement. The results of the analysis of reliability test showed a fairly high level of reliability with an alpha value of 0,804.

Family Involvement

Students completed 28 self-report items tapping family involvement. Examples of items include my parents explain and help me doing home work, my parents asked every day about my experiences in school, my parents check my homework if it has been completed, my parents gave me the spirit to be diligent school. The results of the analysis of reliability test showed a fairly high level of reliability with an alpha value of 0,761.

Descriptive Information

Table 1
Properties of Measurement Instruments

Measure	Number of items	α	M	SD
Academic Engagement	35	0,877	108.2371	13.25218
Family Involvement	28	0,761	86.13402	9.163593
Academic Self Efficacy	40	0,804	18.52577	5.418127

All analyses were performed using Stata 13. Table 1 contains means and standard deviations for all variables. Average scores for all variables were above the midpoint for their respective scales. For example, the mean score for family involvement was 86.13, which is above the midpoint for a scale ranging from 1 to 4. The children in this sample felt family involvement moderately high that means the family is involved in academic activities of children and make children more tied to academic activity in school.

Table 2
Correlations Among Central Variables

Variable	Academic engagement	Involvement	A.Self Efficacy
Academic engagement	1.0000	0.5949	0.2837
Family Involvement	0.5949	1.0000	0.3547
Academic Self Efficacy	0.2837	0.3547	1.0000

Correlations among variables can be found in Table 2. As expected, all correlations were positive and significant (at least $p \leq .01$). Family involvement and children academic engagement were moderately related ($r = 0.59$). Academic self efficacy and children academic engagement were low related ($r = 0.26$). Compared with academic self-efficacy, children’s reports of their family involvement were more highly correlated with children academic engagement.

Results and Discussions

This section presents the estimation results of model analysis of the relation of student’s academic engagement as an independent variable with two main dependent variables namely student’s academic self-efficacy and parent's involvement.

Self-efficacy Impact

This analysis is done to see the impact of our interest variable, level of student’s self-efficacy on student’s school engagement. The result can be seen in Table 3 below. In addition, the influence of some control variables will be used as well for robustness testing.

As shown in Table 3 column 1, it can be seen that in general, when two main dependent variables we mentioned earlier presence in the model, student's school engagement are indeed affected by the student's academic self-efficacy in the same direction way (positive relationship). The more their academic self-efficacy score the more the student's school engagement will be. But this relationship occurred not significantly.

According to the hypothesis, the relation of the direction of the student's self-efficacy again student's school engagement on all columns (1 through 4) is positive. Further more, we can see also that the magnitude of beta coefficient, how many the variation (increase or decrease) of 1 point of school efficacy score will change the school engagement score, varied smoothly. Interesting result in column 2 showed that, only when gender variable added into the model, the magnitude of beta coefficient varied little bit more than an others models (an other columns). Indeed, in this column (model), this magnitude showed as the biggest one.

Parents Involvement Impact

As shown in Table 3 columns 1, it can be seen that in general, when two main dependent variables we mentioned earlier presence in the model, student's academic engagements were indeed affected by the parent's involvement in the same direction way (positive relationship). The more their parents involve in their children's school activities either at home or school the more the student's school engagement will be. This direction term, strengthened by the strong significance fact of this relationship.

According to the hypothesis, the relation of the direction of their parent's involvement again, student's school engagement on all columns (1 through 4) is positive significantly. Further more, we can see also that the magnitude of a beta coefficient, how many the variation (increase or decrease) of 1 point of school efficacy score will change the school engagement score, varied smoothly. In addition, the significance level of this relationship was not turned into weakened at all even when several other variables included into the model also.

Table 3
Regression Results Examining Interactions Between variables

	Engagement (1)	Engagement (2)	Engagement (3)	Engagement (4)
Efikasi	0.295 (1.37)	0.336 (1.58)	0.221 (1.05)	0.264 (1.22)
Involvement	0.778 (6.09)***	0.788 (6.29)***	0.765 (6.23)***	0.789 (6.08)***
gender		4.822 (2.22)*	4.169 (1.93)*	4.068 (1.81)*
Mother's Education			3.462 (1.76)*	6.247 (2.65)**
Father's Education				-5.547 (2.43)**
_cons	35.736 (3.42)***	31.649 (3.04)***	31.355 (3.09)***	31.918 (3.01)***
R ²	0.35	0.38	0.42	0.44
N	97	97	91	84

p*<0.1; *p*<0.05 ; *** *p*<0.01

Gender Impact

However, when the observation data is split into two by the gender variables, male and female student, it can be seen that there are difference in academic engagement score between them significantly. In column (model) 2, when gender variable included into the model, it can be said that the female students are relatively more engaged to school than the male one.

The relation's direction of the gender status; female students again student's school engagement on all columns (2 through 4) concluded that female student are more engaged than male student significantly. Furthermore, we can see also that the magnitude of a beta coefficient, varied smoothly. In addition, the significance level of this relationship was not turned into weakened at all even when several other variables included in the model also. Furthermore, the next section will look at the role of the both of parents, mothers and father's education level on their children school engagement.

Father's Education Impact

As shown in Table 3 columns 4, it can be seen that student's school engagements are indeed affected by the father's education level. Surprisingly, this relation occurred in the conflicting direction way (negative relationship). The higher father's education level more the student's school engagement will be. Furthermore, this relationship occurred significantly also. We can see also that the magnitude of beta coefficient, how many the variation (increase or decrease) of 1 point of father's education level will affect (lower or higher) their children school engagement score significant enough.

Mother's Education Impact

As shown in Table 3 column 3, it can be seen that in general, student's school engagement are indeed affected by their mothers involvement in the same direction way (positive relationship). The higher mothers level of education the more the student's school engagement will be. In addition, this relationship occurred enough significantly. The findings of this study, taken together with other works on relationship representations, lead to the conclusion that family involvement, especially mothers with high level education background play an important role in children school engagement.

Consistent with the contention that students' feelings of connectedness or social support with parents, children who reported a higher sense of relatedness also showed greater emotional and behavioral engagement in school. Moreover, children's sense of family involvement made a unique contribution to their engagement apart from the effects of a strong self-system predictor of motivation, namely, student's academic self-efficacy.

According to the hypothesis, the relation of the direction of the mother's education level again, student's school engagement on all columns (3 through 4) is positive. Interesting result in column 4 showed that, when fathers education level variable added into the model, the magnitude of beta coefficient have bigger variation models (column 3 without fathers education included). Indeed, in column 4 (model), this magnitude showed as the biggest one, approximately two times to column 3 .

This surprising result could be interpretate that if assumed that both parents involve in their children studying process, students feels engaged twice with their mothers involvement compared to fathers involvement. So, how to explain this fact ? Unfortunately, our data couldn't enough to explain, why this phenomenon happened.

Study Limitations

Future research would benefit from more elaborated measures of academic engagement scale (35 items), family involvement scale (28 items), and academic self-efficacy scale (40 items). Nevertheless, scales with expanded item breadth and correspondingly improved psychometric properties would be useful in more clearly identifying the construct domain. One of the main limitations of this study was the measurement with the self-report questionnaire to three or all variables. Second limitation of the study was sample size. Although representative for the data analysis, the sample was homogeny. As demonstrated by the mean levels of the variables, the children in this study were generally doing well, reporting high family involvement, and showing constructive engagement and good school achievement.

Conclusions

This research suggests that a priority for schools should be building the quality of family involvement to improve academic engagement, and the end improves academic achievement. Research from the areas of parenting, suggests that qualities such as warmth, caring, sensitivity, dedication of attention and time, and emotional availability may be important to the development of secure relationships with adults. Children's enthusiasm, interest, happiness, and comfort during new and ongoing academic tasks seem to be shaped by their sense of social support from family. This study underscores the idea that the family involvement matters to children's participation and academic success (Birch & Ladd, 1996, 1997, 1998; Pianta, 1994).

In general, we found the positive impact of student's academic self-efficacy and parents involvement on student's school engagement. But their impact differ in the respondent, their parents personal and their parents involvement characteristics also. As an example, gender statue, specifically being as female, made their school engagement better.

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