



STUDENT DIFFERENCES IN ACADEMIC SELF-EFFICACY:

RELATING GENDER, GRADE LEVEL AND SCHOOL TYPE TO
SELF-EFFICACY

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Introduction

- “I don’t know...”, “It’s too hard!”, “Miss, I can’t learn that...” are but a few of the negative comments teachers often hear while instructing adolescents. What makes students feel this way? Who are they? And how do these feelings impact their learning and academic performance?



Statement of the Problem

- One of the purposes of this study was to investigate the differences in the levels of academic self-efficacy of Jamaican students as related to:
 - ▣ gender,
 - ▣ grade level
 - ▣ school type
- Another purpose was to explore the sub-constructs which are believed to underpin the academic self-efficacy beliefs held by the students.

Self-Efficacy

- Self-efficacy has been defined as the component of self-concept that concerns individuals' beliefs in their capabilities and competencies to handle a given task (Baron & Byrne, 1994).
- This psychological construct was developed by Alfred Bandura in 1977 as part of his social-cognitive theory of human behavior.

Self-efficacy perceptions affect:

- ▣ how one thinks – whether productively or self-debilitating; pessimistically or optimistically;
- ▣ how much effort one expends on an activity;
- ▣ how well one motivates oneself and perseveres in the face of challenges;
- ▣ how well one regulates one's thinking and behaviour; and
- ▣ one's vulnerability to stress and depression.

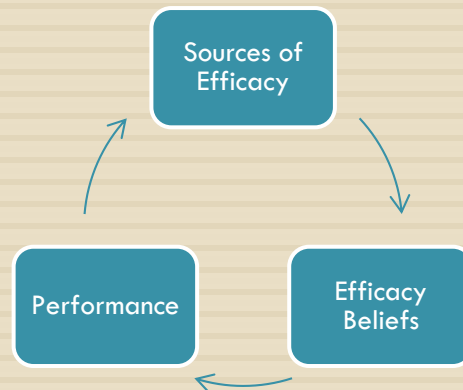
Academic Self Efficacy

- Academic self-efficacy is defined as the belief students hold about their academic capabilities.
- Students participate in activities in which they feel competent and avoid those in which they do not.
- Interestingly, having high self-efficacy can lead to stronger performance which is independent of actual ability.
- Therefore, students with high self-efficacy tend to outperform predicted expectations, while those with low self-efficacy often do not attain their true potentials (Klassam & Lynch, 2007)

Sources of Self-Efficacy

- Bandura (1997) also advanced the assertion that self-efficacy beliefs affect every aspect of a person's life. In school, these perceptions students hold about their academic capabilities were hypothesized to be acquired and modified through four main sources:
 - (1) past mastery experiences,
 - (2) exposure to and identification with significant models (vicarious experiences),
 - (3) access to verbal or self-persuasion and the support of respected others and
 - (4) experience of physiological and emotional arousal or stress reactions to task performance
 - (Bandura, 1994; Hampton & Mason, 2003).

These sources of self-efficacy continually and reciprocally interact with each other and thus contribute to the development of students' beliefs about their capabilities and academic potential and tell them how well they are learning and performing (Sewell & St. George, 2000).



Sub-Constructs of Academic Self-Efficacy

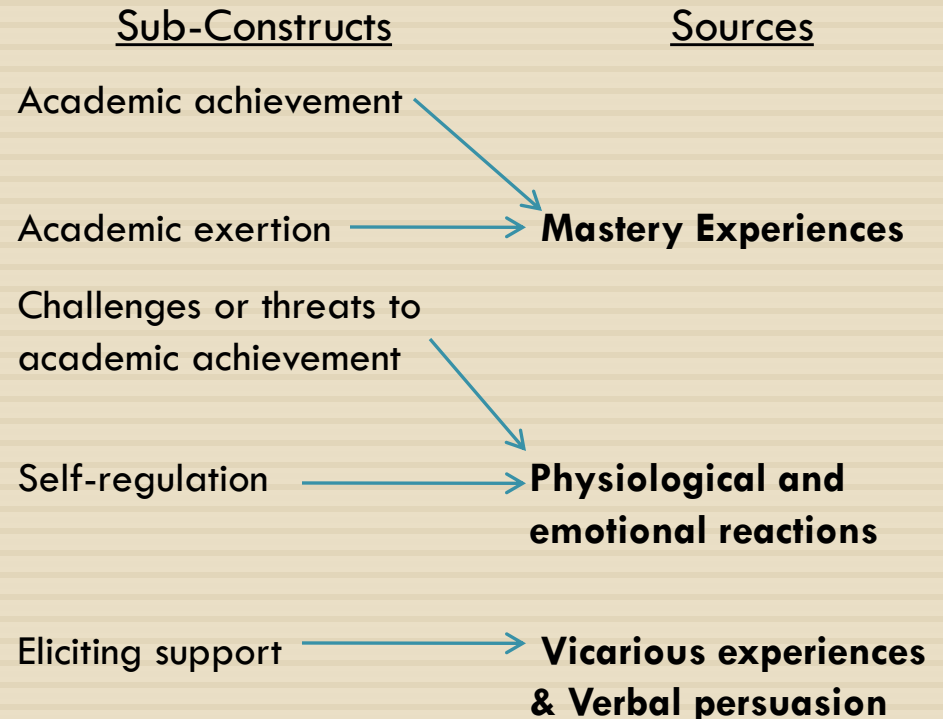
- Additionally, for this study academic self-efficacy was reduced to five sub-constructs as described by Bandura (1997). These are:
 - ▣ Academic Achievement
 - ▣ Academic Exertion
 - ▣ Challenges and threats to academic achievement
 - ▣ Self-Regulation
 - ▣ Eliciting Support

Sub-Constructs Defined

Self-Efficacy Sub-Constructs	Definitions
Academic achievement	the belief in one's capability to learn academic subjects
Academic exertion	the belief that one's effort can result in academic achievement
Challenges and threats to academic achievement	the belief that despite difficulties that could impede learning, one can find solutions
Self-regulation	the belief in one's capability to control and monitor personal behaviour so as to enhance learning or to not impede it
Eliciting support	the belief in one's capability to gain academic assistance when necessary

Concept Map

- This concept map displays the proposed relationship between the sub-constructs of self-efficacy and the sources from which students derive their beliefs in their academic capabilities.



Research Questions



1. Are there any differences between the levels of academic self-efficacy of adolescents according to gender, grade level and school type?

2. Are there any differences between the sub-constructs of self-efficacy of adolescents according to gender, grade level and school type?

Research Design

- In order to answer the research questions, the study utilized an explanatory, sequential mixed methods research design as quantitative, then qualitative information was collected and analyzed.
- For the purpose of this presentation, only the quantitative data will be presented.

Participants and Their Selection

- Participants in the quantitative phase of the study were 269 adolescent grade 7 and grade 9 students randomly selected from four purposely selected schools located in Kingston, Jamaica.

	Grade 7	Grade 9	Total
Female	65	66	131
Male	68	70	138
Total	133	136	269

School Type	Participants
Private Co-ed	70
Public Co-ed	62
All Girls'	67
All Boys'	70
Total	269

Instrument

- An academic self-efficacy questionnaire, which is titled, **Feelings about School** was used to determine the levels of academic self-efficacy held by the adolescent students.

Findings

- **Research Question 1:** Are there any differences between the levels of academic self-efficacy of adolescents according to gender, grade level and school type?

Gender

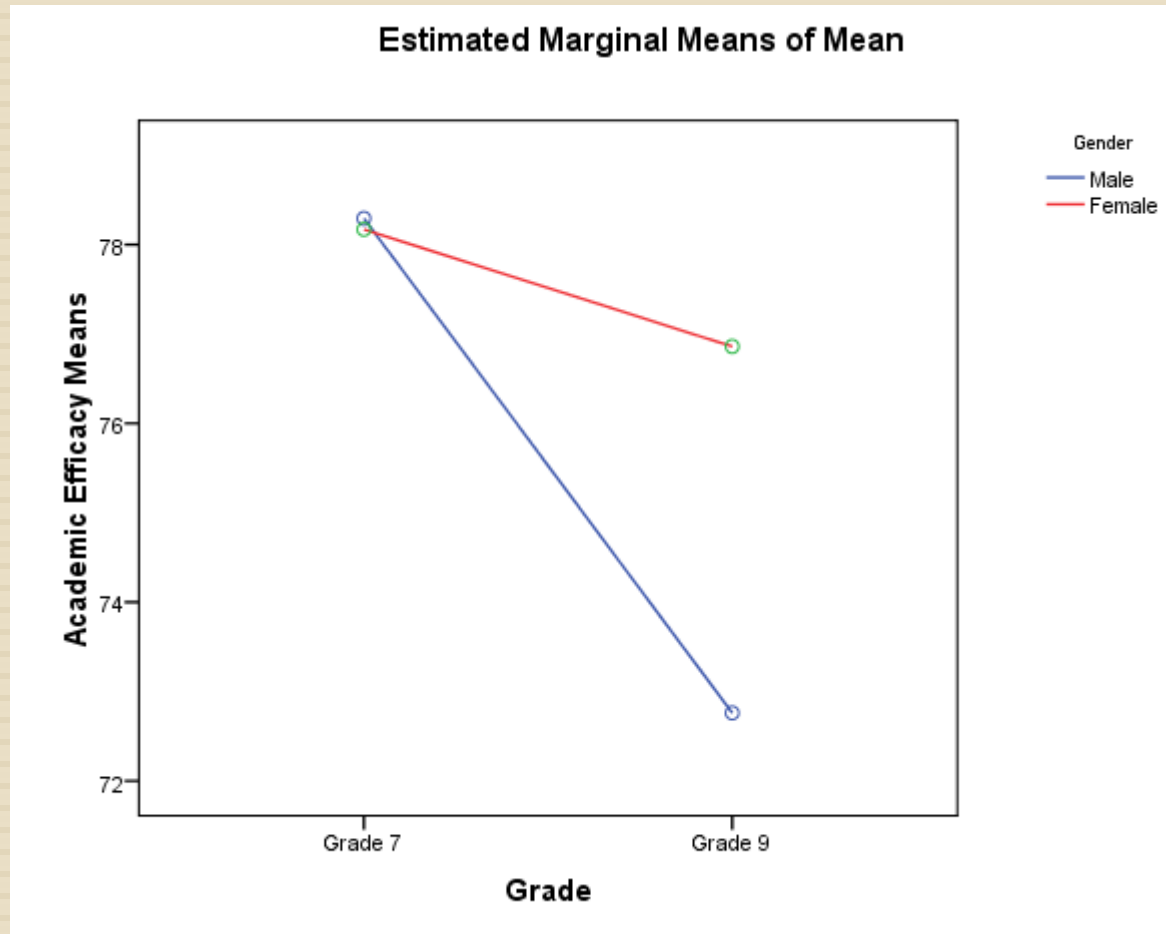


- These results showed that female students had significantly greater academic self-efficacy than their male peers. This finding is inconsistent with some overseas studies which had shown that boys were often found to have higher efficacy beliefs than girls. (e.g., Pajares & Miller, 1994; Schunk & Pajares, 2002).

Grade Level

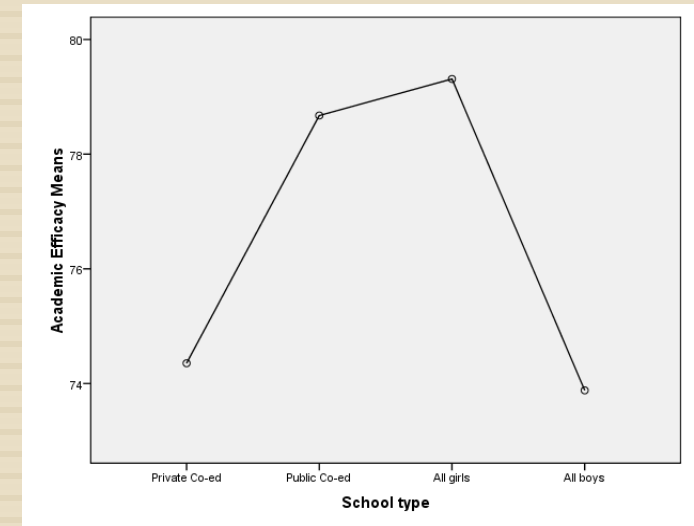
- This finding indicated that the academic self-efficacy levels of the students in this study declined as the students advanced through secondary school, thus concurring with the results of previously conducted research (Jacob, Lanza, Osgood, Eccles, & Wigfield, 2002; Hampton & Mason, 2003; Pajares, 2006).

Gender and Grade Level



School Type

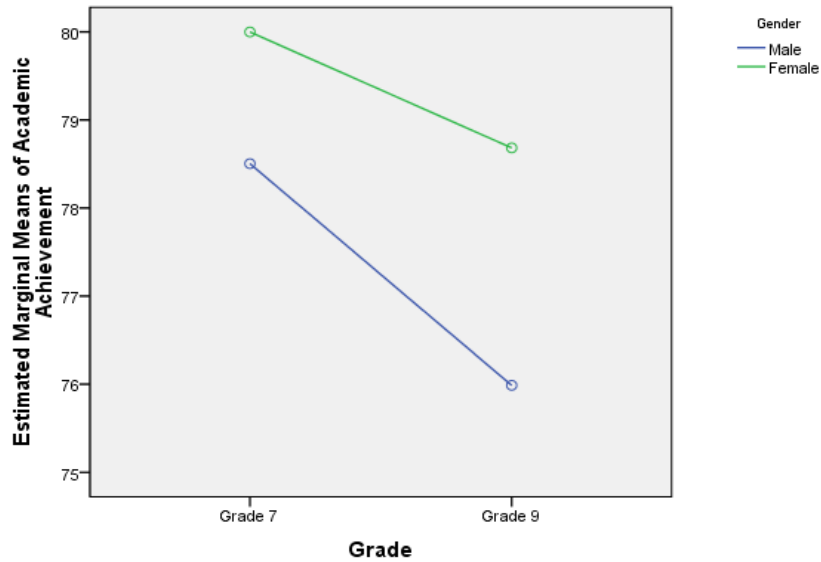
- There were significant differences between the academic self-efficacy of students depending upon the type of school they attended.
- Whereas several of the reviewed studies indicated the advantage of single-sex schooling for both sexes (Smyth, 2010), it would seem that the Jamaican all girls' school produced female students with the highest academic self-efficacy beliefs while males attending an all boys' school yielded the lowest efficacy results of all.



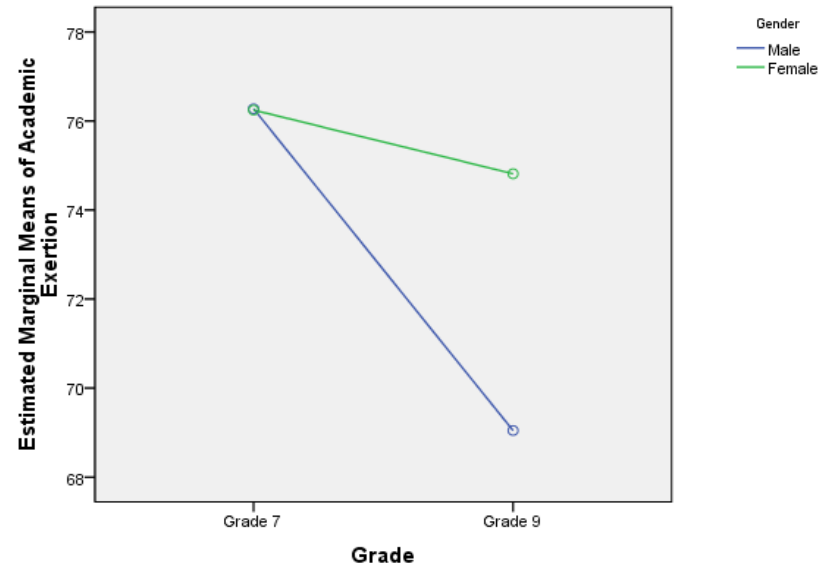
Findings

- **Research Question 2:** Are there any differences between the sub-constructs of self-efficacy of adolescents according to gender, grade level and school type?

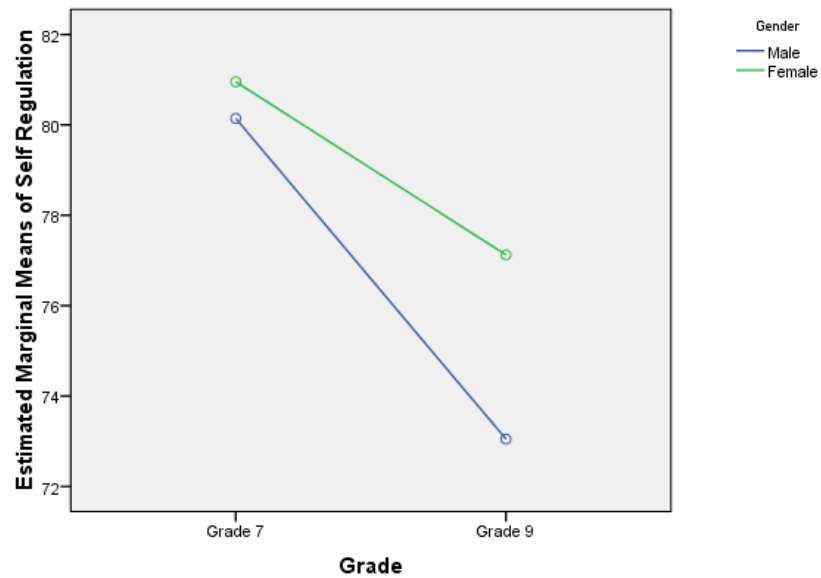
Estimated Marginal Means of Academic Achievement



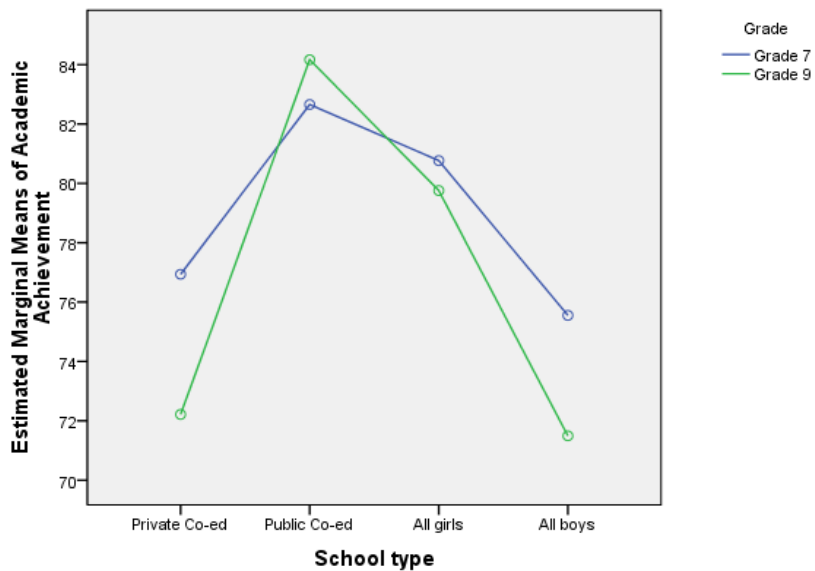
Estimated Marginal Means of Academic Exertion



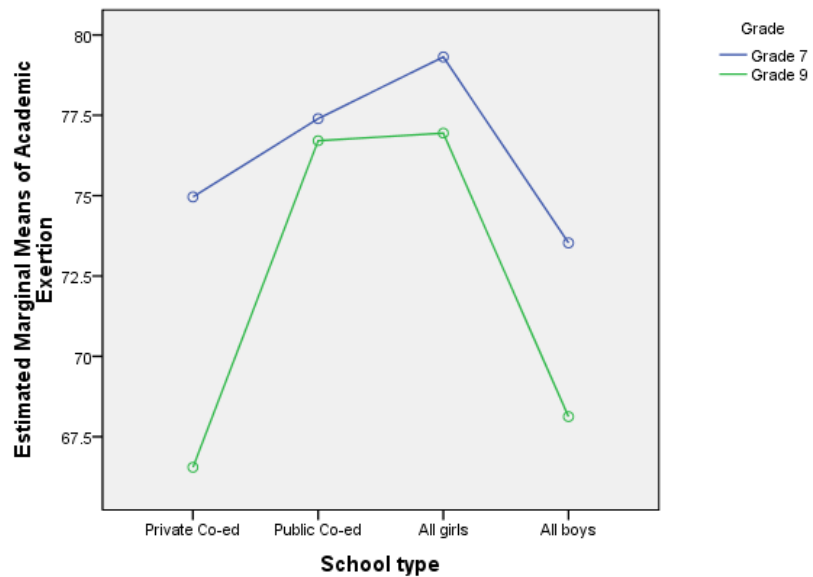
Estimated Marginal Means of Self Regulation



Estimated Marginal Means of Academic Achievement




Estimated Marginal Means of Academic Exertion



Implications

- Male students in this study were found to have consistently lower academic self-efficacy beliefs than their female peers, therefore, it appears that they need to be handled differently in the school setting in order to maintain or enhance their academic self-efficacy.
- This could be addressed through teacher seminars aimed at explaining the sources of self-efficacy and role that the teaching-learning relationship plays in this aspect of boys' academic lives.

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- The results of this study showed that older students also had lower efficacy beliefs with regards their academic capabilities. This may be the result of increased academic competitiveness, reduced teacher encouragement and individualized attention and/or the normal outcome of students developing intellectually and thus being better able to assess their potentials and aptitudes.
 - However, schools could endeavor to provide the types of enactive learning experiences which are within the students' zone of proximal development, thus allowing for more frequent mastery experiences.

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