

Teachers' Self-efficacy as Determinant of Students' Attitudes toward School: A study at the School Level

Ahmed Falah Al-Alwan¹ & Ahmad Mohammed Mahasneh¹

¹ Department of Educational Psychology, The Hashemite University, Jordan

Correspondence: Ahmed Falah Al-Alwan, Department of Educational Psychology, The Hashemite University, Jordan. E-mail: alwan@hu.edu.jo

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Abstract

Teachers' self-efficacy was examined as determinant of students' attitudes toward school. Over 679 teachers and 1820 students in 23 Jordanian (primary and junior) schools were selected using simple random sampling. The instrument used in this study is Norwegian teachers' self-efficacy scale which was developed by Skaalvik and Skaalvik (2007) and students' attitudes toward school scale which was designed by the researchers. Results indicated that the level of teachers' self-efficacy is moderate. Also, there is a significant correlation between teachers' self-efficacy and students' attitudes toward school. On the other hand, teachers' self-efficacy a good predictor of students' attitudes toward school. Finally, the results showed that no significant differences between male and female teachers in their level of self-efficacy.

Keywords: teachers, self-efficacy, students, attitudes, school

1. Introduction

Self-efficacy belief is one of the most factors that influence students' ability to initiate a task and to succeed at it. Students' success and their high academic achievement at school are particularly crucial in any advanced society that places education at the core of its socio-economic development (Caprara, Barbaranelli, Steca, & Malone, 2006). One of the important beliefs considered to be significantly effective in students and teachers outcomes is teachers' feelings of efficacy (Chacon, 2005). Self-efficacy belief is mostly related to specific area and one of these specific areas and may be the most important is teacher self-efficacy belief. More specifically, teachers' self efficacy is considered one of the most important factors in education that can be positively impact student academic outcomes. It is these beliefs that determine "how well knowledge and skill are acquired" (Pajares, 2003, p. 8). Teacher's self-efficacy represents one core aspect of social cognitive theory, there are many factors that determines students' attitude toward schooling. These are factors such as teacher, teaching method, education environment, peer group and parents (Mihladi, Duran, & Dogan, 2011). Therefore, students' attitudes toward school are of great concern to educators worldwide, even though there has been relatively little published research concerning this aspect of school life.

2. Literature Review

Research on teachers' self-efficacy has increased in the past two decades, and the construct is considered to be one of the key beliefs that influence teachers' professional behaviors (Gibbs, 2003; Wolters & Daugherty, 2007). Teachers' self efficacy is one of the features affecting the success or failure of teachers (Jaafari, Karami, & Soleimani, 2012). Teachers' beliefs in their abilities to instruct students and influence students' performance are very strong indicators of instructional effectiveness (Bandura, 1997). Teachers' self efficacy refers to the extent to which teachers believe their efforts will have positive effect on their students' abilities, in redirecting their students' behavior, and on overall student achievement (Ashton & Webb, 1986). Teachers' self efficacy is defined as a "teacher's belief in his or her own capability to organize and execute courses of action required to successfully accomplishing a specific teaching task in a particular context" (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998, p. 233). Also, Ashton (1985) indicated that teacher self-efficacy as a teacher's belief that he/she can affect his/her students' performance. Skaalvik and Skaalvik (2008) pointed out that teacher self-efficacy refers to teachers' ability to plan, organize, and carry out activities required to attain instructional goals. Teacher self-efficacy refers to teachers' beliefs that they can bring about desirable changes in students' behavior and achievement (Guo, Justice, Sawyer, & Tompkins, 2011). In other words, teacher self-efficacy is the belief that

he/she has the necessary capabilities to help students learn (Jaafari, Karami, & Soleimani, 2012). Schunk (1991) claimed that self efficacy as a useful concept to explain teacher behaviors. For example, efficacious teachers may be better able to change their teaching approach to accommodate students need. Moreover, teachers with high self efficacy produced students who performed higher on achievement tests than students taught by teachers with low self efficacy (Jaafari, Karami, & Soleimani, 2012). In addition, Chambers and Hardy (2005) pointed out that students of teachers with high self- efficacy perception levels had higher academic achievement levels than students of teachers with lower self- efficacy perception level. Also, efficacious teachers have high expectations for their students and are effective in facilitating ways for their students to meet those expectations.

As seen, a teacher's self-efficacy perception appears to be an important variable having influence on such matters as instruction, classroom management, method and strategy use, increasing students' motivation and success. As a result, the multidimensional self-efficacy model of Skaalvik and Skaalvik (2007), known as Norwegian Teacher Self- Efficacy Scale (NTSES), was developed. The model measures teacher self-efficacy in six dimensions of (a) instruction: An important task for all teachers is to explain subject matter so that students understand the basic principles. This dimension focuses on the teacher's expectation of being able to instruct students, explain subject matter, and answer questions to improve students' understanding, (b) Adapting education to individual students' need: emphasizes the teachers' beliefs in their ability to adapt education to the needs and abilities of individual students, bearing student diversity in mind, (c) motivating students: refers to teachers' beliefs in their ability to involve students in teaching/learning activities, (d) keeping discipline: a sense of ability to deal with students misbehaviors, (e) cooperating with colleagues and parents: a sense of desire to cooperate with others to solve problems, and (f) coping with changes: a sense of desire to adapt oneself to methodological and situational changes (Khezerlou, 2013; Avanzi et al., 2013; Skaalvik & Skaalvik, 2010). Therefore, teachers' self-efficacy may influence a student's success at school in several ways; teachers' with high self-efficacy enhance student's motivation, use classroom management approaches and adequate teaching method, and increase self-esteem that appear as a positive attitudes towards school.

There are many factors that may influence students learning. One important aspect that may influence students learning is attitudes. One area where attitude is particularly important is teachers' self-efficacy. When teachers create a learning environment in which students feel comfortable and confident, it will enhance positive attitudes toward school. The creation of a positive learning environment impacts both of students' learning and attitudes. The enhancement of positive attitudes, therefore, is one of the key components that impacts students learning (Subramaniam& Silverman, 2007). When students' attitude toward school affects how well or how often they do it, and how much enjoyment they derive from it. Alternatively, studies suggest that students who feel connected to school are more likely to commit themselves to the learning process and to exhibit more positive behaviors and attitudes (McNeely, Nonnemaker, & Blum, 2002; Whitlock, 2006).

It is often claimed that students cannot fully achieve some of the desired learning targets if they lack love, empathy, and reinforcement. If schools provide students with these essential requirements for learning they may be more attracted to school (Sa'di, 2001). Also, two recent studies of high students in the United States (Huebner, Drane, & Valois, 2000; Yazzie-Mintz, 2007) found that almost a quarter of students surveyed indicated more dissatisfaction than satisfaction with their school experience and nearly 10% of students described their feelings toward school as extremely negative.

Negative attitudes toward school are associated with a wide range of undesirable outcomes including poor motivation and performance, disruptive and aggressive behaviors, lack of participation in school activities (Finn, 1989; National Research Council and the Institute of Medicine, 2004). On the contrary, Good and Brophy (2003) indicated that teachers with high self-efficacy perception levels maintain student participation at a higher level through spending more time keeping track of their students, supervising their works during a lesson, and providing them with group works and collaborative tasks. Also, students who have positive attitudes towards school are more likely to exhibit participatory school behaviors such as respecting teachers and friends, responding to teachers' questions and assignments, and responding to school regulations and rules, while also displaying fewer disruptive and antisocial behaviors (Smith, Ito, Gruenewald, & Yeh, 2010; Finn & Rock, 1997). Archambault, Pagani, and Fitzpatrick (2013) pointed out that students who perceive their teacher as being supportive might be more responsive to academic expectations and demands and tend to be better engaged in classroom-related activities. Moreover, students who have negative attitudes towards school are more likely poor academic achievement, lower expectations of future success engage in antisocial and violent behaviors, and increased risk for dropping out (Finn, 2006; Smith & Sandhu, 2004).

On the contrary, researchers indicated that teachers' self- efficacy was a significant predictor of classroom quality and students' gains in literacy and language (Guo, Justice, Sawyer, & Tompkins, 2011). Uzun, Ozkilic, &

Senturk (2010) indicated that there is relationship between teacher self-efficacy perception of teacher candidates and their general academic achievement. Caprara, Barbaranelli, Steca, & Malone's (2006) study indicated that teachers' personal efficacy beliefs affected their job satisfaction and students' academic achievement. Ross, Cousins and Gadalla (1996) found a relationship between teacher self-efficacy and students' engagement in classes. Also, Newman, Rutter, & Smith (1989) found that secondary school teachers with highly engaged students reported higher levels of efficacy, as compared to teachers with less engaged students.

In general, studies in different fields have shown that the importance of teachers' self-efficacy. For example, Lee, Cawthon and Dawson (2013) found a high level of teachers' self-efficacy and significant differences were presented between elementary and secondary teachers in self-efficacy for teaching and in pedagogical conceptual change. Khezerlou's (2013) study revealed teacher self efficacy as a moderate predictor of job burnout. Cayci (2012) in his study indicated that there is a positive and meaningful relationship between the elementary teacher candidates' teacher efficacy and their attitudes towards the profession of teaching. Jaafari, Karami & Soleimani's (2012) study indicated that there is a meaningful correlation between organizational learning and self-efficacy.

The findings of previous studies showed that the importance of the teachers' self-efficacy in the fields of psychology and education; however, as a result of literature review, no study looking at the effect of teachers' self-efficacy on students' attitude toward school has been found. In this regard, it is of important to investigate the extent to which teachers' self efficacy affect students' attitude towards school. Specifically, in Jordan most primary schools lack appropriate learning environment and negative attitudes toward schools. For example, classroom is crowded, insufficient equipments, along school day, and teachers still use lecturing as the main method of teaching and traditional methods of evaluation dependent on examination (Sa'di, 2001).

More specifically, students' attitudes in Jordan as well as in the Arab world and in other countries have not been directly examined. Anderson and Young (1992) pointed out in their study that a lack of attention in the studies which dealt directly with students' attitudes toward schools. In the light of these explanations, the study focuses on determining whether there is a relationship between teachers' self- efficacy and their students' attitudes toward school.

3. Purpose of the Study

The present study aims to explore on the relationship of teachers' self- efficacy to students' attitude toward school. This is in response to a number of studies which discussed the two factors separately. Discussing how these two factors are linked will contribute to further understanding how teachers' self-efficacy can influence students' attitude toward school.

In this respect, the purpose of this study was to determine the extent to which teachers' self-efficacy can predict students' attitudes toward school. In order to achieve this purpose, research questions were constructed as follows:

1. What is the level of teachers' self-efficacy?
2. Is there a significant relationship between teachers' self-efficacy and students' attitudes toward school?
3. Is there a significant difference between male and female teachers' self-efficacy?

4. Method

4.1 Participants

The study was conducted between February 20, 2013 and June 5, 2013. Two samples (teachers and students) participated in this study. Participants were 679 male and female teachers from 23 schools in the Al-Salt city at the western from Amman capital of Jordan. The schools (primary and junior) represented the existing variability of the population in the country in terms of socioeconomic, ethic, and geographic (urban or rural) status. Participants ranged in age from 25 to 31 years ($M=28$, $SD=.780$). Three hundred and twenty were male ($M=29$, $SD=.710$), and three hundred and fifty nine were female ($M=27$, $SD=.710$).

The students sample ($N=1820$) were 15 to 16 year old 9th and 10th grade students (Mean age= 15.7 years; $SD=.56$), in 23 primary and junior schools across 86 classroom in Al-Salt city. Fifty-five percent of the sample was female ($n=1001$), and forty-five percent was male ($n=819$).

4.2 Instrumentations

Research instruments included two scales:

The Norwegian Teacher Self-Efficacy Scale (NTSES & Skaalvik, 2007) was used to measure teachers' self-efficacy. This scale consists of 6 dimensions, for a total of 24 items, with a response scale ranging from 1

(not certain at all) to 7 (absolutely certain). The items of the NTSES were translated into Arabic language by the researchers and administered to 3 specialists in English language to ensure the accuracy of the translation. Then an English native speaker back-translated the Arabic version of the scale into English. In order to establish construct validity of the scale, a confirmatory factor analysis was used to determine the number of factors underlying the 24 items. This technique resulted in six factors that explained 75% of the total variance. To estimate NTSES's reliability, internal consistency technique and Cronbach's alpha for six subscales reported 0.89.

Attitudes toward school scale: in the ATSC, fivefold Likert scale (totally agree, I agree, unstable, I don't agree, I don't agree at all) has been used and there are 17 items; 6 of which are negative expressions and 11 of which are positive expressions. While scoring the scale, the negative items have been reversed and the total scorings have been found. The lowest score is 17 and the highest score is 85 according to these results, and high scores show positive attitude, whereas low scores show negative attitude. The scale was pilot tested for language and time needed for completion with a group of 15 students aged 15 to 16 years old. These students were able to read and understand each item and all completed the scale within 20 minutes. Seven experts in educational psychology and evaluation and measurement, received a copy of the scale items. They were asked to judge the relevance of each item to the purpose of the scale, the clarity of its language and whether it was suitable for students of 15-16 years. The reliability of the ATSC has been reported by Cronbach's alpha to be 0.87. It is indicating excellent internal consistency.

4.3 Procedures

During the administration of the questionnaire, the participants were instructed to answer the all items in a questionnaire. They were reminded to maintain an orderly environment while answering the scale. Participants were given around 20 minutes to answer about each questionnaire. They were also informed that there was no right or wrong answers. Participants were assured that their responses were kept within strict confidentiality and solely used for the purpose of the study. The data obtained in this way were analyzed through SPSS 17 program package.

5. Results

Research question 1: What is the level of teachers' self-efficacy?

The level of teachers' self-efficacy for the sample group is given in table 1. Table 1 presents the mean scores of the 679 teachers on their self efficacy. With regard to teachers' self-efficacy level, the group of respondents was segmented into three categories: low, moderate, and high. Teachers who possessed a low level in self-efficacy in teaching were those whose average mean of responses on self-efficacy scale less than 2.99. When the average mean of responses of the participants fell between 3.00 and 4.99, teachers were considered as having moderate self-efficacy. Teachers were considered as having a high level of efficacy were those whose average mean of their responses was more than 5.

Table 1. Means and standard deviations for teachers' self-efficacy

Teachers' self-efficacy Subscale	M	SD
Instruction	4.53	0.74
Adapting education to individual students' need	3.67	0.62
Motivating students	4.64	0.68
Keeping discipline	3.46	0.45
cooperating with colleagues and parents	4.61	0.90
Coping with changes	4.75	0.84
Overall mean score	4.27	0.85

According to table 1, the mean score for teachers' self-efficacy was calculated to be M=4.27. This calculated mean is close to being considered moderately-level. Also, table 1 showed that the all dimensions of teachers' self-efficacy: instruction (4.53), Adapting education to individual students' need (3.67), motivating students (4.64), keeping discipline (3.46), cooperating with colleagues and parents (4.61), and coping with changes (4.75) at the moderate level. With regard to the subscales of teachers' self-efficacy, coping with changes has the highest mean (4.75) and keeping discipline (3.46) has the lowest mean.

Research question 2: Is there a significant relationship between teachers' self-efficacy and students' attitudes

toward school? To examine the relationship between teachers' self-efficacy and students' attitudes toward school, a zero-order correlation was conducted for the purpose of this study (see table 2).

Table 2. The relation coefficient between teachers' self-efficacy and students' attitudes toward school

Teachers' self-efficacy subscale	Students' attitudes toward school
Instruction	0.76*
Adapting education to individual students' need	0.68*
Motivating students	0.70*
Keeping discipline	0.69*
cooperating with colleagues and parents	0.56*
Coping with changes	0.51*
Overall mean score	0.78*

* $P \leq .01$.

As given in table2, results indicated that teachers' self-efficacy was significantly correlated with students' attitudes toward school ($r=0.78$). Also, results indicated that each of the dimensions of teachers' self-efficacy was significantly correlated with students' attitudes toward school. Thus, correlations were significant between instruction and students' attitudes toward school ($r=0.76$), Adapting education to individual students' need ($r=0.68$), motivation students ($r=0.70$), keeping discipline ($r=0.69$), cooperating with colleagues and parents (0.56), and coping with changes (0.51). In addition, a regression analysis was conducted to evaluate the ability of teachers' self-efficacy to predict students' attitudes toward school. Results are provided in table 3.

Table 3. Multiple regression analysis on students' attitudes toward school predicting

Variable	B	SE B	β	T	P	R	R^2	F
Instruction	.33	.16	.18	3.11	.001	.75	.56	6.12*
Adapting education to individual students' need	.45	.17	.24	3.44	.000			
Motivating students	.65	.13	.28	3.52	.000			
Keeping discipline	.28	.15	.13	2.98	.001			
cooperating with colleagues and parents	.17	.15	.12	2.99	.002			
Coping with changes	.13	.14	.10	2.95	.004			

* $P \leq .05$.

As shown in table 3, the sub dimensions of teachers' self-efficacy explained 56% of the total variance in students attitudes toward school ($F=6.12$, $P \leq .05$). The main contribution was the Motivating students ($\beta=.28$, $P \leq .05$), Adapting education to individual students' need ($\beta=.24$, $P \leq .05$), instruction ($\beta=.18$, $P \leq .05$), keeping discipline ($\beta=.13$, $P \leq .05$), cooperating with colleagues and parents ($\beta=.12$, $P \leq .05$), and Coping with changes ($\beta=.10$, $P \leq .05$).

Research question 3: Is there a significant difference between male and female teachers' self-efficacy?. To address this question, table4 presents the mean scores and standard deviations of the teachers' self-efficacy with respect to gender.

Comparing the means for the male and female teachers' self efficacy, there wasn't a difference between them in self-efficacy scores, with male having a mean of 4.25 and female having a mean of 4.29. According to the test results shown in table 4, there was no significant difference between male and female teacher in term of teachers' self-efficacy for each of the six scales. Moreover, according to t-test results shown in table 4, however, it has been found that the teachers' self-efficacy scores of male and female teachers do not show any significant variation ($t=.752$, $p \leq .05$).

Table 4. T-test results for the differences of teachers' self-efficacy according to differences of gender

Teachers' self efficacy Subscales	Gender	Mean	T	Sig.
Instruction	Male	3.64	0.449	0.274
	Female	3.70		
Adapting education to individual students' need	Male	4.50	0.698	0.310
	Female	4.56		
Motivating students	Male	4.55	0.706	0.405
	Female	4.75		
Keeping discipline	Male	3.51	0.741	0.290
	Female	3.41		
cooperating with colleagues and parents	Male	4.59	0.863	0.305
	Female	4.64		
Coping with changes	Male	4.78	.0568	0.456
	Female	4.71		
Overall mean score	Male	4.25	0.752	0.382
	Female	4.29		

6. Discussion

One of the main aims of this study was to determine the level of teachers' self-efficacy. The results of this study revealed that the mean scores for teachers' self-efficacy was calculated to be $M=4.27$. This calculated mean is close to being considered moderate-level. It can be attributed to ministry of education in Jordan recently started to hold many training programs about essential dimensions of effective teaching. The dimension of cope with changes has high mean (first rank) comparing with other dimensions; this dimension is considered essential in teaching process, it requires from teachers use successful instructional methods, manage instruction even if the curriculum is changed. Also, adapt instruction to individual needs in second rank; Jordanian educational system interested in students with special needs. So, teachers try to organize schoolwork to adapt instruction and assignments to individual needs, provide realistic challenge for all students even in mixed ability classes, and organize classroom work so that both low-and high-ability students work with tasks that are adapted to their abilities.

The motivation students dimension has a third rank; this attributes to importance this dimension in human life, and many courses in Jordanian universities consist of motivation subject. So, teachers try to get all students in class to work hard with school work, wake the desire to learn even among the lowest achieving students, get students to do their best even when working with difficult problems, and motivate students who show low interest in school work

Also, Cooperate with colleagues and parents; social work very important as educational work. So, Jordanian teachers cooperate well with most parents, collaborate constructively with parents of students with behavioral problems, and cooperate effectively and constructively with other teachers, for example, in teaching teams.

Moreover, Instruction, effective teaching tend to explain subject matter so that most students understand the basic principles, explain central themes in their subjects so that even the low-achieving students understands, answer students' questions do that they understand difficult problems. Maintain discipline, teachers try to control even the most aggressive students, get all students to behave politely and respect the teachers, and get students with behavioral problems to follow classroom rules.

This finding corresponds with the findings of Lee, Cawthon, & Dawson's (2013) study that found a high level of teachers' self-efficacy for teaching. In general, this finding also goes with the above literature investigation, it indicated that teacher self-efficacy can predict of job burnout, there is a positive and meaningful relationship between teacher's efficacy and their attitudes towards the profession of teaching, and there is a meaningful correlation between organizational learning and self-efficacy (Khezerlou, 2013; Jaafari, Karami, & Soleimani, 2012).

The second main aim of this study was to explore the relationship between teachers' self-efficacy and students' attitudes toward school. The results of this study revealed that there was a significant relationship between teachers' self-efficacy and students' attitudes toward school. The teachers with a strong sense of efficacy exhibit high levels of planning, management, and organization, are open to new ideas and are more willing to experiment with new methods to better meet the needs of their students. These teachers also exhibit enthusiasm

for instruction, are more committed to their profession, and likely exert a positive influence on students' attitudes toward school. Specifically, teachers' self-efficacy may support, promote their students to engage in their schools. All of these practices reflect on students' attitudes toward school. In addition to, when teachers teach their students effectively; students tend to learn, understand, mastery of concepts and principles; therefore; students consider a school as a pleasant experience, and have positive attitudes toward school.

Another aspect, when teachers adapt instruction to individual needs; their students feel satisfied, pleasant; therefore; they feel their teachers seem to care about them as persons, and have positive attitudes toward school.

Also, when teachers motivate their students to work hard with their schoolwork, get them to do their best, and reinforce their students. Therefore; students consider a school as a fun and nice place, and have positive attitudes toward school.

In addition, when teachers tend to maintain discipline; they control aggressive students and behavioral problems. Then, their students feel safe at school, and have positive attitudes toward it. When teachers cooperate with colleagues and parents; they find adequate solutions to students' problems through cooperation with parents and they reach to effective teaching through their cooperation with their colleagues. Then, their students feel they could discuss personal problems with them, feel their school is just a place where they get in trouble and have positive attitudes toward school.

Finally, when teachers are able to cope with changes; such as instructional methods and adapting curriculum, their students feel flexible, and feel that school helps them know many things and have positive attitudes toward it.

This finding corresponds with the results of Ross, Cousins & Gadalla's (1996) study that found a relationship between teacher self-efficacy and students' engagement in classes.

The third main aim of this study was to determine the differences in the level of teachers' self-efficacy that may be attributed to gender of teachers; It has been also found that the level of teachers' self-efficacy is not affected by the variable of gender. This result is attributed to the Ministry of Education in Jordan's programs in effective teaching to all teachers (males and females). In this respect, the results align with Aydin (2008); in his study on elementary school teacher candidates, it was found that their self-efficacy belief level was not significantly correlated with the variable of sex.

Based on the results of this study, researchers should examine the extent to which the same path of influence among examined variables holds in other cultural settings as well as in other scholastic systems. Also, educators should pay attention to the importance of teachers' self-efficacy on students' academic outcomes; such as attitudes. More specifically, many training programs should be held to improve teachers' self-efficacy.

7. Conclusions

It is important for all students to have positive attitudes toward being at school and participating in school activities. Students are enabled to attain more skills and knowledge when they are happy about the situation in which they are placed. It is important for the classroom to be able to identify their students' attitudes toward school. It may be that a clearer understanding of how excellent teaching relates to teaching practices will contribute to improved teaching and students' learning and attitudes.

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References

- Anderson, H., & Young, G. (2001). Holistic attitudes of high school students toward themselves and their school experiences. *Adolescence*, 27(107), 719-730. <http://dx.doi.org/10.1016/j.learninstruc.2012.09.003>
- Archambault, I., Pagani, L., & Fitzpatrick, C. (2013). Transactional associations between classroom management and relations with teachers from first through fourth grade. *Learning and Instruction*, 23, 1-9.
- Ashton, P. (1985). Motivation and teachers' sense of efficacy. In C. Ames, & R. Ames (Eds.), *Research on Motivation in Education: The Classroom Milieu* (Vol. 2, pp. 141-174). Orlando, Academic Press.
- Ashton, P., & Webb, R. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. New York, NY: Longman.
- Avanzi, L., Miglioretti, M., Velasco, V., Balducci, C., Vecchio, L., ... Skaalvik, E. (2013). Cross-validation of the Norwegian Teachers' Self-Efficacy Scale. *Teaching and Teacher Education*, 31, 69-78.

- <http://dx.doi.org/10.1016/j.tate.2013.01.002>
- Bandura, A. (1997). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. <http://dx.doi.org/10.1037/0033-295X.84.2.191>
- Caprara, G., Barbaranelli, C., Steca, P., & Malone, P. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology*, 44, 473-490. <http://dx.doi.org/10.1016/j.jsp.2006.09.001>
- Cayci, B. (2012). The relationship between the elementary teacher candidates' teacher efficacy and their attitudes towards the profession of teaching. *Education*, 132(2), 402-418.
- Chacon, C. (2005). Teachers' perceived efficacy among English as a foreign language teacher in middle schools in Venezuela. *Teaching and Teacher Education*, 21, 257-272. <http://dx.doi.org/10.1016/j.tate.2005.01.001>
- Chambers, S., & Hardy, J. (2005). Length of time in student teaching: Effects on classroom control orientation and self-efficacy beliefs. *Educational Research Quarterly*, 28(3), 3-9.
- Finn, J. (1989). Withdrawing from school. *Review of Educational Research*, 59, 117-142. <http://dx.doi.org/10.3102/00346543059002117>
- Finn, J. (2006). *The adult lives of at-risk students: The roles of attainment and engagement in high school* (NCES 2006-328). Washington DC: U.S. Department of Education, National Center for Education Statistics.
- Finn, J., & Rock, D. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology*, 82, 221-234. <http://dx.doi.org/10.1037/0021-9010.82.2.221>
- Gibbs, C. (2003). Explaining effective teaching: Self-efficacy and thought control of action. *Journal of Educational Inquiry*, 4, 1-14.
- Good, T., & Brophy, J. (2003). *Looking in classrooms* (9th ed.). Boston: Allyn and Bacon.
- Guo, Y., Justice, I., Sawyer, B., & Tompkins, V. (2011). Exploring factors related to preschool teachers' self-efficacy. *Teaching and Teacher Education*, 27, 961-968. <http://dx.doi.org/10.1016/j.tate.2011.03.008>
- Huebner, E., Drane, W., & Valois, R. (2000). Levels and demographic correlates of adolescent life satisfaction reports. *School Psychology international*, 21, 281-292. <http://dx.doi.org/10.1177/0143034300213005>
- Jaafari, P., Karami, S., & Soleimani, N. (2012). The relationship among organizational climate, organizational learning and teachers' self efficacy. *Procedia-Social and Behavioral Sciences*, 2212-2218. <http://dx.doi.org/10.1016/j.sbspro.2012.06.974>
- Khezerlou, E. (2013). Teacher self-efficacy as a predictor of job burnout among Iranian and Turkish EFL teachers. *Procedia- Social and Behavioral Sciences*, 70, 1186-1194. <http://dx.doi.org/10.1016/j.sbspro.2013.01.175>
- Lee, B., Cawthon, S., & Dawson, K. (2013). Elementary and secondary teacher self-efficacy for teaching and pedagogical conceptual change in a drama- based professional development program. *Teaching and Teacher Education*, 30, 84-98. <http://dx.doi.org/10.1016/j.tate.2012.10.010>
- McNeely, C., Nonnemaker, J., & Blum, R. (2002). Promoting school connectedness: Evidence from the National Longitudinal Study of Adolescent Health. *Journal of School Health*, 72, 138-146. <http://dx.doi.org/10.1111/j.1746-1561.2002.tb06533.x>
- Mihladiz, G., Duran, M., & Dogan, A. (2011). Examining primary school students' attitudes towards science in terms of gender, class level and income level. *Procedia- Social and Behavioral Sciences*, 15, 2582-2588. <http://dx.doi.org/10.1016/j.sbspro.2011.04.150>
- National Research Council and the Institute of Medicine. (2004). *Engaging schools*. Washington, DC: The National Academic Press.
- Newman, F., Rutter, R., & Smith, M. (1989). Organizational factors that affect school sense of efficacy, community, and expectations. *Sociology of Education*, 62, 221-238. <http://dx.doi.org/10.2307/2112828>
- Pajares, F. (2003). William James: our father who begat us. In B. J. Zimmerman, & D. H. Schunk (Eds.), *Educational Psychology: A century of contributions* (pp. 41-64). Mahwah: Erlbaum.
- Ross, J., Cousins, J., & Gadalla, T. (1996). Within- teacher predictors of teacher efficacy. *Teaching and Teacher Education*, 12, 385-400. [http://dx.doi.org/10.1016/0742-051X\(95\)00046-M](http://dx.doi.org/10.1016/0742-051X(95)00046-M)

- Sa'di, I. (2001). An Attitude to school for primary school children. *Research in Education*, 66, 65-75. <http://dx.doi.org/10.7227/RIE.66.6>
- Schunk, D. (1991). Self-efficacy and academic motivation. *Educational Psychologist*, 55, 68-78.
- Skaalvik, E., & Skaalvik, S. (2007). Dimension of teacher self-efficacy and relation with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology*, 99, 611-625. <http://dx.doi.org/10.1037/0022-0663.99.3.611>
- Skaalvik, E., & Skaalvik, S. (2008). Teacher self-efficacy: Conceptual analysis and relations with teacher burnout and perceived school context. In R. Craven, H. W. Marsh, & D. McInermy (Eds.), *Self-processes, learning and enabling human potential* (pp. 233-247). Connecticut: Information Age Publishing.
- Skaalvik, E., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, 26, 1059-1069. <http://dx.doi.org/10.1016/j.tate.2009.11.001>
- Smith, C., & Sandhu, D. (2004). Toward a positive perspective on violence prevention in schools: Building connections. *Journal of Counseling and Development*, 82, 288-294. <http://dx.doi.org/10.1002/j.1556-6678.2004.tb00312.x>
- Smith, D., Ito A., Gruenewald, J., & Yeh, H. (2010). Promoting school engagement: Attitudes toward school among American and Japanese youth. *Journal of School Violence*, 9, 392-406.
- Subramaniam, P., & Silverman, S. (2007). Middle school students' attitudes toward physical education. *Teaching and Teacher Education*, 23, 602-611. <http://dx.doi.org/10.1016/j.tate.2007.02.003>
- Tschannen-Moran, M., Woolfolk, H. A., & Hoy, W. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68, 202-248. <http://dx.doi.org/10.3102/00346543068002202>
- Uzun, A., Ozkicik, R., & Senturk, A. (2010). Analysis of teacher self-efficacy of teacher candidates. *Procedia Social and Behavioral Sciences*, 2, 5018-5021. <http://dx.doi.org/10.1016/j.sbspro.2010.03.813>
- Whitlock, J. (2006). Youth perceptions of life in school: Contextual correlates of school connectedness in adolescence. *Applied Developmental Science*, 10, 13-29. http://dx.doi.org/10.1207/s1532480xads1001_2
- Wolters, C., & Daugherty, S. (2007). Goal structures and teachers' sense of efficacy: Their relation and association to teaching experience and academic level. *Journal of Academic Psychology*, 99, 181-193.
- Yazzie-Mintz, E. (2007). *Voices of students on engagement: A report on the 2006 High School Survey of Student Engagement*. Bloomington, IN: Center for Evaluation & Education Policy, Indiana University.

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