

Gender as Predictor of Students' Classroom Engagement and Academic Self-efficacy: A Case Study of Oye-Ekiti Secondary School students, Ekiti State, Nigeria

Oluwayemisi Damilola Akomolafe

Department of Guidance and Counseling Education,
Faculty of Education, Federal University Oye-Ekiti, Nigeria.
oluwayemisi.akomolafe@fuoye.edu.ng <http://orcid.org/0000-0002-4400-2580>

Abstract: *Classroom engagement and academic self-efficacy are potent drivers of students' academic outcomes. This study investigated the influence of students' gender on their classroom engagement and academic self-efficacy in Oye-Ekiti Secondary Schools, Ekiti State, Nigeria. The study was informed by the Bandura's social cognitive theory, and adopted quantitative case study design. The study population comprised of all secondary school students in Oye-Ekiti local government area of the State, with sample of 200 students selected through the purposive and convenience sampling techniques. A self-report questionnaire was used for data collection ($\alpha = 0.82$), which was analysed using frequency counts and percentages, mean and Standard deviation, correlation and independent t-test at 0.05 significance level. Findings revealed a low level of classroom engagements among students; high academic self-efficacy levels among students; a positive and significant relationship between students' classroom engagement and academic self-efficacy; students' gender does not significantly predict their classroom engagement and academic self-efficacy; gender differences exist in students' classroom engagement and their academic self-efficacy. It is therefore recommended that learning environment that fosters students academic engagements and self-efficacy should be provided by governments and education stakeholders; gender preference and disparity should be discouraged in schools, and teaching and learning strategies that boosts students' classroom engagement, and self-efficacy should be employed by teachers and school management.*

Keywords: Academic self-efficacy; Classroom engagement; Gender; Students; Secondary School; Nigeria.

Introduction

Secondary education in the Nigerian context is expected to facilitate and enhance students' general academic engagements, self-efficacy and other related learning concerns; which is aimed at ensuring the development of a functional and productive citizenry. Students at this level, who are within their adolescent ages, crave for engagements (social, emotional, cognitive) and self efficacy with the hope of attaining self-actualisation. As such, this study investigates students' classroom engagements, academic self-efficacy with respective of their gender.

Gender has in recent times, become a variable of interest in scholarly concerns, especially in the field of education and psychology. Despite the fact that scholars believe there are gender inequalities, there are many different reasons why they arise and continue across time (Strunc & Murray, 2019). Gender is a stable human characteristics, and the very basis on which humans, irrespective of their diversified backgrounds, can be classified. Igbo et al. (2015) restated that gender consists of behaviour associated with masculinity and femininity, and with how people view their role as male or female. According to Osiesi and Fajobi (2020), gender is a personal variable that causes the notable differences in students' academic achievement and motivational functioning. Stewart et al. (2020) and Whitcomb et al. (2019) have reaffirmed that students' gender plays a great role in determining their classroom engagements, self-efficacy, amongst others.

Students' self-efficacy" refers to a person's belief that they can carry out specific actions required for achieving a particular goal or the belief that they are capable of organizing and carrying out actions towards achieving a specified goal, in this case, the achievement of academic goals (Pavlin-Bernardić et al., 2017; Vidić, 2021). Self-efficacy was described by Schunk and DiBenedetto (2016) as a dynamic concept that is continually subject to change. Thus, student self-efficacy can support self-regulated learning and the development of a quality learning environment in the classroom. Similar to this, Fallan and Opstad (2016) identified self-efficacy as a crucial success factor in the learning process. This concept refers to an individual's level of confidence in their ability to complete a task.

According to Bandura (1995), an individual's self-efficacy can be determined by how they interpret their current situation, how others perceive their experiences, whether they believe they have what it takes to achieve their goals, and how they are feeling psychologically and emotionally. Student participation in the classroom is significantly influenced by self-efficacy (Linnenbrink & Pintrich, 2003). Rudina (2013) asserts that people who have high levels of self-efficacy set more ambitious objectives for themselves and are more prepared to put up the effort necessary to reach those goals. It is crucial to monitor changes in students' self-efficacy and engagement at all educational levels since students with higher levels of self-efficacy will be more motivated to learn (Vidić, 2021).

Students' connectivity, involvement, and devotion to academic and social activities within the classroom can be defined as classroom engagement (Li & Lerner, 2013; Vidi, 2021). It improves students' cognitive and thriving abilities (Hamsho, 2017). The subject of classroom involvement is vast and includes cognitive, behavioral, and emotional elements (Ahamed et al., 2022; Fredricks et al., 2011). Well-engaged students are more eager to study and perform better in class (Ahamed et al., 2022). The level of student participation in class may concretize the kind of interactions that are necessary for real teaching and learning processes (Osiesi & Adeyemo, 2019).

Research on gender relations with respect to students' classroom engagements and self-efficacy in the extant literature abound. For instance, Vidić (2021) conducted a study to ascertain the differences in students' self-efficiency and engagement with respect to gender and age. The sampled students were 659 who were in primary school in Croatia. The results revealed a gender difference in students' engagements. However, there was no difference in their gender with respect to their self efficacy. Using a descriptive correlation research approach, Bangsa (2021) looked at the self-efficacy of 134 high school students taking an online physics course in terms of gender and its link to engagements. The findings showed that pupils of both sexes exhibit high levels of self-efficacy. The research also shows a positive correlation between students' self-efficacy and cognitive engagement and a negative correlation between their self-efficacy and emotional involvement. Other research have revealed a favorable connection between students' engagement and self-efficacy (Birgin et al., 2017; Chang, 2015; Kanaparan et al., 2019; Ouweneel et al., 2011; Wang et al., 2017).

Male and female students' self-efficacy levels and strengths were examined by Fallan and Opstad (2016). The study's major goal was to ascertain how gender affected students' self-efficacy and how such interactions played a role. According to the findings, gender has an impact on students' self-efficacy, with female students having lower levels and fewer strengths. Male students had stronger mathematics self-efficacy than female students, according to Pajares' (2005) study. Girls have higher writing self-efficacy than boys, according to Pajares' (2003), Ifdil et al. (2016), and Namaziandost and Cakmak's (2020) investigations.

Sawari and Mansor (2013) and Shkullaku (2013) studies showed male and female students having equal levels of self-efficacies. Huang (2013) meta-analytical study indicates that male students have a higher self-efficacy than females. More so, Rezki (2017) carried out a study that examined students' self-efficacy in EFL classroom. The study adopted the mixed methods design. Results revealed that students' self-efficacy were both at high and moderate levels, and that there was no significant difference across gender. On a similar note, studies have shown that students' gender impacts their classroom engagements. Some show that male students are far less engaged than their female counterparts (Havik & Westergård, 2020; Lam et al., 2012; Lamote et al., 2013; Lietaert et al., 2015). Studies by Lam et al. (2016) found no differences in engagement between male and female students.

In a study published in 2021, Ganiyu evaluated the dimensions of pre-service teachers' classroom participation in Nigerian institutions of education. The study used a descriptive survey approach to its investigation. The 241 study participants were chosen using the purposive and snowballing sample strategies, and a questionnaire was used to gather the study's data. The results showed that there was a considerable gender difference in the levels of student involvement, favouring male students, and that the level of general student engagement was high. Ohamobi and Ezeaku (2016) also looked at the connection between academic achievement and student engagement in Nigeria's Anambra State. 4, 937 secondary school students made up the sample for the survey research design. The results showed that student involvement was very high.

Contrasting findings from studies in the extant literature (et al., 2014; Bangsa, 2021; Birgin et al., 2017; Chang, 2015; Fallan & Opstad, 2016; Havik & Westergård, 2020; Ifdil et al., 2016; Kanaparan et al., 2019; Lam et al., 2012; Lamote et al., 2013; Lietaert et al., 2015; Namaziandost & Çakmak, 2020; Ouweneel et al., 2011; Pajares, 2005; Pajares, 2003; Rezki, 2017; Sawari & Mansor, 2013; Shkullaku, 2013; Wang et al., 2017; Vidić, 2021) raises research concerns. Also, there seems to be no study in the literature that has investigated the influence of students' gender on their classroom engagement and academic self-efficacy in Nigeria. It is against this backdrop, that this study investigated gender's influence on secondary school students' classroom engagement and self-efficacy in Ekiti State, Nigeria.

Theoretical Framework

This study is informed by Bandura's (1989) social cognitive theory. In the classroom, a student's academic success is influenced by their self-directed objectives and general propensity for self-development (Bandura, 2005; Viorel et al, 2015). According to the social cognitive theory, gender, behavior (such as how effectively students participate in class and their level of self-efficacy), and the school environment all play a role in how people behave and how well they operate as a whole. According to Bandura (1994), self-efficacy refers to one's perceptions of their own skills to carry out a behavior (classroom engagement) successfully. The gender of students, their participation in the classroom, and their level of self-efficacy may all be related.

Research Questions

1. What is the level of classroom engagement among students in Oye-Ekiti secondary schools?
2. What is the level of students' academic self-efficacy in Oye-Ekiti secondary schools?
3. What relationship exist between students' classroom engagement and their academic self-efficacy?
4. To what extent does gender predict students' classroom engagement and academic self-efficacy?
5. Do male and female students significantly differ in their classroom engagement and academic self-efficacy?

Methodology

Research Design

The quantitative case study research design was utilised in this study. Quantitative case study research design is an empirical investigation into a real-life and contextualised phenomenon, and tries to understand the dynamics present within a single or specified context (Cohen et al., 2007; Yin, 2003).

Population, Sampling Technique, and Sample

The target population of this study consists of all secondary school students in Ekiti state, Nigeria. The purposive and convenience sampling techniques were used in selecting the samples for the study. Oye-Ekiti local government area of Ekiti State was purposively selected as the research site, while schools within the local government, which at the time of data collection gave the researcher and the research assistant permission to use their school for the study were conveniently selected. In all, four of these schools were selected (forty students were selected from each school, and these students were in senior secondary school 1 (SS1) to senior secondary school 3 (SS3). Thus, a total of two hundred (200) students were sampled for the study.

Instruments and Instrumentation

A questionnaire tagged "Students' Classroom Engagement and Academic Self-efficacy Scale (SEASES)" was the instrument used for data collection in the study, and this was designed by the researcher. The questionnaire had three sections, A, B and C. The section A was used to obtain information with regards to students' bio-data such as gender, class, and school. Section B contained 15 items that measured students' classroom engagement, and these were placed on a 4-Likert scale of Great Extent (GE) = 3, Large Extent (LE)= 2, Little Extent (LE)= 1, and No Extent (NE)= 0. Section C had 13 items that measured students' self efficacy, and was placed on a 4-Likert scale of Strongly Agree (SA) = 4, Agree (A)= 3, Disagree (D)= 2, and Strongly Disagree (SD)= 1.

Instrument Validation and Reliability

The face and content validity of the instrument was determined by two research experts in the field of Educational Tests and Measurement, who were satisfied with the contents of the instruments with regards to the study's concerns. To ascertain the reliability of the instrument, a pilot test was done using forty three (43) students from a secondary school in Ikole-Ekiti (a different local government area), and these students were not part of the actual study. Test reliability of the instrument was ascertained using the Cronbach Alpha method, and this yielded an acceptable correlation coefficient of 0.82.

Data Collection Procedure

Informed consent of the sampled respondents for the study was sought and obtained. The researcher and the trained research assistant administered the instrument (SEASES) to the respondents. There was a 100% return rate of the instrument.

Analysis Method

The collected data was organized and cleaned before being entered into SPSS version 23 for analysis. Frequency counts and percentages, mean and standard deviation, correlation, and an independent t-test with a 0.05 significance level were the statistical techniques utilized for the data analysis.

Results

Respondents' Demographics

Variable	Classification	Frequency (Percentage)
Gender	Male	113 (56.5)
	Female	87 (43.5)
Class	Senior Secondary 1 (SS 1)	102 (51.0)
	Senior Secondary 2 (SS 2)	50 (25.0)
	Senior Secondary 3 (SS 3)	48 (24.0)

Table 1: Respondents' Demographics

Table 1 depicts the demographic information of the respondents. As indicated, with regards to their gender, there are more male respondents (113; 56%) than the female (87; 43.5). Also, a large number of the respondents were in Senior Secondary 1 (102; 51.0%).

Research Question 1: What is the level of classroom engagement among students in Oye-Ekiti secondary schools?

Table 2: Level of Students' Classroom Engagement

S/No	Statements	Agree Freq (%)	Disagree Freq (%)	Mean	S.D
1	I feel interested while in class	50 (25.0)	90 (45.0)	1.36	0.48
2	I feel proud doing class works	66 (33.0)	74 (37.0)	1.50	0.53
3	I feel excited participating in class	51 (25.5)	89 (44.5)	1.36	0.48
4	I feel happy while learning in class	50 (25.0)	90 (45.0)	1.36	0.48
5	I listen very carefully in class	51 (25.5)	89 (44.5)	1.36	0.48
6	I complete my class assignments in time	51 (25.5)	89 (44.5)	1.36	0.48
7	I am always involved in class activities	50 (25.0)	90 (45.0)	1.36	0.48
8	I love to continue working even after class lessons	63 (31.5)	77 (38.5)	1.45	0.50
9	I actively participate in class discussions	54 (27.0)	86 (43.0)	1.39	0.49
10	I engage with my classmates and we learn from one another	57 (28.5)	83 (41.5)	1.40	0.49
11	I ask my classmates about things I don't understand	58 (29.0)	82 (41.0)	1.41	0.49
12	I seek for information from my class peers and teachers, when I am not sure of things	55 (27.5)	85 (42.5)	1.39	0.49
13	I interact well with my classmates	55 (27.5)	85 (42.5)	1.39	0.49
14	I judge the quality of my ideas or work during class	69 (34.5)	71 (35.5)	1.48	0.53
15	I concentrate fully during class activities	59 (29.5)	81 (40.5)	1.60	0.50
	Pooled Mean (n=200)			1.44	

*Criterion Mean = 1.5.

Table 2 indicates the level of classroom engagement among the respondents. Since a large number of respondents disagreed to the items on their levels of engagements in the classroom, and with the pooled mean below the criterion mean, it can be inferred that the level of classroom engagement of the sampled students in the study is low.

Research Question 2: What is the level of students' academic self-efficacy in Oye-Ekiti secondary schools?

Table3: Level of Students' Academic Self-efficacy

S/N	Statements	Agree Freq (%)	Disagree Freq (%)	Mean	S.D
1	I relate with my teachers very well	119 (59.5)	81 (40.5)	4.39	1.27
2	I can adequately express my opinion	111 (55.5)	89 (44.5)	4.05	1.49
3	I can easily make myself happy	125 (62.5)	75 (37.5)	3.58	1.76
4	I can study on my own	142 (71.0)	58 (29.0)	3.97	1.56
5	I can easily control my emotions	138 (69.0)	62 (31.0)	3.38	1.80
6	I can easily make new friends	160 (80.0)	40 (20.0)	4.24	1.34
7	I am able to complete all my homework everyday	117 (58.5)	83 (41.5)	4.33	1.31
8	I academically engage with my classmates during class	140 (70.0)	60 (30.0)	4.24	1.40
9	I pay apt attention during every class	131 (65.5)	69 (34.5)	4.44	1.24
10	I understand most subjects thought in school	125 (62.5)	75 (37.5)	4.14	1.50
11	I do make my parents and loved ones happy as a result of my academic performance	128 (64.0)	72 (36.0)	4.29	1.33
12	I can suppress unpleasant thoughts easily	136 (68.0)	64 (32.0)	3.68	1.67
13	I can succeed in passing my tests and examinations in all subjects	146 (73.0)	54 (27.0)	4.37	1.34
Pooled Mean (n = 200)				4.09	

*Criterion Mean = 2.5

Table 3 indicates the level of students' academic self-efficacy. Since a large number of respondents agreed to the items on their levels of academic self-efficacy, and with the pooled mean (4.09) far above the criterion mean (2.5), it can be inferred that the academic self-efficacy of the students in this study is high.

Research Question 3: What relationship exist between students' classroom engagement and their academic self-efficacy?

Table 4: Correlation Analysis between students' classroom engagement and their self-efficacy

Correlations		Classroom Engagement	Academic Self-efficacy
Classroom Engagement	Pearson Correlation	1	.237**
	Sig. (2-tailed)		.005
Academic Self-efficacy	Pearson Correlation	.237**	1
	Sig. (2-tailed)	.005	

** . Correlation is significant at the 0.05 level (2-tailed).

Table 4 indicates the relationship between students' classroom engagement and their academic self-efficacy. As revealed in the table, there exists a positive and significant relationship between students' classroom engagement and their academic self-efficacy. This infers that an increase in students' classroom engagement, positively increases their academic self-efficacy.

Research Question 4: To what extent does gender predict students' classroom engagement and self-efficacy?

Table 5: Regression Analysis of Gender predicting students' classroom engagement and self-efficacy

R = 0.09 R² = 0.08 Adjusted R² = 0.10 Std, Error of the Estimate = 0.40					
ANOVA^a					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	.17	2	.09	.54	.59
Residual	21.55	197	.16		
Total	21.72	198			

*Sig, at $P < 0.05$

Table 5 depicts the extent to which students' gender predict their classroom engagement and academic self-efficacy. The table shows a coefficient of multiple regression ($R = 0.09$, $R^2 = 0.08$, and R^2 adjusted = 0.10). This means that students' gender accounted for 10% of the variance in their classroom engagement and self-efficacy. Thus, the regression ANOVA produced ($F_{(2, 197)} = 0.54$, $P > 0.05$). This implies that students' gender does not significantly predict their classroom engagement and academic self-efficacy.

Research Question 5: Do male and female students significantly differ in their classroom engagement and academic self-efficacy?

Table 6: T-test Analysis of the Gender Difference in Students' Classroom Engagement and Academic Self-efficacy

Gender		N	Mean	S. D	Df	T	Sig.	Decision
Classroom Engagement	Male	113	33.72	7.64	198	-.17	0.87	Not significant
	Female	87	34.00	8.55				
Academic Self-efficacy	Male	113	94.13	19.98	198	-2.37	0.02*	Significant
	Female	87	103.75	13.15				

*Significant at $p < 0.05$.

Table 6 indicates the t-test analysis of the gender difference in students' classroom engagement and academic self-efficacy. For students classroom engagement, results of the t-test ($t = -0.17$; $p(0.87) > 0.05$) indicates a non significant difference between male and female students. Nonetheless, the female students have higher classroom engagement (Mean = 34.00) than the males (Mean = 33.72). In contrast, the t-test results ($t = -2.37$; $p(0.02) < 0.05$) shows that there exist a significant difference in the academic self-efficacy among male and female students. This difference is in favour of the female students.

Discussion

The findings of this study revealed clearly that the level of classroom engagements of students in the study is low. There is the possibility that this could be as a result of teachers adopting teaching strategies that disallow students' participation/engagement in the learning process. Or could it have been as a result of students' poor attitude towards learning or disinterest in classroom engagement? Future inquiry could ascertain this. This finding contrasts the findings of Ganiyu (2021) study which revealed a high level of students general engagements. The reason for this is likely to be the difference in the sample characteristics, as the later sampled pre-service teachers, as against the secondary school teachers used in this study. Also, the finding does not agree with the findings of Ohamobi and Ezeaku (2016), whose findings revealed a high level of engagements among students. This may be due to the fact that the later used the survey research design and a larger sample size, as against the present study whose sample is smaller and is a case study.

Findings of the study also revealed that the academic self-efficacy of the students in this study is high. This is understandable as the cultural context of the study allows for students' self-dependence and actualisation. From homes, students are trained and taught the life survival skills, and these may have impacted on their self-efficacy levels. This finding fully supports the findings of Bangga (2021) whose study revealed a high level of self-efficacy among students. Findings also revealed that there exists a positive and significant relationship between students' classroom engagement and their academic self-efficacy. A robust classroom engagements of students do improve or enhance their self efficacy levels. Bangga (2021), Birgin et al. (2017), Chang (2015), Kanaparan et al. (2019), Ouweneel et al. (2011), and Wang et al. (2017); whose studies indicated a positive relationship between students' self-efficacy and engagement.

Findings also showed that students' gender does not significantly predict their classroom engagement and academic self-efficacy. This disagrees with the findings of Fallan and Opstad (2016), that revealed that gender predicts students' self-efficacy. As at the time of this study, the researcher could not review literature that shows how students' gender predict their classroom engagement. More so, the study finding indicates a non significant difference between male and female students in classroom engagement; although, the female students have higher classroom engagement than the males (by the comparison of difference in mean values). This is supported by Rezki (2017) study that showed a non significant difference across gender. This has been corroborated by the findings of et al. (2014), Havik and Westergård (2020), Lam et al. (2012), Lamote et al. (2013), and Lietaert et al. (2015).

The results of this survey also revealed a considerable discrepancy between male and female students' perceptions of their own academic abilities. The female students benefit from this differential. This backs with the conclusions of studies by Fallan and Opstad (2016), Pajares (2003), Ifdil et al. (2016), and Namaziandost and Cakmak (2020) showing girls exhibit stronger writing self-efficacy than boys. The results, however, conflict with those of Huang (2013) and Pajares (2005), whose studies found that male students have higher levels of self-efficacy than female students, as well as Sawari and Mansor (2013) and Shkullaku (2013), whose studies found that both male and female students have comparable levels of self-efficacy.

Conclusion and Recommendations

According to the study's findings, there is a connection between students' academic self-efficacy and their participation in the classroom. Although differences exist in favour of female students, gender does not significantly impact students' classroom engagement and academic self-efficacy.

Sequel to these, the study recommends the following:

1. Learning environment that fosters students academic engagements and self-efficacy should be provided by governments and education stakeholders;
2. Gender preference and disparity should be discouraged in schools;
3. Teaching and learning strategies that boosts students classroom engagement, and self-efficacy should be employed by teachers and school management.

References

- Ahamed, F., Jabar, N.S.B.A., Harun, N.H.B., Nazrei, N.A.Z.B., & Suffian, N.A.S.B.M. (2022). Identifying the Determinants of Students' Classroom Engagement. *Malaysian Journal of Social Sciences and Humanities*, 7(8), 1-15; e001649. <https://doi.org/10.47405/mjssh.v7i8.1649>
- Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child Development*, Vol. 6. pp. 1 – 60. Greenwich, CT: JAI Press.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachandran (Ed.), *Encyclopedia of Human Behavior*, Volume 4, 71 – 81.
- Bandura, A. (1995). *Exercise of personal and collective efficacy in changing societies*. U A. Bandura, Self-efficacy in changing societies (str. 1-45). Cambridge: Cambridge University Press.
- Bandura, A. (2005). *The evolution of social cognitive theory*. In K. G. Smith and M. A. Hitt (Eds). *Great Minds in management* (pp. 9 -35). Oxford: Oxford University Press.
- Bangga, D. (2021). Senior High School Students' Self-Efficacy and its Relation to Engagement in Online Class Setting in a Private University in the South of Metro Manila. *Science Education International*, 32(4), 302-307 <https://doi.org/10.33828/sei.v32.i4.4>
- Birgin, O., Mazman-Akar, S.G., Uzun, K., Goksu, B., Peker, E.S., & Gumus, B. (2017). Investigation of factors affected to Mathematics engagement of middle school students. *International Online Journal of Educational Sciences*, 9(4), 1093-1110.
- Chang, D. (2015). *Determining the Relationship Between Academic Self-efficacy and Student Engagement by Metaanalysis*. Conference Session. Hong Kong: 2nd International Conference on Education Reform and Modern Management.
- Cohen, L., Manion, L., and Morrison, K. (2007). *Research methods in education* (6th ed). New York: Routledge.
- Fallan, L. & Opstad, L. (2016). Student Self-Efficacy and Gender-Personality Interactions. *International Journal of Higher Education*, Vol. 5, No. 3; 32-44. 10.5430/ijhe.v5n3p32
- Fredricks, J., McColsky, W., Meli, J., Montrosse, B., Mordica, J., & Mooney, K. (2011). Measuring student engagement in upper elementary through high school: a description of 21 instruments. *Institute of Education Sciences*, 1-80. https://ies.ed.gov/ncee/edlabs/regions/southeast/pdf/re1_2011098.pdf
-

- Ganiyu, B. (2021). Colleges of education science student engagement in Emergency Remote Teaching amidst COVID-19 in Nigeria. *Jurnal Pendidikan Biologi Indonesia*. Vol. 7 (3). DOI: <https://doi.org/10.22219/jpbi.v7i3.16249>.
- Hamsho, N. (2017). The Impact of Classroom Behaviors and Student Attention on Written Expression. *Social and Behavioral Sciences Commons*, 1-62.
- Havik, T., & Westergård, E. (2020). Do teachers matter? Students' perceptions of classroom interactions and student engagement. *Scandinavian Journal of Educational Research*, 64(4), 488-507. <https://doi.org/10.1080/00313831.2019.1577754>
- Huang, C. (2013). Gender differences in academic self-efficacy: A meta-analysis. *European Journal of Psychology and Education*, 28(1), 1-35. <https://doi.org/10.1007/s10212-011-0097-y>
- Ifdil, I., Apriani, R., Yendi, F. M., & Bolo Rangka, I. (2016). Level of Students' Self-Efficacy Based on Gender. *Counsedu: The International Journal of Counseling and Education*, 1(1), 29-33. [10.23916/29-33.0016.11-i41b](https://doi.org/10.23916/29-33.0016.11-i41b)
- Igbo, J.N., Onu V.C. & Obiyo, N.O. (2015). Impact of gender stereotype on secondary students self concept and academic achievement. *SAGE Journals*. <http://sgo.sagepub.com/conceniortant/5/1/2182440155773934>. Doi. 10: 1177/2158244015573934.
- Kanaparan, G., Cullen, R., & Mason, D. (2019). Effect of self-efficacy and emotional engagement on introductory programming students. *Australasian Journal of Information Systems*, 23, 1825.
- Lam, S.-f., Jimerson, S., Kikas, E., Cefai, C., Veiga, F.H., Nelson, B., Hatzichristou, C., Polychroni, F., Basnett, J., Duck, R., Farrell, P., Liu, Y., Negovan, V., Shin, H., Stanculescu, E., Wong, B.P.H.; Yang, H., Zollneritsch, J. (2012). Do girls and boys perceive themselves as equally engaged in school? The results of an international study from 12 countries. *Journal of School Psychology*, 50(1), 77-94. <https://doi.org/10.1016/j.jsp.2011.07.004>
- Lam, S.-f., Jimerson, S., Shin, H., Cefai, C., Veiga, F.H., Hatzichristou, C., Polychroni, F., Kikas, E., Wong, B.P.H.; Stanculescu, E., Basnett, J., Duck, R., Farrell, P., Zollneritsch, J. (2016). Cultural universality and specificity of student engagement in school: The results of an international study from 12 countries. *British Journal of Educational Psychology*, 86(1), 137-153. <https://doi.org/10.1111/bjep.12079>
- Lamote, C., Speybroeck, S., Van Den Noortgate, W., & Van Damme, J. (2013). Different pathways towards dropout: The role of engagement in early school leaving. *Oxford Review of Education*, 39(6), 739-760. <https://doi.org/10.1080/03054985.2013.854202>
- Li, Y., & Lerner, R. (2011). Trajectories of school engagement during adolescence: Implications for grades, depression, delinquency, and substance use. *Developmental Psychology*, 47(1), 233-247. <https://doi.org/10.1037/a0021307>
- Li, Y., & Lerner, R. M. (2013). Interrelations of behavioral, emotional, and cognitive school engagement in high school students. *Journal of Youth and Adolescence*, 42(1), 20-32. <https://doi.org/10.1007/s10964-012-9857-5>
- Lietaert, S., Roorda, D., Laevers, F., Verschueren, K., & De Fraine, B. (2015). The gender gap in student engagement: The role of teachers' autonomy support, structure, and involvement. *British Journal of Educational Psychology*, 85(4), 498-518. <https://doi.org/10.1111/bjep.12095>
- Linnenbrink, E. A., & Pintrich, P. R. (2003). The role of self-efficacy beliefs in student engagement and learning in the classroom. *Reading & Writing Quarterly*, 19(2), 119-137. <https://doi.org/10.1080/10573560308223>
- Mahatmya, D., Lohman, B., Matjasko, J., & Feldman Farb, A. (2013). *Engagement across developmental periods*. U S. L. Christenson, A. L. Reschly, & C. Wylie, Handbook of research on student engagement (str. 45-63). New York, NY: Springer Science+Business Media.
- Namaziandost, E., & Çakmak, F. (2020). An account of EFL learners' self-efficacy and gender in the Flipped Classroom Model. *Educational and Information Technology*, 25, 4041-4055. <https://doi.org/10.1007/s10639-020-10167-7>
- Ohamobi, I. N. & Ezeaku, S. N. (2016). Students Engagement Variables as Correlates of Academic Achievement in Economics in Senior Secondary Schools in Anambra State, Nigeria. *International Journal of Science and Research*, Vol. 5 (5), 473-478.
- Osiesi, M. P. & Adeyemo, O. A. (2019). Transforming primary school teachers' quality and classroom interaction patterns through in-service training programmes. *Ibadan Journal of Educational studies*, Nigeria, 16 (2), pp 156-161.
- Osiesi, M. P. & Fajobi, O. O. (2020). Students' Academic Motivation in Nigerian Tertiary Institutions: Influence of Age, Gender and Academic Discipline. *Journal of Positive Psychology and Counseling*, Nigeria, Vol. 7, pp 162-172.
- Ouweneel, E., Le Blanc, P.M., & Schaufeli, W.B. (2011). Flourishing students: A longitudinal study on positive emotions, personal resources, and study engagement. *Journal of Positive Psychology*, 6(2), 142-153.
- Pajares, F. (2003). Self-efficacy beliefs, motivation, and achievement in writing: A review of the literature. *Reading & Writing Quarterly*, 19, 139-158. <https://doi.org/10.1080/10573560390143085>
- Pajares, F. (2005). *Gender differences in mathematics self-efficacy beliefs*. U A. M. Gallagher, & J. C. Kaufman, Gender differences in mathematics: An integrative psychological approach (str. 294-315). New York: Cambridge University Press.
- Pavlin-Bernardić, N., Putarek, V., Rovani, D., Petričević, E., & VlahovićŠtetić, V. (2017). *Students' engagement in learning physics: A subject specific approach*. In: Burić, I., (Ed.), 20th Psychology Days in Zadar: Book of Selected Proceedings. Croatia: University of Zadar. pp. 193-203.
- Rezki, A. (2017). Students' self-efficacy of Nicenet in EFL classroom. *Langkawi*, Vol. 3 No. 2, 175-184.
-

- Rudina, S. (2013). The relationship between self efficacy and academic performance in the context of gender among Albanism students. *European academic research*, 4(1) , 467 – 498.
- Sawari, S., & Mansor, N. (2013). A study of student's general self-efficacy related to gender differences. *International Journal of Informative and Futuristic Research*, 1(4), 62-67. <http://ijifr.com/searchjournal.aspx>
- Schunk, D. H., & DiBenedetto, M. K. (2016). *Self-efficacy theory in education*. U K. R. Wentzel, & D. B. Miele, Handbook of motivation at school (str. 34-54). New York, NY: Routledge.
- Shkullaku, R. (2013). The Relationship between self-efficacy and academic performance in the context of gender among albanian students. *European Academic Research*, 1(4), 467-478. <http://www.euacademic.org/currentIssue.aspx>
- Stewart, J., Henderson, R., Michaluk, L., Deschler, J., Fuller, E., & Rambo- Hernandez, K. (2020). Using the social cognitive theory framework to chart gender differences in the developmental trajectory of STEM self-efficacy in science and engineering students. *Journal of Science Education and Technology*, 29: 758-773.
- Strunc, A. & Murray, K. (2019). "Understanding the Relationship between Gender and Self-Efficacy in Northeast Texas Public Schools," *Journal of Human Services: Training, Research, and Practice*: Vol. 4 : Iss. 1 , 1-22. <https://scholarworks.sfasu.edu/jhstrp/vol4/iss1/1>
- Vidić, T. (2021). *Student Self-efficacy, Cognitive, Behavioral, and Emotional Engagement: Age and Gender Differences*. 3rd World Conference on Future of Education, Milan, Italy. May 7-9, 2021.
- Viorel, M., Mih, C., & Dragoş, V. (2015). Achievement Goals and Behavioral and Emotional Engagement as Precursors of Academic Adjusting. *Procedia - Social and Behavioral Sciences*, 209, 329-336. doi:10.1016/j.sbspro.2015.11.243
- Wang, Y.L., Lin, C.Y., & Tsai, C.C. (2017). Identifying Taiwanese junior high school students' mathematics learning profiles and their roles in Mathematics learning self-efficacy and academic performance. *Learning and Individual Differences*, 54, 92-101.
- Whitcomb, K., Kalender, Y., Nokers-Malach, T., Schunn, C., & Singh, C. (2019). *Inconsistent gender differences in self-efficacy and performance for engineering majors in physics*. Physics Education Research Conference Proceedings, 17, 639-644.
- Yin, R. K. (2003). *Case Study Design: Research and Methods*. Thousand Oaks. California. SAGE Publication.