



## Adolescents Antisocial Behavior and Their Academic Performance: The Case of High Schools in Jimma Town

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### **Abstract**

The objective of this study was to analyze the relationship between antisocial behavior and academic achievement of high school students in Jimma town. Participants were 524 students 14-19 years old from government and private secondary schools. Cross sectional research designed was employed. Primary and secondary data were sources of this study. Results indicate that academic achievement was negatively associated with antisocial behavior. The result also shows that there is no significant difference between government and private schools in correlation of academic performance and antisocial behavior. The result also showed that there is a significant difference between male and female students' academic achievement and antisocial behavior engagement, which is strong in male participants than female participants. To conclude the result showed there is a significant negative correlation between academic achievement and antisocial behavior. Therefore, the researchers recommends further studies to be conducted in the area, teachers also have to implement behavioral monitoring and modification strategies in secondary schools to minimize behavioral problem among students. Teachers, parents and other parties work together for better improvement of students' academic and behavioral improvement.

**Keywords:** Antisocial Behaviors; Academic Performance

### **Introduction**

Adolescence is viewed as a transitional period between childhood and adulthood. The cultural purpose is the preparation of children for adult roles (Larson., & Wilson., 2004). It is a period of numerous transitions involving education, training, employment and unemployment, as well as transitions from one living circumstance to another (Coleman., and Roker., 1998).

Students with antisocial behavior commonly engage in behaviors (e.g., verbal and physical aggression; social skills acquisition and performance deficits) that negatively influence both their ability to successfully negotiate peer and adult relationships and their educational experience (Cullinan and Sabornie., 2004).

As Wagner and Cameto (2004) mentioned, many research findings have shown the negative academic outcomes of students with anti-social behavioral problems. Students with antisocial behavior earn lower grades, are less likely to pass classes, and experience higher rates of school dropout than typical students and students with other high incidence disabilities. Furthermore, these poor outcomes follow them when they leave the school setting and influence them throughout their life (Lane., 2002). This group of students goes on to have negative employment outcomes, difficulties with substance abuse, and a high need for mental health services. Despite differences among nations, between 2% and 20% of the school-age population is likely to have antisocial behavior which might affect life of the young generation tremendously (Bullis and Yovanoff., 2006).

According to Haibin (2009) low academic achievement leads to a loss of self-esteem, low commitment to school, and frustration, which in turn, results in delinquency, and antisocial behavior. That means, underachievement leads to problematic behavior (McGee., Williams., Share., Anderson., & Silva., 1986; Stevenson., Richman., & Graham., 1985). Not only this, problem behavior heralds and causes underachievement (Dishion., 1990; Jorm., Share., Matthews., & Maclean., 1986; Sanson., Prior., & Smart., 1996). That means, the amount of time children is engaged in meaningful learning activities is reduced due to their time spent acting out or being disciplined for aggressive behavior. Additionally, aggressive children may also develop negative relationships with teachers and peers or negative feelings about school, and as a consequence be less inclined to exert effort on academic work (Arnold., 1997; Wentzel & Asher., 1995).

Furthermore, each domain leads to the other (Arnold., 1997; McMichael., 1979). The relations between school performance and problematic behavior are bidirectional instead of unidirectional. When poor learners become increasingly frustrated, their antisocial behavior increases; which in turn disrupts the processes of learning, which then creates more antisocial problems. Williams & McGee put forward an inverse relationship between problematic behavior and academic performance (1994).

In Ethiopia, as far as our exhaustive, searching different data bases, there are scanty research works on the area (Anteneh., Telake and Solomon., 2012; Dargie., 2001; Seleshi., 2000; Kindie & Sentayehu., 2007). These few studies revealed that that there are many kinds of antisocial behaviors committed by adolescents in schools. Therefore this study was designed to address the following research questions.

- To what extent do antisocial behaviors prevail among adolescent students in the selected high schools?
- Is there a relationship between antisocial behavior and academic achievement?
- Is there a difference in government and private schools with respect to the prevalence of antisocial behavior among adolescents?

### **Methodology**

A cross sectional study designed was employed to conduct this study. The study was conducted in the Oromia region, Jimma town. All Jimma town high school students were the target group of this study. From six high schools found in Jimma town-government (Jirren secondary school, Seto Samaro secondary school and Jimma preparatory school) and private (Catholic., Eldan and Jimma university community secondary school). Two one government and one private high school were selected through lottery method. Finally to determine the sample size *Slovin's formula*, the formula- " $n = N / (1 + N e^2)$ "

(solvin., 1960) (Where, n stands for sample size, N total population e standard error) was used and the sample size was drawn proportionally from Jimma university community school and Jiren secondary school Therefore 353 students were drawn from Jiren secondary school out of 3029 students and from Jimma university community school 217 out of 475 students. The standard error was 0.05. Total sample study participants were 570.

Both primary (questionnaires) and secondary (students grade reports) data sources were used in the study.

Primarily, frequency distribution was used to analyze demographic information and measure of dispersion mean and standard deviation were used to assess which type of students' antisocial behaviors are highly observed. In addition, to assess the prevalence of antisocial behavior among the participants and to identify students' antisocial behavior; independent sample Mann Whitney U test was implemented to see if the difference in schools was significant.

## Result

From a total number of 524 participants 324 (61.83%) -154 female and 170 male were from government school. The rest 200 (38.17%)-115 female and 85 male were from private. 184 (35.1%) of the study population's age range was 14-16 years, the rest 340 (64.9%) respondents were between 17-19 years.

**Table 1** Background information of the participants, 2017

Types of school	Sex				Total	%		
	Female		Male					
Government	Age	14-16	60	38.96	88	51.76	148	45.68
		17-19	94	61.04	82	48.24	176	54.32
	Total		154	100	170	100	324	100
Private	Age	14-16	21	18.26	15	17.65	36	18
		17-19	94	81.74	70	82.35	164	82
	Total		115	100	85	100	200	100
Total	Age	14-16	81	30.11	103	40.39	184	35.11
		17-19	188	69.89	152	59.61	340	64.89
	Total		269	100	255	100	524	100

## Correlation of Antisocial Behavior and Academic Performance

As it is indicated in Table 2, there is a strong negative correlation between antisocial behavior and academic performance.

**Table 2** Correlation of antisocial behavior and academic performance among participants, 2017

Correlations		Anti-social behavior	Academic performance
Anti-social behavior	Pearson Correlation	1	-.744**
	N	524	524
Academic performance	Pearson Correlation	-.744**	1
	N	524	524

### ***The Prevalence of Antisocial Behavior in Adolescents***

The prevalence of antisocial behavior recorded was 17.59% (92) participants with high antisocial behaviors. Out of 92 participants 71 (77.17%) were engaged in fighting. And 58.69% (307) with no antisocial behavior and the rest 23.66% (124) was presented with mild antisocial behavior scores.

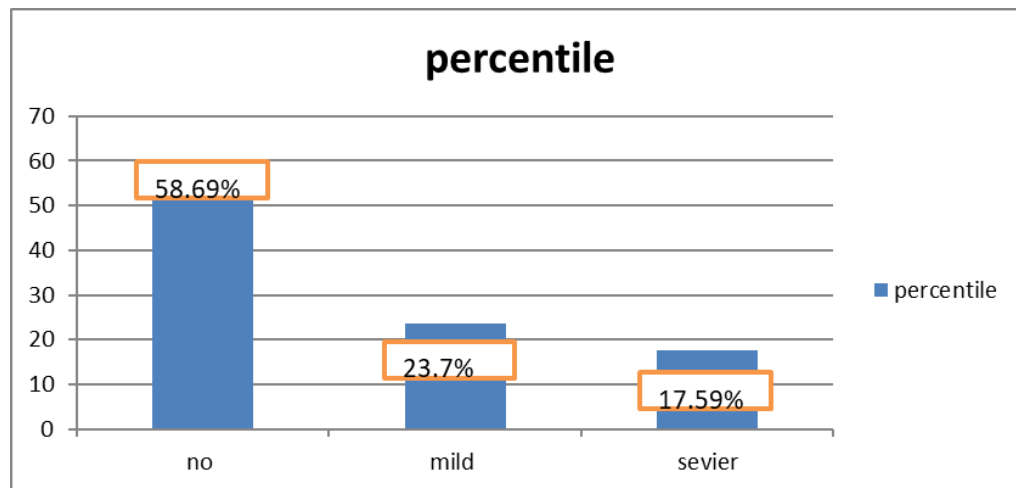


Fig. 1 The prevalence of antisocial behavior in adolescents, 2017

### ***The Prevalence of Antisocial Behavior Among Government and Private Schools***

The respondent's antisocial behavior is analyzed using the cutoff point of the test and it has shown that 17.5% were found to manifest high antisocial behavior, 23.7% of them with mild antisocial behavior and the rest with no antisocial behavior. Figure 2 provides a clear illustration between government and private schools.

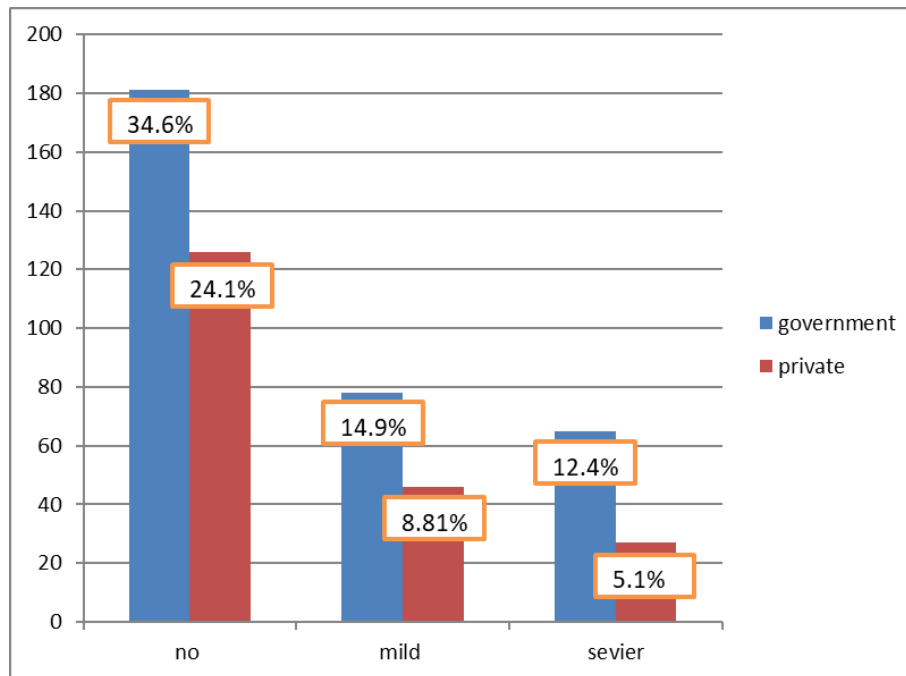


Fig. 2 The prevalence of antisocial behavior among government and private schools, 2017

### ***Correlation of Adolescents' Anti-Social Behavior and Academic Performance***

The relationship between antisocial behavior and students' academic achievement was computed using Pearson Correlation and both government and private schools antisocial behavior was correlated separately with their academic performance. The result showed that there is a significant negative strong correlation between academic achievement and antisocial behavior that is (-0.791) in government schools and (-.664) in private schools at  $\alpha < 0.01$ .

**Table 3** Correlation of Adolescents' Anti-Social Behavior and Academic Performance in government and private schools 2017

Types of school			Anti-social behavior	Academic performance
Government	Anti-social behavior	Pearson Correlation	1	
		N	324	
	Academic performance	Pearson Correlation	-.791**	1
		N	324	324
Private	Anti-social behavior	Pearson Correlation	1	
		N	200	
	Academic performance	Pearson Correlation	-.664**	1
		N	200	200

### ***Mann-Whitney U Test, Between Government and Private Schools***

To check if the correlation difference is significant the researcher used the Mann-Whitney u test because the data violates the assumptions of independent sample T-test. The result obtained from Mann-Whitney U test revealed that the difference in antisocial behavior between government school was private and not significant at a p value greater than 0.05.

**Table 4** Mann-Whitney u test, between government and private schools, 2017

	Null hypothesis	Test	sig.	sig.
1	The distribution of academic performance is the same across categories of types of schools	Independent samples Mann Whitney U Test	0.064	Retain the null hypothesis
2	The distribution of antisocial behavior is the same across categories types of schools	Independent samples Mann Whitney U Test	0.678	Retain the null hypothesis

### ***Gender Difference in Antisocial Behavior***

There is also a slight difference in correlation between males and females. The correlation is higher in males than females in -0.043 that was indicated in Table 3.

**Table 5** Gender difference in anti-social behavior, 2017

Sex			Anti-social behavior	Academic performance
Female	Anti-social behavior	Pearson Correlation	1	
		N	269	
	Academic performance	Pearson Correlation	<b>-.724**</b>	1
		N	269	269
Male	Anti-social behavior	Pearson Correlation	1	
		N	255	
	Academic performance	Pearson Correlation	<b>-.761**</b>	1
		N	255	255

### **Model Summery of Linear Regression Model**

As indicated in table six the data were analyzed into linear regression. And 55.3% change in academic achievement was explained by antisocial behavior.

**Table 6** Model summery of linear regression model, 2017

Model Summery <sup>b</sup>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.744 <sup>a</sup>	0.553	0.553	7.4061	0.553	646.832	1	522	0
a. Predictors: (Constant), Anti-social behavior									
b. Dependent Variable: academic performance									

### **Discussion**

In this research it is found that there is a strong negative correlation between antisocial behavior and academic performance. 55.3% of change in academic achievement was explained by antisocial behavior. Similarly, Wagner and Cameto's (2004) found that the negative academic outcomes of students associated with anti-social behavioral problems of students. "For example, students with antisocial behavior earn lower grades, are less likely to pass classes, and experience higher rates of school dropout than typical students and students with other high incidence disabilities." Wagner and Cameto's (2004).

In this study, 17.59% of the participants were engaged in antisocial behaviors. This finding goes in line with Bullis and Yovanoff findings that, 2% and 20% of the school-age population is likely to have antisocial behavior.

In this study, the result shows that there is a significant relationship between academic performance and anti-social behavior among adolescents (-0.744). This research finding also supports the results obtained from different researchers. However, it should be remembered that risky behavior and academic performance have reciprocal influence. As argued by Barriga et al. (2002), poor academic performance is a strong motivator for tolerance of risky behavior.

Teenagers who do not do well in school are more likely to indulge in risky behavior; while those who engage in risky behavior will have their academic performance go down. Understanding how to mediate the effects of risky behavior on learning outcomes therefore becomes critical. But in China Habin's study of correlation between academic achievement and behavior the result obtained was very low, but in this study it is high. This might explained by cultural factors and different factors that vary from place to place. And finally Masten and her associates (1995) proposed that for school-age children, high academic achievement and behavioral competence should be regarded as two important indicators for their success.

Regarding gender difference in relation of antisocial behavior and academic performance; in this study, males were more likely than females to engage in antisocial behavior. This sex difference suggests

that a large etiological component of antisocial behavior consists of factors associated with the male sex – factors that are either biological or psychosocial in origin or both. For example, there may be sex-specific genes influencing antisocial behavior or causative environmental circumstances that only arise for males. Alternatively, males and females may share all of the same risk factors for antisocial behavior, but these risk factors are, for some reason, more prevalent among males and/or males are more vulnerable to them (Moffitt et al., 2001; Rowe., Vazsonyi, & Flannery., 1995).

### ***Conclusion***

Antisocial behavior is negatively correlated with students' academic performance. That means, when antisocial behaviors are manifested highly, the students' academic performance will decrease. The prevalence of antisocial behavior was 31.3%, both in government and private schools. Male participants were found to be more on high antisocial behavior.

### ***Implications***

- Teachers to implement behavioral monitoring and modification strategies in secondary to minimize antisocial behaviors among students.
- School guidance and counseling facilities availability might help in managing antisocial behaviors among students and promoting academic performance.
- Teachers and parents to work together for better improvement of students' academic and behavioral improvement.
- Further studies to be conducted in the area, in the variables of economic status and others to fill the gaps of the study

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### ***Competing Interest***

The authors have declared that no competing interests.

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