Extent of implementation of smoking ban among Senior High School students in Zambales, Philippines

Mary Jane M. Balangon¹, Marshall James P. Dantic²

President Ramon Magsaysay State University

Abstract

The Department of Education, Zambales Division is also adopting anti-smoking measures in accordance with the above Deped guidelines and rules. Consequently, this study would assess the extent to which smoking ban was implemented among senior high school. The study utilizes descriptive research design where survey checklist was the main instrument to gather data. The study was conducted in Zone 2, Division of Zambales which consisted of municipalities of Palauig, Iba and Botolan. The study used simple random sampling. There are five hundred twenty seven (527) senior high school students from different municipalities have served as respondents. The instrument was validated by three experts and treated through reliability testing. There are two parts of the instrument, (a) demographic profile of the respondents; (b) perception of the student-respondents towards extent of smoking ban implementation. Based from the results, therefore it conclude that the student-respondents assessed "Implemented" on the level of smoking ban implementation as to school policies and intervention, teachers' participation and students' participation respectively; that there is significant difference when grouped according all profile variables except for gender as to school policies and intervention, teachers and there is no significant differences on the assessment towards dimensions on the level of extent of implementation of smoking ban as to school policies and intervention, teachers and there is no significant differences and intervention, teachers and there is no significant differences on the assessment towards dimensions on the level of extent of implementation of smoking ban as to school policies and intervention, teachers and student participation respectively.

Introduction

Students sneaking out of class to smoke with friends and classmates is one of the most common problems in the education system. This action led to poor grades in every subject (Tupas & Agreda, 2020). Young individuals often begin smoking, and the majority begin before the age of 18. Few anticipated to become addicts (Ben-Joseph, 2019). This age group increases the risks associated with smoking. This age group is still developing, making smoking more hazardous. In addition, a younger age of initiation increases the potential lifetime length of smoking. The risk of chronic diseases caused by smoking increases with time (National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, Centers for Disease Control and Prevention, 2012). Peer pressure has left them conflicted. Teens who have three or more smoking friends are 10 times more likely to smoke than those who don't (Benitez, 2014).

In the Philippines, smoking is highly prevalent and tobacco control policies fail to fully implement the WHO Framework Convention on Tobacco Control provisions (Bilano, Borja, Cruz, Tan, Mortera, and Reganit, 2015). Tobacco use harms Philippine public health. In few minutes, many could die in smoking-related diseases. The tobacco epidemic kills thousands of Filipinos per year (Bellew et al., 2013).

Deped has always banned smoking in classrooms. Since 2016, DepEd has made it illegal to smoke near schools and among students. It has been teaching students about the bad effects of smoking for a long time as part of the curriculum and through extracurricular activities as emphasized by Sec. Briones in one of her speech (DepEd, 2022). How many people smoked depended on what they knew and how they felt about it. The school smoking prevention program is linked to students' knowledge, but not to their attitudes. The school curriculum taught students more about the health risks of smoking, but it didn't change how they felt about it (Pholsena et al., 2011). Likewise, as Dube, Asman, Malarcher and Carabollo (2009) also stressed, that

comprehensive tobacco control initiatives must continue to implement community-based interventions that prevent initiation and enhance cessation, as well as evidence-based cessation methods for adolescents.

The Department of Education must incorporate lessons on the dangers of smoking into the K-12 curriculum and use the Graphic Health Warning templates to do so, as mandated by Republic Act No. 10643. It was also reaffirmed in Deped Order No. 48 s. 2016 titled "Policy and Guidelines on Comprehensive Tobacco Control," Moreover, The Department of Education (DepEd) reiterated its commitment to the continued fight against tobacco use and the development of a healthy environment in and around schools and DepEd offices during the Tobacco-Free Generation (TFG) Culminating Activity (Department of Education, 2018).

Despite the effectiveness of the smoking ban in Zambales, Philippines, further steps have been taken to ensure its continuing success. Similarly to Olongapo City, smoking in public has been made illegal in this community (Aspa, 2017). In conclusion, smoking is prohibited in a variety of public venues and workplaces in the Philippines, including those operated by the government, those offering medical or educational services to the general public, and those frequented by minors.

The Department of Education, Division of Zambales is likewise adopting anti-smoking measures in conformity with the aforementioned Deped memorandum and regulations, but it is unknown to what extent these programs have been implemented. As a result, this study would investigate into the extent to which the smoking ban was implemented among senior high school students. Additionally, this would look into teachers' and students' involvement and serve as the basis for developing a program to expand anti-smoking implementation.

Methodology

The study utilizes descriptive research design wherein survey checklist was the main instrument in gathering the required data. This study therefore would look into the extent of implementation of smoking ban among senior high school students. The study was conducted in Zone 2, Division of Zambales which consisted of municipalities of Palauig, Iba and Botolan. The study used simple random sampling. There are five hundred twenty seven (527) senior high school students from different municipalities have served as respondents. The instrument was validated by three experts and treated through reliability testing. There are two parts of the instrument, (a) demographic profile of the respondents; (b) perception of the student-respondents towards extent of smoking ban implementation. The study check if there was a significant difference in the perception of the student respondent towards extent of smoking ban when grouped according to profile variables using ANOVA.

Results And Discussion

1. Student-Respondents' Profile Variables

	Profile	Frequency	Percentage	
Age	16 and below	125	23.70	
	17-18 years old	75	14.20	
	19-20 years old	300	56.90	
	21 years old and above	27	5.10	
Gender	Gender Male		43.30	
	Female	214	40.60	
	Lesbian		10.40	
	Gay	15	2.80	
	Bisexual	15	2.80	

Table 1. Respondents' Demographic

Grade Level	Grade 11	137	26.00
	Grade 12	390	74.00
Track/ Strand	Accountancy and Business Management (ABM)	70	13.30
-	Humanities and Social Sciences (HUMMS) General Academic		13.70
_			5.10
	Science, Technology, Engineering and Mathematics (STEM)	165	31.30
	Agri-Fishery		3.20
-	Home Economics	84	15.90
_	Industrial Arts	39	7.40
-	Information Technology	47	8.90
	Sports Track	6	1.10
Monthly Family	Less than Php5000	145	27.50
Income	Php5001-Php10,000	128	24.30
	Php10,001-Php15,000	82	15.60
	Php15,001-Php20,000	71	13.50
	20,001-25,000	42	8.00
-	25,001-30,000	20	3.80
-	30,001 and above	39	7.40
Religion	Roman Catholic	312	59.20
	Methodist	20	3.80
-	Born Again	84	15.90
	Iglesia ni Cristo	43	8.20
	Baptist	19	3.60
	Mormons	24	4.60
	Others	25	4.70

Age. Majority of the student respondents with 300 or equivalent to 56.90% are from age group of 19-20 years old; 125 or equivalent to 23.70% from age group of 16 years old and below; 75 or 14.20% from 17-18 years old; and 27 or 5.10% from 21 years old and above. The computed mean age of the respondents was 18.37 years old.

Gender. Mostly of the student respondents with 228 or equivalent to 43.30% are males; 214 or 40.60% are females; 55 or 10.40%, lesbian; 15 or 2.80% are gays and bisexual respectively.

Grade Level. Majority of the five hundred twenty seven (527) were from Grade 12 with 390 or equivalent to 74.00% while in Grade 11 with only 137 or equivalent to 26.00%. The data manifest on the supremacy in number from Grade 12 and this could be ascribed that at the time on the distribution of the instrument the Grade 11 students have activity in the school.

Track/ Strand. Most of the five hundred twenty seven (527) were from Science, Technology, Engineering and Mathematics (STEM) strands with 165 or equivalent to 31.30% followed by Home Economic strand with 84 or equivalent to 15.90%; from Humanities and Social Science (HUMMS), 72 or equivalent to 13.70%; from Accountancy and Business Management, 70 or 13.30%; from Information Technology strand with 47 or 8.90%; from Industrial Arts strands, 39 or 8.90%; from General Academic with 27 or 5.10%; from Agri-Fishery tracks with 17 or 3.20% while the least coming from Sports tracks with only 6 or equivalent to 1.10%.

Monthly Family Income. Out of five hundred twenty seven (527) student-respondents, mostly with 145 or equivalent to 27.50% with family income of less than Php5000 a month; 128 or 24.30%, from Php5,001 to 10,000; 82 or 15.60%, from Php10,001-Php15,000; 71 or 13.50%, with family income of Php15,001-

Php20,000; 42 or 8.00%, Php20,001-25,000; 20 or 3.80%, Php25,001-Pph30,000 and 39 or equivalent to 7.40% with family income of Php30,001 and above. The computed mean of family monthly income was Php12,054.44.

Religion. Majority of the respondents with 312 or equivalent to 59.20% are members of the Roman Catholic church; followed by 84 or 15.90%, Born Again; 43 or 8.20% are Iglesia ni Cristo; 25 or 4.70% are other like 7th Day Adventist and Jehovah Witnesses; 24 or 4.60%, are members of the Church of Jesus Christ of Latter Day Saints popularly known as "Mormons"; 20 or 3.80% are Methodist and least with 19 or equivalent to 3.60% are Baptist.

2. Perception of the student-respondents towards Extent of Smoking Ban Implementation 2.1.School Policies and Intervention

Table 2 shows the perception of the student-respondents towards Extent of Smoking Ban Implementation as to School Policies and Intervention.

Table 2 : Perception towards Extent of Smoking Ban Implementation as to School Policies and Intervention

	School Policies and Intervention Statement Indicators	Weighted Mean	Qualitative Interpretation	Rank
1	Anti-smoking law is properly disseminated to all student and teachers.	4.11	Implemented	1
2	There is "No Smoking" signage in all public schools.	3.79	Implemented	3
3	Selling or distributing of cigarettes to senior high students is reprimanded by school heads and teachers.	3.63	Implemented	4
4	Smoking ban penalty/charges is being imposed to those who caught smoking.	3.62	Implemented	5
5	Smoking cessation program is being conducted to active smokers.	3.44	Implemented	7
6	School administrators' advocates Smoking ban Policy to students and teachers.	3.84	Implemented	2
7	Anti-smoking policy is strictly monitored and evaluated.	3.54	Implemented	6
8	There are assigned teachers/personnel in implementing smoking ban.	3.37	Moderately Implemented	8
9	The school conducts program to celebrate a national no smoking month.	2.82	Moderately Implemented	10
10	Selling and distribution of cigarette within 100 meter from the perimeter of school is prohibited.	3.22	Moderately Implemented	9
	Overall Weighted Mean	3.54	Implemented	

This revealed that proper dissemination of Anti-smoking law to all students and teachers is implemented evident from the highest mean of 4.11. Additionally, school administrators' advocating Smoking ban Policy

to students and teachers (M=3.84), having "No Smoking" signage in all public schools (M=3.79), selling or distributing of cigarettes to senior high students is reprimanded by school heads and teachers (M=3.63), smoking ban penalty/charges is being imposed to those who caught smoking (M=3.62), strictly monitoring and evaluating of Anti-smoking policy (M=3.54), and conducting of smoking cessation program to active smokers (M=3.44) are all implemented based from student perception. However, assigning of teachers/personnel in implementing smoking ban (M=3.37), prohibiting of selling and distribution of cigarette within 100 meter from the perimeter of school is prohibited (M=3.22), and conducting of school program to celebrate a national no smoking month (M=2.82) are only moderatelyt implemented based from their perception.

In overall, the smoking ban implementation as to school policies and intervention are implemented based from the perception of the respondents evident with the weighted mean of 3.54.

The school administrator, principals and teachers cares for the health of every person specially the youth as well as to the environment. Hence, full implementation and cooperation is needed to be followed strictly by all person involve in the program.

Policy, rule, and regulatory dissemination increases program implementation. According to statistics, students in grades 7-12 are progressively smoking. This increase in high school smokers is a public health concern (Murnaghan, Leatherdale, Sihvonen and Kekki, 2009). Thereby, it needs proper care and attention to the problem.

Centers for Disease Control and Prevention (1994) also emphasized that school-based interventions aimed at preventing tobacco use may be effective in lowering tobacco use. However, high percentages of student cigarette smokers were aware of school smoking bans, but they did not change their behavior. Lack of school policy compliance necessitates further enforcement and sustainability, taking into account household smoking and social determinants (El Amin, 2019).

2.2. Teachers' Participation

Table 10 shows the perception of the student-respondents towards the extent of Smoking Ban Implementation as to Teachers' Participation.

ſ	Feachers' Participation Statement Indicators	Weighted Mean	Qualitative Interpretation	Rank
1	Teachers attend seminars and trainings for proper implementation of anti-smoking law.	3.76	Implemented	2
2	Teachers conduct seminars and programs to senior high school students every year.	3.74	Implemented	3
3	Smoking and its harmful effects is integrated in science and health subject.	3.96	Implemented	1
4	Teachers coordinate with the community officials for a regular monitoring of residences selling and distributing of cigarette to students.	3.35	Moderately Implemented	7
5	Teachers conduct a smoking cessation program in coordination with school nurse or public health officials.	3.35	Moderately Implemented	7
6	Assigned teacher/personnel are conducting anti- smoking campaign.	3.36	Moderately Implemented	5
7	Teachers integrate importance of anti-smoking law implementation in their respective subjects.	3.60	Implemented	4

Table 3 : Perception towards Extent of Smoking Ban Implementation as to Teachers' Participation

8	Teachers celebrate No Smoking Month every month of June and conducts activities to help increase the extent of anti-smoking implementation.	3.00	Moderately Implemented	10
9	Teachers inform and encourage parents in the	3.35	Moderately	7
	implementation anti-smoking law.		Implemented	
10	Teachers impose punishment to those students	3.30	Moderately	9
	smoking inside the school and within 100 meter		Implemented	
	of school perimeter.		_	
	Overall Weighted Mean	3.48	Implemented	

The data clearly demonstrated on the awareness of the respondents towards effects of smoking in science and human health. As aired every day in the television, printed in the newspapers and even pictures on the cigarette packs on the harmful effects of smoking as caused of emphysema, lung cancer and other dreadful diseases. Research reveals that testing and evaluation methods for school tobacco policy vary. Little is known about effective school tobacco policies and teen smoking prevention strategies (Lovato, Sabiston, Hadd, Nykiforuk, & Campbell, 2007). Despite that, school tobacco policy enforcement has been associated to fewer sightings of minors smoking on school grounds and reduced student smoking rates. Teachers play a critical role in preventing youth tobacco use in schools (Adams, Jason, Pokorny and Hunt, 2009).

Teacher training must contain a discussion of the program's philosophy, a demonstration of the skills to be acquired, practice, feedback, and application coaching in order to be effective. Throughout a teacher's first classroom implementation, a training workshop and ongoing consultation are required (Tortu & Botvin, 1989).

2.3. Students' Participation

Table 4 shows the perception of the student-respondents towards the Extent of Smoking Ban Implementation as to Students' Participation.

This revealed that students are knowledgeable on harmful effects of smoking evident from the highest mean of 3.52. Moreover, students being knowledgeable about the benefits/importance of implementing antismoking law (M=3.86), them being strictly prohibited to smoke inside the school and within 100 meter of school perimeter (3.58), all of them participating in anti-smoking programs conducted by teachers (M=3.52), them being informed about the punishment if caught smoking inside and within the perimeter of school (M=3.52), inclusion of smoking prohibition in the curriculum (M=3.50), students' parents being fully informed and involved on implementation of anti-smoking law (M=3.50), and students participating in the activities such as essay writing, poster making, slogan and jingle making contest to express their ideas about the implementation of anti-smoking law (M=3.42) are implemented based from the perception of the respondents. However, students being required to attend and participate in celebration of national no smoking month every month of June yearly (M=3.20), and them found to be active smokers undergo smoking cessation program (M=3.11) are only moderately implemented based from the respondent's perceptions as well.

In overall, the extent of smoking ban implementation as to students' participation is implemented based from the perceptions of the respondents evident from the weighted mean of 3.52.

 Table 4 : Perception towards Extent of Smoking Ban Implementation as to Students' Participation

		Weighted Mean	Qualitative Interpretation	Rank
1	All student participates in anti-smoking programs conducted by teachers.	3.52	Implemented	4.5

2	Students are knowledgeable on harmful effects of smoking.	3.95	Implemented	1
3	Prohibition of smoking is included in the curriculum.	3.50	Implemented	6.5
4	Students were informed about the punishment if caught smoking inside and within the perimeter of school.	3.52	Implemented	4.5
5	Students found to be active smokers undergo smoking cessation program.	3.11	Moderately Implemented	10
6	Students are knowledgeable about the benefits/importance of implementing anti- smoking law.	3.86	Implemented	2
7	Students are required to attend and participate in celebration of national no smoking month every month of June yearly.	3.24	Moderately Implemented	9
8	Students participate in the activities such as essay writing, poster making, slogan and jingle making contest to express their ideas about the implementation of anti-smoking law.	3.42	Implemented	8
9	Students' parents are fully informed and involved on implementation of anti-smoking law.	3.50	Implemented	6.5
10	Students are strictly prohibited to smoke inside the school and within 100 meter of school perimeter.	3.58	Implemented	3
	Overall Weighted Mean	3.52	Implemented	

The data clearly demonstrated on the high level of awareness on the effects of smoking on the health of the respondents. This was made possible because of the strong involvement of students to participate in school intervention programs. The Department of Education suggested holding a poster-making contest and a parade within 100 meters of the school to raise awareness about tobacco control measures. They also suggested coordinating advocacy actions in schools and communities with other government agencies and non-government organizations (Southeast Asia Tobacco Control Alliance, 2018).

Conducting awareness-raising activities to warn against smoking, promote healthy lifestyles, and counter the tobacco industry's tactics to avoid tobacco control measures, glamorize smoking, and minimize or deny the addictive, harmful nature of tobacco products; and posting signs in prominent and strategic locations indicating the school or office is a smoke-free zone. Carry out creative projects, lectures, and seminars, in addition to student projects such as parades, posters, jingles, essays, and videos.

Summary Table on the perception towards Extent on Smoking Ban Implementation

Table 12 shows the Summary Table on the perception towards Extent on Smoking Ban Implementation.

Table 5 : Summary Table on the perception towards Extent on Smoking Ban Implementation							
Level of Extent on the Implementation on Smoking Ban	Overall Weighted Mean	Qualitative Interpretation	Rank				
School Policies and Intervention	3.54	Implemented	1				
Teachers' Participations	3.48	Implemented	3				
Students' Participation	3.52	Implemented	2				
Grand Mean	3.51	Implemented					

The student-respondents unanimously responded to have "Implemented" on school policies and intervention obtained an overall weighted mean of 3.54 and ranked 1st; teachers' participation, 3.48 and ranked 3rd while in students" participation with 3.52 and ranked 2nd. The computed overall grand mean was 3.51 with qualitative interpretation of "Implemented" towards the level of extent on smoking ban implementation

3. Test of Differences on the Extent of Smoking Ban Implementation when grouped according to profile variables

3.1. School Policies and Intervention

Table 6 shows the Analysis of Variance to test differences on the Perception towards Extent of Smoking Ban Implementation as to School Policies and Intervention when grouped according to profile variables.

In the table, it presents the perception towards extent of smoking ban implementation as to school policies and intervention when grouped according to profile variables. It revealed that there is significant difference in the perception towards extent of smoking implementation according to profile variables evident from the p-value .000 in age, grade level, track/ strand and monthly income. However, there is no significant difference profile variables gender and religious affiliation evident from the p-value of 0.064 and 0.077, respectively. This means that based from respondents profile, they may have varied perceptions towards the extent of smoking ban implementation as to school policies and interventions.

The data clearly demonstrate on the divergence and opposition of opinion towards extent of smoking ban as to school policies and intervention when grouped according to age, grade level, tracks/strand and family monthly income. School tobacco policies prove to be a promising strategy to prevent smoking initiation among adolescents, as there is evidence that the school environment can influence young people to smoke.

Table 6 Analysis of Variance to test differences on the Perception towards Extent of Smoking Ban Implementation as to School Policies and Intervention when grouped according to profile variables

Sources of Va	riation	SS	df	MS	F	Sig.	Decision
Age	Between Groups	21.289	3	7.096	9.962	0.000	Reject Ho
	Within Groups	372.569	523	0.712			Significant
	Total	393.859	526				
Gender	Between Groups	6.648	4	1.662	2.241	0.064	Accept Ho
	Within Groups	387.210	522	0.742			Not Significant
	Total	393.859	526				
Grade Level	Between Groups	9.131	1	9.131	12.461	0.000	Reject Ho
	Within Groups	384.727	525	0.733			Significant
	Total	393.859	526				
Track/Strand	Between Groups	36.525	8	4.566	6.618	0.000	Reject Ho
	Within Groups	357.334	518	0.690			Significant
	Total	393.859	526				
Monthly Family Income	Between Groups	19.691	6	3.282	4.561	0.000	Reject Ho
	Within Groups	374.168	520	0.720			Significant
	Total	393.859	526				
Religious Affiliation	Between Groups	8.508	6	1.418	1.913	0.077	Accept Ho
	Within Groups	385.351	520	0.741			Not Significant
	Total	393.859	526				

STPs (school tobacco policies) are affordable, simple to adopt, and have a significant impact. It is unclear, nevertheless, if this strategy works to stop people from starting to smoke (Coppo et al, 2014).

3.2. Teachers' Participation

Table 7 shows the Analysis of Variance to test differences on the Perception towards Extent of Smoking Ban Implementation as to teachers' participation when grouped according to profile variables.

In the table, it presents the perception towards extent of smoking ban implementation as to teachers' participation when grouped according to profile variables. It revealed that there is significant difference in the perception towards extent of smoking implementation according to profile variables evident from the p-value .000 in age, grade level, track/ strand and monthly income, and 0.015 in religious affiliation.

		to prome	variab	ies			
Sources of Vari	iation	SS	df	MS	F	Sig.	Decision
Age	Between	39.187	3	13.062	14.353	0.000	Reject Ho
	Groups						Significant
	Within	475.981	523	0.910			
	Groups						
	Total	515.169	526				
Gender	Between	2.762	4	0.690	0.703	0.590	Accept Ho
	Groups						Not Significant
	Within	512.407	522	0.982			
	Groups						
	Total	515.169	526				
Grade Level	Between	19.163	1	19.163	20.283	0.000	Reject Ho
	Groups						Significant
	Within	496.006	525	0.945			
	Groups						
	Total	515.169	526				
Track/Strand	Between	94.785	8	11.848	14.599	0.000	Reject Ho
	Groups						Significant
	Within	420.384	518	0.812			-
	Groups						
	Total	515.169	526				
Monthly Family Income	Between	25.093	6	4.182	4.438	0.000	Reject Ho
	Groups						Significant
	Within	490.076	520	0.942			
	Groups						
	Total	515.169	526				
Religious Affiliation	Between	15.365	6	2.561	2.664	0.015	Reject Ho
	Groups						Significant
	Within	499.803	520	0.961			0
	Groups						
	Total	515.169	526				

Table 7 : Analysis of Variance to test differences on the perception towards Extent of Smoking Ban
Implementation as to Teachers' Participation when grouped according
to profile variables

However, there is no significant difference profile variables gender evident from the p-value of 0.064. This means that based from respondents profile, they may have varied perceptions towards the extent of smoking ban implementation as to teacher participation.

Individual demographic characteristics and attending a school with a high concentration of smokers were good predictors of smoking, but a school smoking ban was not. As more students stated that their schools did not allow them to smoke, the grades of those who did not smoke fell. Beginning to smoke and performing well in school are both associated with a lower socioeconomic level.

Students' Participation

Table 8 shows the Analysis of Variance to test differences on the Perception towards Extent of Smoking Ban Implementation as to students' participation when grouped according to profile variables.

In the table, it presents the perception towards extent of smoking ban implementation as to students' participation when grouped according to profile variables. It revealed that there is significant difference in the perception towards extent of smoking implementation according to profile variables evident from the p-value .000 in age, grade level, track/ strand and monthly income. However, there is no significant difference profile variables gender and religious affiliation evident from the p-value of 0.453 and 0.056, respectively. This means that based from respondents profile, they may have varied perceptions towards the extent of smoking ban implementation as to students' participation.

Dissemination of school smoking policies has been associated with the students' smoking prevalence together with the restrictive staff and pupil smoking policies; and implementation of smoking policies in the context of a health promoting whole school environment. A study found that pupils attending schools that did not disseminate pupil smoking policy in a written document had a greater tendency to <u>smoke</u> daily on school premises than those who attended schools that disseminated policy through a written document (Wiium, Burgess, and Moore, 2011).

according to profile variables							
Sources of Van	riation	SS	df	MS	F	Sig.	Decision
Age	Between Groups	24.195	3	8.065	10.431	0.000	Reject Ho
_	Within Groups	404.381	523	0.773			Significant
	Total	428.576	526				
Gender	Between Groups	2.996	4	0.749	0.919	0.453	Accept Ho
	Within Groups	425.581	522	0.815			Not Significant
	Total	428.576	526				
Grade Level	Between Groups	10.556	1	10.556	13.258	0.000	Reject Ho
	Within Groups	418.020	525	0.796			Significant
	Total	428.576	526				
Track/Strand	Between Groups	26.465	8	3.308	4.261	0.000	Reject Ho
	Within Groups	402.112	518	0.776			Significant
	Total	428.576	526				
Monthly Family Income	Between Groups	24.661	6	4.110	5.291	0.000	Reject Ho
	Within Groups	403.915	520	0.777			Significant
	Total	428.576	526				
Religious Affiliation	Between Groups	9.947	6	1.658	2.059	0.056	Accept Ho
	Within Groups	418.629	520	0.805			Not Significant
	Total	428.576	526				

Table 8 : Analysis of Variance to test differences on the perception towards Extent of Smoking Ban
Implementation as to Students' Participation when grouped
according to profile variables

Smoking initiation was predicted by individual-level demographic factors and by the contextual factor of attending a school with a high prevalence of established smoking, but failed to be predicted by a school smoking ban. The academic performance of students who indicated there was no school smoking ban was found to worsen as an increasing proportion of the student body indicated that such a rule existed. Lower socio-economic status was found to be an independent predictor of smoking initiation and poorer academic performance. A school ban against smoking, in addition to not being clearly effective, might also not be entirely benign. School smoking policy should be monitored as to educational outcomes and the impact of policy on groups vulnerable to smoking (Poulin and Poulin, 2007).

According to Galan, et al (2012), smoking among students is increased in those schools that did not undertake educational programmes regarding smoking; and in those that received complaints about smoking. This association is partly due to the effect of the increase in giving up smoking. The coming into force of a law

banning smoking in schools, and the implementing of educational policies for the prevention and control of smoking are related to a lower risk of adolescent smoking.

4. Test of Differences on the dimensions towards Extent of Smoking Ban Implementation

Table 10 shows the Analysis of Variance to determine significant differences on the dimension towards extent of smoking ban implementation.

Table 10. Test of Differences on the Extent of Smoking Dan Implementation									
Groups	Count	Sum	Average	Variance					
School Policies and Intervention	10	35.38	3.538	0.127951					
Teachers' Participation	10	34.81	3.481	0.078432					
Students' Participation	10	35.2	3.52	0.062378					

Table 10 : Test of Differences on the Extent of Smoking Ban Implementation

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	0.01698	2	0.00849	0.094768	0.909885	3.354131
Within Groups	2.41885	27	0.089587			
Total	2.43583	29				

The computed F value of 0.094768 which is less than the F critical value of 3.354131 using 0.05 Alpha Level of Significance, therefore the Null Hypothesis is Accepted, hence there is no significant difference on the perception towards dimensions on the extent of smoking ban implementation as to school policies and intervention, teacher's and student participation respectively.

The data clearly manifest on the equal weights of involvement towards the implementation of smoking ban in the school. School administrators and teachers work closely hand in hand in disseminating information drive against smoking among school youths.

As reported in the Article of Southeast Asia Tobacco Control Alliance (2018), Education Secretary Leonor Briones stated that DepEd should focus on promoting the implementation of DepEd Order No. 48 series of 2016 or the "Policy and Guidelines on Comprehensive Tobacco Control" in all schools and DepEd offices in order to provide a massive and countrywide anti-smoking campaign in schools.

Youth smoking may be reduced by STPs. School tobacco policies govern when and where students can smoke, as well as adult smoking at school and student smoking penalties. A smoking ban for students and/or teachers, its scope, enforcement levels, monitoring methods, sanctions for students or teachers caught smoking, and tobacco cessation programs are all components (Coppo, et al, 2014).

Increased community-based interventions and home supports, such as parental monitoring, can help to boost school-based preventative efforts. Youth smoking may be reduced via school-based tobacco control programs. School-based tobacco-control programs may improve understanding of the health risks of tobacco, but they have little impact on teen tobacco-control efforts (Murnaghan, Leatherdale, Sihvonen and Kekki, 2009).

Likewise Dube, Asman, Malarcher, and Carabollo (2009), stated that comprehensive tobacco control programs must continue to include community-based treatments that prevent initiation and increase cessation, as well as evidence-based cessation strategies for juveniles.

Conclusion

- 1. The student-respondent is a typical male, relatively young Grade 12 senior high school student, Roman Catholic, under STEM tracks and whose family income is below poverty level.
- 2. The student-respondents assessed "Implemented" on the level of smoking ban implementation as to school policies and intervention, teachers' participation and students' participation respectively.
- 3. There is significant difference when grouped according to age, grade level, tracks/strand, monthly family income while no significant differences on gender and religious affiliation respectively as to school policies and intervention and students' participation while there is significant difference when grouped according to age, grade level, tracks/strand, monthly family income and religious affiliation respectively on teachers' participation.
- 4. There is no significant differences on the assessment towards dimensions on the level of extent of implementation of smoking ban as to school policies and intervention, teachers and student participation respectively.

References

- 1. Adams, M. L., Jason, L. A., Pokorny, S., & Hunt, Y. (2009). The relationship between school policies and youth tobacco use. *The Journal of school health*, 79(1), 17–43. <u>https://doi.org/10.1111/j.1746-1561.2008.00369.x</u>
- 2. Aspa, C. (2017). Olongapo implements smoking ban. *Headline Zambales*. https://headlinezambales.wordpress.com/2017/08/24/olongapo-implements-smoking-ban/
- Bellew, B., Antonio, M., Limpin, M., Alzona, L., Trinidad, F., Dorotheo, U., Yapchiongco, R., Garcia, R., Anden, A., & Alday, J. (2013). Addressing the tobacco epidemic in the Philippines: progress since ratification of the WHO FCTC. *Public health action*, 3(2), 103–108. <u>https://doi.org/10.5588/pha.13.0006</u>
- 4. Benitez, Z. (2014). Peer Pressure: Teen Smoking. *Health Beat.* <u>https://jamaicahospital.org/newsletter/peer-pressure-teen-smoking/</u>
- 5. Ben-Joseph, E. P. (2019). Smoking. *Nemours Teens Health.* <u>https://kidshealth.org/en/teens/smoking.html</u>
- 6. Bilano, V. L., Borja, M. P., Cruz, E. L., Tan, A. G., Mortera, L. L., & Reganit, P. F. (2015). Smokingattributable burden of lung cancer in the Philippines. *Tobacco control*, 24(3), 263–268. <u>https://doi.org/10.1136/tobaccocontrol-2013-051082</u>
- 7. Centers for Disease Control and Prevention (1994). Guidelines for School Health Programs to Prevent Tobacco Use and Addiction. *Morbidity* and *Mortality* Weekly Report. https://www.cdc.gov/mmwr/preview/mmwrhtml/00026213.htm
- Coppo, A., Galanti, M. R., Giordano, L., Buscemi, D., Bremberg, S., & Faggiano, F. (2014). School policies for preventing smoking among young people. *The Cochrane database of systematic reviews*, 2014(10), CD009990. <u>https://doi.org/10.1002/14651858.CD009990.pub2</u>
- 9. Department of Education (2018). DepEd, gov't agencies support Tobacco-Free Generation initiative. *DepEd. GOVPH.* <u>https://www.deped.gov.ph/2018/10/09/deped-govt-agencies-support-tobacco-free-generation-initiative/</u>
- 10. Department of Education (2022). DepEd enjoins government units, partners to support smoke-free schools. *DepEd. GOVPH.* <u>https://www.deped.gov.ph/2022/01/14/deped-enjoins-government-units-partners-to-support-smoke-free-schools/</u>
- Dube, S., Asman, K., Malarcher, A., and Carabollo, R. (2009). Cigarette smoking among adultsand trends in smoking cessation-united states, 2008. *Morbidity and Mortality WeeklyReport, vol. 58, no.* 44, pp. 1227–1232. <u>https://www.cabdirect.org/cabdirect/abstract/20093337933</u>

12.

- El Amin, S. E. T. (2019). School Smoking Policies and Health Science Students' Use of Cigarettes, Shisha, and Dipping Tombak in Sudan. *Frontiers in Public Health*. DOI: 10.3389/fpubh.2019.00290
- 13. Lovato, C. Y., Sabiston, C. M., Hadd, V., Nykiforuk, C. I. J. and Campbell, H. S. (2007). The impact of school smoking policies and student perceptions of enforcement on school smoking prevalence and location of smoking, *Health Education Research*, Vol. 22, Issue 6 <u>https://doi.org/10.1093/her/cyl102</u>
- 14. Murnaghan, D. A., Leatherdale, S. T., Sihvonen, M., & Kekki, P. (2009). School-based tobaccocontrol programming and student smoking behaviour. *Chronic diseases in Canada*, 29(4), 169–177.
- 15. National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health. Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta (GA): Centers for Disease Control and Prevention (US); 2012. 2, The Health Consequences of Tobacco Use Among Young People. Available from: <u>https://www.ncbi.nlm.nih.gov/books/NBK99242/</u>
- 16. OUA-00-0122-0148 Memorandum (22 January 2022). Tobacco Graphic Health Warning Assessment. *Department of Education*. <u>https://depedpines.com/wp-content/uploads/2022/02/OUA-MEMO-00-0122-0148_0001.pdf</u>
- Pholsena, S., Asaad, A. M., Mao, Z. Q., Sio, A. R., Sokana, O., Kishi, Y. and Kitajima, K. (2011). Youth smoking prevention program: Influence on smoking prevention program among secondary school students in Paranaque City, Philippines. *Journal of National Institute of Public Health Vol. 60 No. 1 p.54-59.* <u>https://www.niph.go.jp/journal/data/60-1/201160010011.pdf</u>
- 18. Southeast Asian Tobacco Control Alliance (2018). Philippines: No smoking activities in schools urged. *Seatca.org*. <u>https://seatca.org/philippines-no-smoking-activities-in-schools-urged/</u>
- 19. Tortu, S., & Botvin, G. J. (1989). School-based smoking prevention: the teacher training process. *Preventive medicine*, 18(2), 280–289. <u>https://doi.org/10.1016/0091-7435(89)90075-3</u>
- 20. Tupas, F. and Agreda, M. I. (2020). How to stop before it starts: the case of an anti-smoking campaign for High Schools in the Philippines. *Journal of Educational and Social Research*. https://doi.org/10.36941/jesr-2020-0048
- 21. Wiium, N. Burgess, S. and Moore, L. (2011). Brief report: Multilevel analysis of school smoking policy and pupil smoking behaviour in Wales. *Journal of Adolescence, Vol. 34, Issue 2.* <u>https://doi.org/10.1016/j.adolescence.2010.02.006</u>.