

# Assessment of School Security Practices Implemented at Visayas State University Tolosa in the New Normal

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**Abstract:-** This study purposely examined school security measures implemented at Visayas State University Tolosa in Eastern Visayas specifically in the Municipality of Tolosa. The Theoretical Framework of Scheider, Walker, Sprague (2000), on *Safe School Design* for educational leaders applying the principles of crime prevention through environmental design was used in the study. The study utilized quantitative methods for which a questionnaire was employed to elicit information on the nature of school security practices on the aspects of human, physical, technological/electronic security practices as well as from the recent Commission on Higher Education (CHED) and Department of Health (DOH) Minimum Public Health standards as adapted from CHED-DOH Joint Memorandum Circular No. 2021-004. The security measures included monitoring of school gates and exits, use of metal detectors and presence of security officers, as well as the emergency/crisis preparedness of the institutions. The questionnaires were administered to a total of 170 respondents all of whom are school employees. The results of the study revealed that the Institution implemented some security measures on various aspects like infrastructure/physical security, and personnel/human security practices. At some point the level effectiveness of security measures was observed very much effective for Structure/Physical security, as well as very much effective for personnel/human security measures and much effective for technological or electronic security and very much effective for the implementation of the Commission on Higher Education-Department of Health minimum public health standards. Overall, most of the gaps observed were on less involvement of the employees to security measures, inadequate technological and electronic security equipment. Moreover, from the recent traumatic experience of the employees of the School from a disaster affecting the region, more security personnel, including student and school employees were recommended to be trained to equip them to handle any future and similar crisis/emergency situations.

**Keywords:-** Assessment, School, Security, Measures, Practices, Higher Educational Institution, New Normal.

## I. INTRODUCTION

Security is one of the primary concerns of the governments. Full attention has been given to Higher Education Institutions (HEIs) security to address the security threats. Thus, all HEIs in the country are also allocating funds on security purposes in order to address possible arising

security risks. These security practices include rules and regulations regarding student conduct such as potentially violence arising from students' activities. The security measures also include security strategies like monitored door gates or exits, the use of metal detectors, the presence of security guards on campus patrol and possibility of students to link with terrorist or fraternities causing negative effects and responses. All of these are examples on the value of school-based security practices done at the academic institutions specifically in Visayas State University Tolosa on the security concerns.

Presently, one of the major challenges that our Philippine government is facing is the issue on the Covid 19 Pandemic as students across the attends classes through the internet for millions of students in the Philippines are staying home for almost two years (Gutierrez, et.al, 2021). However, the government's pandemic task force approved last year the phased rollout of face to face classes for colleges and universities, (Abad, 2021)" Limited face-to-face classes are now allowed under Alert 1,2 and 3 subject to certain conditions," Resolution No. 148-G of the inter-Agency Task Force (IATF) for the Management of Emerging Infectious Diseases.

In a briefing conducted last November 2021 before the house committee on higher and technical education, CHED Chairperson Prospero de Vera emphasized "for schools to be allowed to conduct the classes, CHED will require them to retrofit, facilities to be protective from COVID-19 and to comply with minimum public health standards. Thus, CHED has released the Memorandum Circular No. 2021-004 Guidelines on the implementation of Limited Face-to-face classes for all program of Higher Education Institution's (HEIs) in Areas Under Alert Levels System for Covid 19 Response.

Another major challenges that Philippine government is facing before the school lockdown is the issue on managing the increasing trends of violence in academic settings. It has become the forefront responsibility of schools to protect the welfare of our younger generations as molded in academic institutions especially that schools is now allowed to gradually open for face to face classes. Recent study describes State universities and Private colleges' security practices to prevent rising condition of threats in campus. Media reports nationwide also highlighted violence which is no longer new in some schools and occurrence of serious violence such as shootings are happening in few HEIs campuses while other forms of violence are even unreported continue to take place. The incidents like physical attacks, fights (without a weapon),

theft, larceny, or vandalism and weapons carried in school premises are threatening. Any school-based violence is alarming and has become a public's knowledge in local media taking place in schools and universities. These occurrences not only maligned school reputation but it also possesses questions on campus security of children where schools are considered safe haven for youth and children.

Several studies conducted abroad about School based security measures among of these was conducted by Jonson (2017) this was about the massacres at Columbine High School, Virginia Tech, and Sandy Hook Elementary School drew public attention to the issue of school shootings. Many schools hired armed security personnel, restricted access to campus buildings, installed metal detectors, and trained individuals on how to respond when a shooter enters school grounds in response to calls for something to be done to safeguard our children, faculty, and staff. Many of these security measures, on the other hand, were adopted with little to no reference to the empirical research. Failure to implement evidence-based remedies has had unintended budgetary and hidden implications that are only now becoming apparent. This essay fills that hole by evaluating the empirical facts underlying typical security measures taken in reaction to well-publicized school shootings and advocating for a data-driven approach to school safety.

In a case study written by Kwon, et.al (2021) when it comes to school security and to promote safety they found out in their study that to protect students from infection, a "school disinfection plan" was implemented at the individual and class level. In addition, for effective implementation, school health activities were carried out with a "personal protection safety belt" and a "community protection safety belt." The "prevention safety belt strategy" was introduced in accordance with governmental guidelines to sequentially implement various preventive measures necessary to ensure environmental safety of schools in order to ensure a safe educational environment for high school students and to ensure smooth execution of face-to-face classes (in-person teaching). Personal preventative safety belts were activated by checking students' symptoms when they entered the school and throughout each class, and self-made disinfectants were provided by spraying alcohol on wet-wipes. These were cost-effective and sustainable approaches utilized in this school. The experience of designing a prevention safety belt approach to fit the local education office's recommendations to the school environment was shared. The concept of prevention safety belts served to unite and inspire voluntary engagement of students in health promotion activities by focusing on the school community as well as individual students and teacher.

As mentioned by Curran,et.al (2020) Policymakers and educators seek strategies to prevent school shootings after high-profile incidents, but there has been little study on school-level responses in the early aftermath of such incidents. Using a nationally representative sample of elementary school principals from the Early Childhood Longitudinal Study, this study examines how school-level security measures and practices changed after the 1999 Columbine shooting. Using variation in the timing of survey completion relative to the

Columbine shooting, elementary schools were 16 percentage points more likely to lock exits after Columbine and, over time, were more likely to use visitor sign in procedures. In several models, the racial/ethnic composition of the school had a moderating influence. Policy and educational implications are examined.

In a study conducted by (Bergeron, 2016) found out that the biggest threat or concern related to school security within the school were the following: Active shooter, intruder, neighborhood, entry points, crazy people and natural disasters. The following security measures should also be put into considerations; (1) Access control and doors/entry/exit- these should be secured in order to avoid intruder in the school facility; (2) knowledge and training these includes Information on school safety and security is disseminated and communicated. (especially between the teachers and staff and the administration); More opportunities for educators and staff to participate in school safety training. policies, methods, priorities, and practices; and There will be more opportunities for practice, rehearsals, and drills across the board. critical circumstances that could occur at school (3) Student Concerns- Student supervision issues (i.e., a lack of student supervision) and student compliance issues are almost evenly distributed. Students' concerns included the ability for students to essentially roam the halls freely in some schools, as well as compliance issues such as student non-compliance with school safety and security procedures (complacency) or more deliberate disruptive actions (subterfuge) on the part of students to circumvent or sabotage school safety and security efforts; (4) Parental issues- Non-compliance by parents with guest check-in/out, drop-off, and pickup procedures. Concerns about problems with custody issues involving pupils and non-custodial parents coming to school, as well as potentially aggressive or violent parents both at home and potentially in the school context, were almost equally voiced, indicating the need for mitigation strategies; (5) Notification and Alarm Systems In some schools, there was no dependable notice or public address system (one depended solely on its typical bell system), and in others, there were uncertainties about the usefulness of existing systems; and lastly (6) School resource Officers and/or Armed Security officers- This category is about dealing with guns and weapons, and it was created in response to a perceived need among some faculty and staff for designated (non-security) personnel to have weapons training and access to firearms at school, or to allow concealed carry weapon permit holders to have access to their own weapons while on school grounds.

In the research article of Nguyen.et.al (2020) and Jaarsveld (2011) discusses physical security as part of security that one is able to see. It is implemented as a security measure in order to ensure the safety of personnel and property. When physical security measures are implemented in the correct and effective manner, it will ensure maximum protection. However, it is important to bear in mind that physical security only forms a part of a total integrated security system and should not be used on its own.

Fry, et.al (2016) study found out that Many schools in the United States try to create safe learning environments by putting in place visible security measures including cameras, metal detectors, and security guards. This study looked at how people use visible security measures and some of the factors that influence them. Multiple waves of two nationally representative surveys yielded responses from school administrators and students. There were three latent kinds of visible security measures discovered. The heaviest security latent class was connected with student race/ethnicity and school disorder and was most commonly found in large metropolitan high schools in the South. The findings have implications for future study into the efficiency of visible security measures.

Mowen & Manierre (2017) found out that despite the fact that delinquency in US schools is at record lows, school authorities, parents, and policymakers continue to be concerned about the issue. Many academics believe that the current disciplinary method in the United States is excessively severe. While some studies have looked at the impact of punitive security on students' perceptions of safety and general well-being, there has been little focus on the influence of these measures in extracurricular activities. The findings reveal that kids who attend schools with more security measures are less involved in extracurricular activities, while the existence of security measures does not correlate with lower levels of participation over time.

As studied by Fisher, et.al (2021) school-based security is most likely perceived by the presence of security cameras as the prevalent methods for preventing and detecting school crime and violence since the late 1990s in their study using multiple waves of the nationally representative School Survey on Crime and Safety. It investigates the link between installing school security cameras and the outcomes of crimes documented by the school. The number of offenses reported to the police, the frequency of social disturbances, and the amount of exclusionary punishment imposed are all factors to consider. The findings revealed null effects for all outcomes and a number of alternate specifications, indicating that crime and punishment patterns in schools with cameras were similar to those in schools without cameras. Theoretical and practical concerns are used to understand the findings.

According to Rooney (2015) The recent decade has witnessed an increase in the development of high-security fences surrounding schools, in a movement away from the open or low-fenced grounds that have traditionally been a staple of Australian school design. These structures, far from being passive and inert, act to reshape the landscape's possibilities for mobility and connectivity. Beyond the impact of fences on safety and security, this research investigates the broader ramifications of these constructions. The study conducted opens up new pathways for thinking about how children's learning is impacted by the relationship between school, community, and the boundaries between them by bringing together perspectives on children's experience of independent movement, belonging, and attachment to place. It serves as a starting point for understanding how high-security limits affect children's development and why these structures

might often cause more problems than the ones they are intended to solve.

Thus, this study has sought to assess school-based security practices whether real or perceived. This study will describe existing gaps in security measures, an issue schools faced. This study further looked into the school security measures and implementation of the COVID 19 protocol which was specified under CHED-DOH minimum public health standards which was just implemented in the institution this academic year.

To date, from observation, the researcher did not have any document to support studies on school-based security measures in local context. The study is limited to the use of one-shot data collection by means of using questionnaire and documents to describe school-based security measures implemented in Visayas State University Tolosa.

#### ➤ *Statement of the Problem*

This study attempted to answer the following questions:

1. What are the School-Based Security Measures Implemented at VSU Tolosa?
2. What is the level of effectiveness of school security measures applied at VSU Tolosa?

## II. METHODS

This study uses the evaluation framework employing quantitative approach in order to answer possible complex questions anchored in this research. It objectively measures the variable(s) of interest and constructs identified, with attention to validity and reliability. A quantitative research typically reduces the data through mean, median, and statistics. In this study, a quantitative research designed was following evaluation approach. Using the evaluation approach, the data were collected from survey questionnaires. Furthermore, some of the data were acquired through the document reviews which provided insights into the practice, and how the school stakeholder viewed these security circumstances in the research sites. The quantitative nature of the study begins with a theoretical perspective or views of the stakeholders' security management and practices observed in the school.

The total enumerated population for this study are teaching (76), non-teaching (94), a total of (170) one hundred seventy personnel was considered in this study.

Table 1. Respondents of the study.

RESPONDENTS	CODE	NUMBER OF RESPONDENTS
FACULTY	1	76
STAFF	2	94
<b>TOTAL</b>		<b>170</b>

The research site of this study is purposively selected by the researcher and it is one of the HEIs located in Eastern Visayas(EV). Eastern Visayas is designated as the Region VIII composed of two main islands. The study locale is Visayas State University-Tolosa which nestle in 18

hectares' land of Barangay Tanghas, Tolosa, Leyte this particular academic institution is directly facing the Pacific Ocean (Wikipedia, 2021) which from the researcher perspective to consider that aside from the threat of this COVID-19 Pandemic it is also important that the school-based security and disaster preparedness should always be in place for this school. One of the pressing issues of Eastern Visayas is its high vulnerability to natural disasters. Studies have reported Eastern Visayas (Leyte) in the Philippines as a disaster capital from recent studies (Philippine Star 12/22/2013). Its infrastructure identified by DPWH as vulnerable when a strong earthquake hits. At present, there are 31 public school buildings, 22 municipal buildings and others which are either dilapidated or have storm hairline cracks as floor, walls, ceilings which are sign of possible collapse. Majority of the buildings were constructed in 1950s.

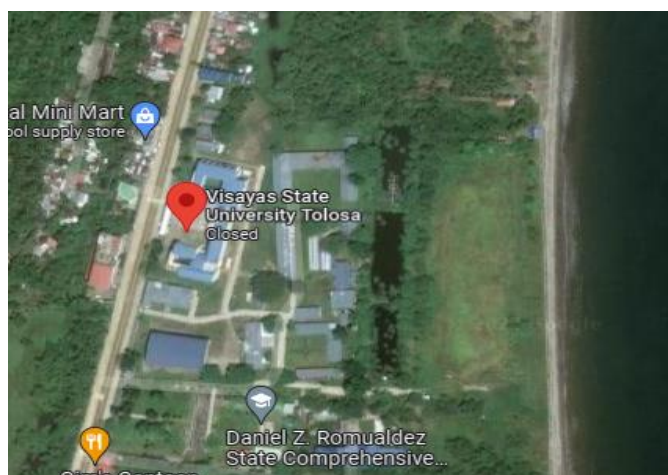


Fig 1. Image showing the study site

(Source: <https://www.google.com.ph/maps/place/Visayas+State+University+Tolosa/@11.0456657,125.03427,351m/data=!3m1!1e3!4m5!3m4!1s0x3307da7eddf8be93:0xa9b610441247db19!8m2!3d11.0456183!4d125.0346509>)

Presently, the region where this institution is located have experience reported flooding caused by typhoons such that disaster and risk reduction must be taught in public schools. Disaster risk reduction is also an integral part of security practice in the study. The purpose of the study on security measures implemented by VSU Tolosa is to assess vulnerability to risk and update schools in order to create a stable, fairly predictable environment which school clients can move freely and safely. Thus, security measure in the “new normal” is also included in this present study.

This Survey questionnaire consisted of 3 parts and uses the 4 point Likert scale. Part 1 outlined the respondents' profile while Part 2 solicited the school-based security measures namely; (Physical, Human and Technological/Electronic Security Measures) with 15

indicators each and Part 3 is an Adopted Survey Questionnaire from CHED-DOH Minimum Public Health Standards with 20 indicators. The questionnaires' validity was subjected to three experts who reviewed the item statements and constructs identified per section. The three experts were identified from a security officer, a criminal justice educator, and personnel from the office of academic affairs. The questionnaire has also undergone a reliability test from other HEI's.

Permission was requested from the Campus Chancellor. The data collection was conducted on a one shot survey through google forms and will be requested to submit immediately to the researcher upon filled-up.

For statistical analysis the researcher used the quantitative statistics was employed using means and percentage to describe the data from the questionnaire

The data gathered in objective was analyzed and interpreted based on the following mean range and interpretation.

Mean Range	Interpretation
4	Very Much Effective
3	Much Effective
2	Effective
1	Less Effective

This research was conducted without monetary or food consideration the respondents of this study are all encourage to be involved voluntarily and names are not indicated in the instrument, the data collected was processed only by the researcher and stored in the email drive storage of the researcher.

### III. RESULTS AND DISCUSSION

#### *School-Based Security Measures Implemented at Visayas State University Tolosa* *School Based Physical Security Measures*

Figure 1 presents the school-based physical security measures as perceived by the respondents. This presents the different types of School-based security measures as implemented at VSU Tolosa this “new normal”. Data presented in this figure were the different indicators of School-Based Physical Measures and ranked from 1<sup>st</sup> to the 15<sup>th</sup>. Bar graphs indicates the number of responses from the respondents as well as the total average weight. The physical security measures weighted mean was 3.50 interpreted as “very much effective”. Accordingly, the indicator *Log and record each visitors and contractor entry as well as the badge/tagged issue and return for each individual* with a mean of 3.99 was interpreted “very much effective” ranked 1.

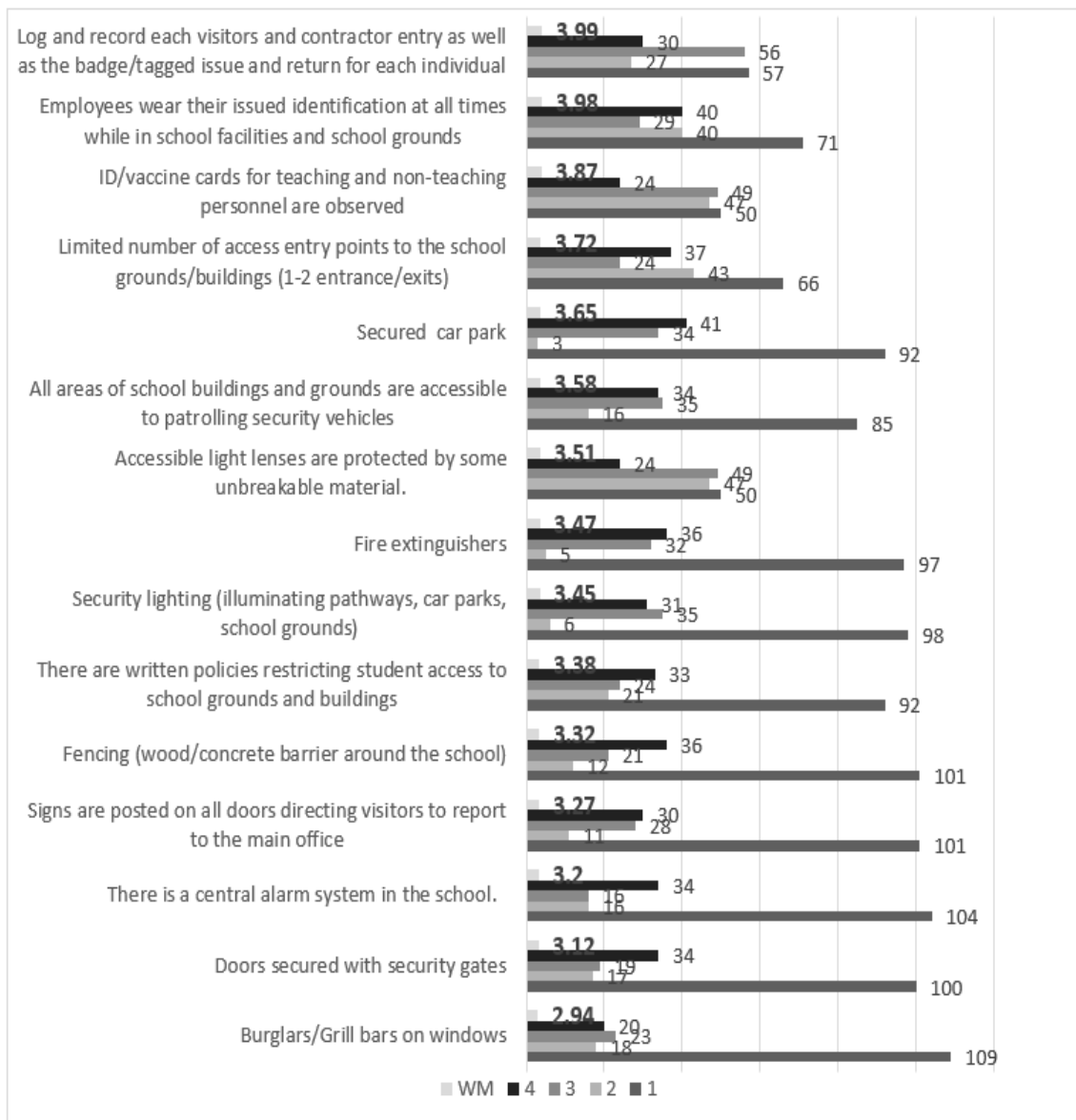


Fig 1. The School-Based Physical Security Measures as implemented at VSU Tolosa.

OVERALL WEIGHTED MEAN RATING: **3.50**

OVERALL

DESCRIPTIVE RATING: **VERY MUCH EFFECTIVE**

LEGEND:

4	3.26 - 4.00	VERY	MUCH
3	2.51 – 3.25	MUCH EFFECTIVE	
2	1.76 – 2.50	EFFECTIVE	
1	1.00 – 1.75	LESS EFFECTIVE	
WM	Weighted Mean		

Concerning with the result Gama, U. G. (2010) stated that the very Visitors' books, log books, and school records are examples of book forms. Records were evaluated to identify whether are essential, substantial, important, or less beneficial in school management. Following this the indicator *Employees wear their issued identification at all times while in school facilities and school grounds* with a mean of 3.98 an interpreted as "very much effective" ranked 2.

Keeping school records including visitors record is important especially in tracing the identity of the visitor's so as this new normal it is not only the name of the person visiting the school as well as the requirement under health protocols as established by the Department of Health has also been carefully checked, this is also the same with the identity of the personnel in the institution it is very important to display the name through an identification card of every person who are working specially in government services as required by the Civil Service Commissions under Republic Act No. 11032 known as Anti-Red Tape Authority, this is not only for the purpose of identifying the name of the employee but also as well for the clientele making sure that the person they are transacting with is legally employed in the said institution. Recently the Chancellor of VSU Tolosa has released Memorandum Circular No. 008 series of 2022; Monitoring and ensuring compliance on Anti-Red Tape Act pursuant to RA 9485 as amended by RA No. 11032.

Based on the results there were five indicators that got the most number of 1 “less effective” responses from the survey questionnaire. The indicator *Fencing (wood/concrete barrier around the school)* ranked number 11 with the weighted mean 3.32 interpreted as “very much effective” and indicator *Signs are posted on all doors directing visitors to report to the main office*, ranked 14 with the weighted mean 3.27 interpreted as “very much effective”, can also be observed despite of getting the mean with “very much effective” in its interpretation, these two indicators got the most number of 1 or “less effective” responses in the survey questionnaire. VSU Tolosa has a perimeter fence that secured the Campus. However, because of typhoon “Odette” that cause wreckage of the fenced that is facing directly to the shore, and left that part of the campus opened, thus affecting the responses of the respondents. There were also posting found inside the campus but not directly pointing to the main office but pointing to the areas were usually access by the students such as the Offices of Students Affairs and Services where this building has the support services of the school is located, and some directions going to the canteen and to the areas were Colleges or classrooms were located.

While indicator; *There is a central alarm system in the school*, ranked 13 with weighted mean 3.20 interpreted as “much effective”, and indicator; *Doors secured with security gates* ranking number 14 with 3.12 mean with “much effective” interpretation and *Burglars/Grill bars on*

*windows* with the lowest mean of 2.94 and interpreted as “much effective”, these last ranked indicators are identified by the respondents “less effective” in the survey questionnaire.

Meanwhile, Moore, P.et.al (2021-p4) study revealed that a systems approach involves considering school physical security as a component of a larger school safety system, which includes components of prevention, response, and recovery. Protection and risk mitigation go beyond physical security to influence and interact with key aspects of school violence prevention, such as student mental health and school atmosphere, as well as emergency response and recovery operations.

This implies that VSU Tolosa under the School-based security measures specifically *Physical Security* with a general weighted mean of 3.50 and this particular school-based security measures are implemented and is “very much effective” as observed by the employees.

#### ➤ School-Based Human Security Measures

This figure presents the School-Based Human Security Measure indicators which comprises of the different school-based security measures applied at VSU Tolosa.

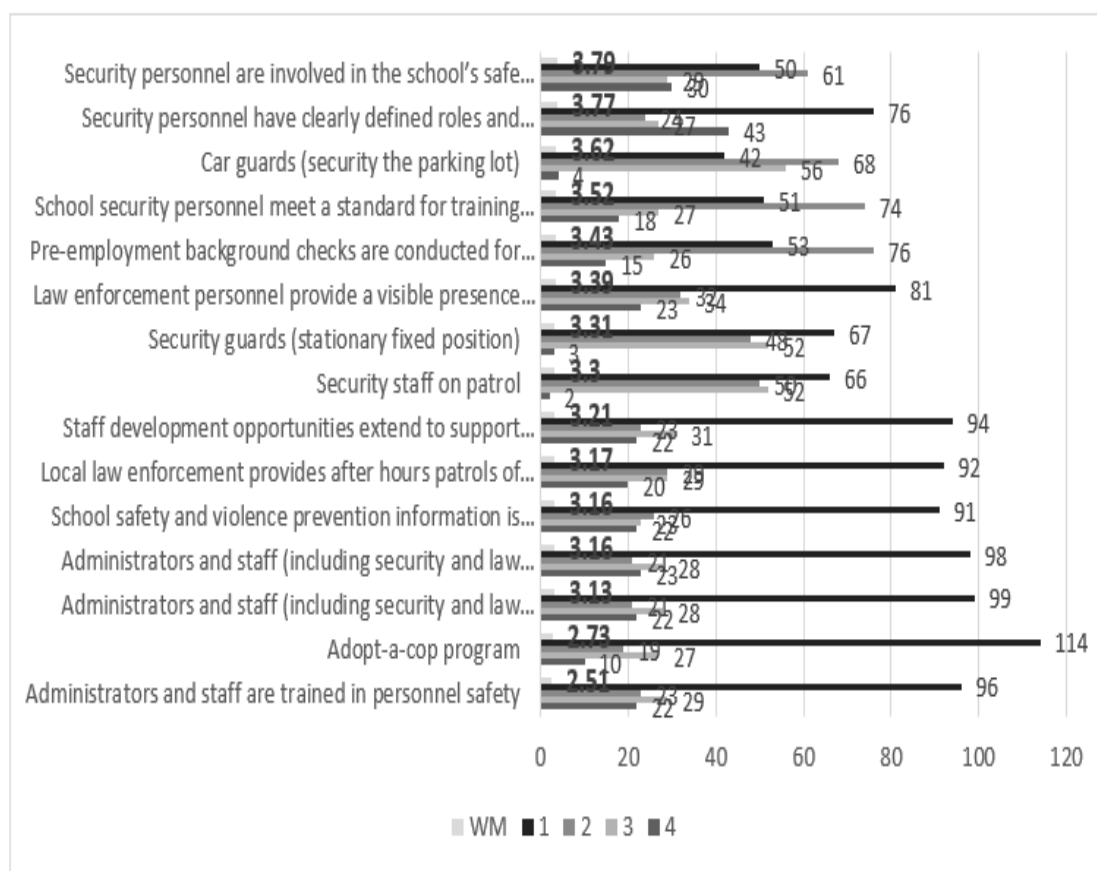


Fig 2. School-Based Human Security Measures implemented at VSU Tolosa

OVERALL WEIGHTED MEAN RATING: **3.28**

OVERALL DESCRIPTIVE RATING: **VERY MUCH EFFECTIVE**

LEGEND:

4	3.26 – 4.00	VERY MUCH EFFECTIVE
3	2.51 – 3.25	MUCH EFFECTIVE
2	1.76 – 2.50	EFFECTIVE
1	1.00 – 1.75	LESS EFFECTIVE
WM	WEIGHTED MEAN	

Figure 2 shows that the average mean of School-Based Human Security Measures implemented at VSU Tolosa was 3.28 interpreted “very much effective,” the indicator *Security personnel are involved in the school’s safe school planning process* with a mean of 3.79 was interpreted as “very much effective” ranked 1, while the indicator *Security personnel have clearly defined roles and responsibilities* with a mean of 3.77 interpreted as “very much effective” ranked 2, this only means that VSU Tolosa employees observed the Human Security particularly the security officer is very much visible and given importance in the campus. Thus, resulting to a high score in the weighted means. On the other hand, this concept can also be observed in the study conducted by Wittie, M. C. (2012) which mentioned that School-based law enforcement *security personnel or officers* is a subset of the criminal justice system that has a significant impact on the pupils with the violation committed in schools the present of a security officers are very much important in mitigating or avoiding possible crimes.

Figure 2 also reveals that there were five (5) indicators rated as “highly effective” by the respondents, and remarkably there were two (2) indicators got the same average mean of 3.16 thus both were occupying the ranked 11.5, *Administrators and staff (including security and law enforcement personnel) are trained in implementation of the crisis management plan and have the training updated annually.* And *School safety and violence prevention information is regularly provided as part of staff development plan.* The institution has an available crisis management plan, however not all employees were trained or involved in the revision of the said plan since it is only limited to the upper management and not all are even involved in this particular activity. The changes in this approached is also accepted in the study of Athamneh (2018) and Starosta(2014) which states that humans have been picked, distributed, and organized depending on their skills and job qualifications since the birth of civilization. Human Resources (HR) professionals' responsibilities now extend beyond recruiting and human capital management. Human Resource Planning for the Twenty-First Century examines contemporary trends in human resource

management (HRM) and human resource planning, as well as the duties played by HR professionals. Human Resource Planning for the Twenty-First Century delves into HRM systems and their responsibilities in the workplace, as well as HR strategies for crises, the implications of downsizing on company brand, and the potential impact of globalization on corporate social responsibility and HRM.

This study also reveals that there were two indicators ranked last; *Adopt-a-cop program* which got the mean average of 2.73 translated as “Much effective”. The institution seeks assistance of Tolosa Police Station specially during special events of the institution which is very ideal for the safety and protection of the VSU Tolosa clientele. Meanwhile the study of Patalinghug, M (2017) lead to the conclusion that crime prevention programs were successful in reducing crime. The community has benefited from increased police visibility, patrolling, and other initiatives, which have greatly aided the community's efforts to maintain peace and order.

And the indicator that ranked 15<sup>th</sup> stating *Administrators and staff are trained in personnel safety* with general weighted mean of 2.51 observed as “Much effective” by the VSU Tolosa employees. Meanwhile, same result of the study conducted by Jonathan, G.K and Mbogo, R.W. (2016) it discovered that the bulk of the teaching staff had not participated in any of the training programs designed to provide them with occupational safety skills. The majority of them were not active in workplace safety discussions this threatened the safety of instructors at work to a great amount, compromising their preparedness for health threats and, as a result, their overall performance.

This implies that Human Security of VSU Tolosa implemented is ‘very much effective’, nonetheless starting from ranked 9 down to ranked 15 was rated by the respondents “Much effective”. Despite of the perceived implementation of the security measures all 7 indicators was observed that involvement of all employees in the crisis management plan and its training annually and involvement of development plan in school safety and violence prevention as well as the involvement of all personnel in the training in conflict resolution methods and trainings in personnel safety was given the most 1 “less effective” rating by the respondents in the survey questionnaire.

#### ➤ *School-Based Technological/Electronic Security*

Figure 3 presents the Technological/Electronic Security Measures implemented at VSU Tolosa it also shows the average mean of every indicator as identified under the said school-based security measures.

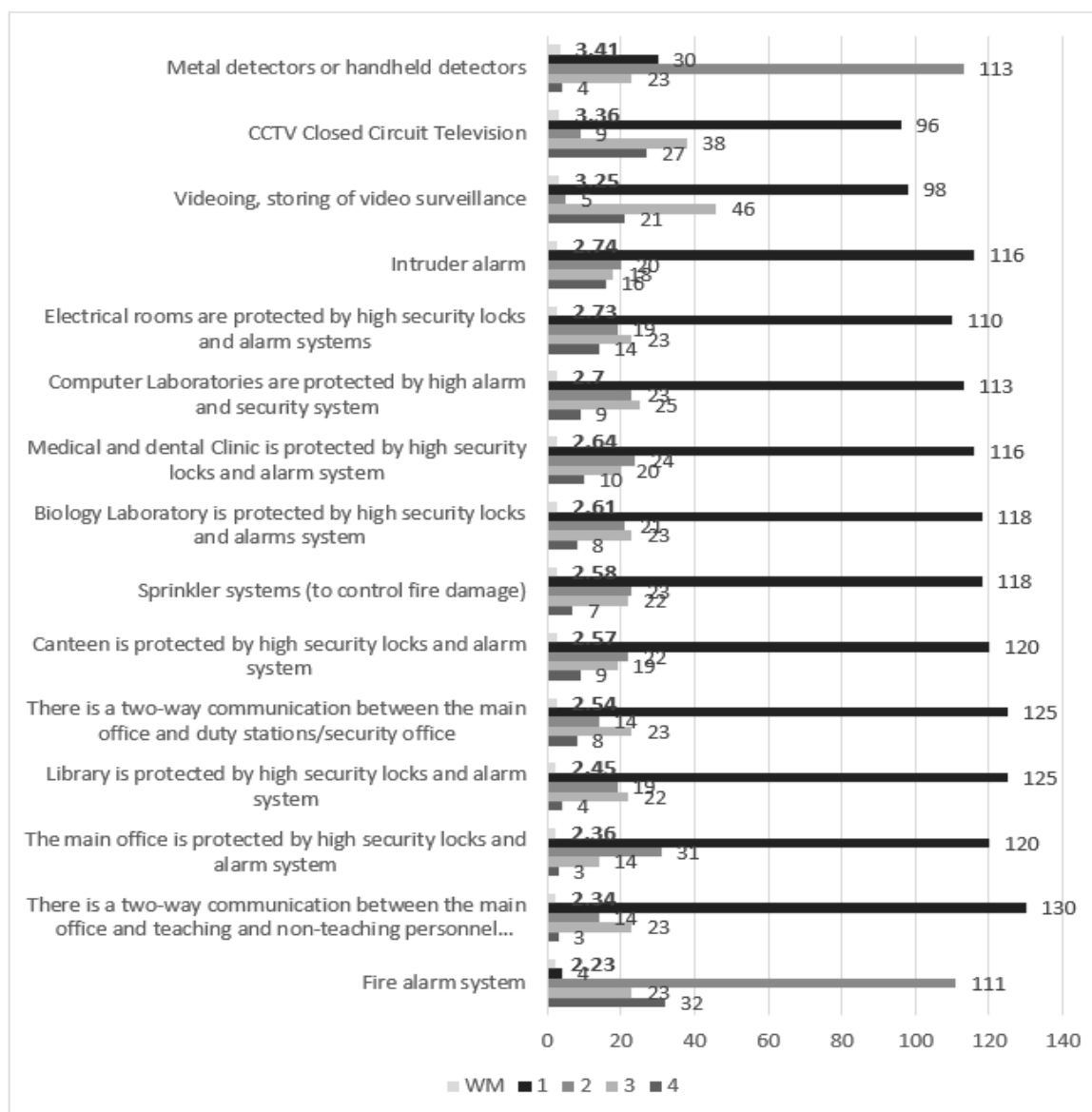


Fig 3. School-Based Technological/Electronic Security

OVERALL WEIGHTED MEAN RATING: **3.00**

OVERALL DESCRIPTIVE RATING:

**MUCH EFFECTIVE**

LEGEND:

4 3.26 - 4.00 VERY MUCH EFFECTIVE

3 2.51 – 3.25 MUCH EFFECTIVE

2 1.76 – 2.50 EFFECTIVE

1 1.00 – 1.75 LESS EFFECTIVE

WM WEIGHTED MEAN

Figure 3 reveals that the overall weighted mean rating of Technological/Electronic Security Measures as implemented in VSU Tolosa is 3.00 interpreted as “much effective”. It can be observed that in this type of school-based security measures there were only two (2) indicators that got the rating of “very much effective”. The indicator *Metal detectors or handheld detectors* with the weighted mean of 3.41 interpreted as “very much effective”, ranked 1. And, the indicator; *CCTV Closed Circuit Television* with 3.41 weighted mean interpreted “very much effective”

ranked 2. And, the indicator *Videoing, storing of video surveillance* with the weighted mean of 3.25 interpreted as “much effective”. The first 3 ranks in the technological/electronic security measures was observed specifically by the employees of VSU Tolosa since the main building were the administration offices was observed using this above mentioned security measures. However, ranked 2 and ranked 3 were observed with a high number of 1 “less effective” responses in the survey questionnaire. It very much important that these security measures should be implemented in every academic institutions as Fisher, et.al (2021) states that one of the most prevalent approaches for preventing and detecting school crime and violence is the use of surveillance cameras in schools.

It can be observed that more than 60% respondents have answered 1 “less effective” responses on the survey questionnaire on the following security measures; ranked (4) *Intruder alarm*, (5) *Electrical rooms are protected by*

high security locks and alarm systems, (6) Computer Laboratories are protected by high alarm and security system, (7) Medical and dental Clinic is protected by high security locks and alarm system, (8) Biology Laboratory is protected by high security locks and alarms system, (9) Sprinkler systems (to control fire damage), (10) Canteen is protected by high security locks and alarm system, (11) There is a two-way communication between the main office and duty stations/security office, (12) Library is protected by high security locks and alarm system, (13) The main office is protected by high security locks and alarm system, and (14) There is a two-way communication between the main office and teaching and non-teaching personnel outside the building (all locations have communication) while indicator; *Fire Alarm* has 65% of 3-much effective responses.

It is not only VSU Tolosa as an institution that hesitates on applying technological/electronic security measures as Schneider (2010) states that before implementing high-tech security measures, school officials should consider the possibility of unexpected repercussions. It's possible that technological solutions aren't the best fit for the problems at hand. They can be quite costly. Any network will require ongoing maintenance, eventual upgrades, and regularly updated virus prevention and intrusion detection systems (IDS) to guard against hackers and unwanted data transfers. In most cases, a full-fledged information technology (IT) department will be required.

Study conducted by Schwartz et al (2016) also states that some technology, according to experts, could be dangerous. Metal detectors and X-ray machines, according to over 80% of panelists in the urban panel and a comparable percentage in the suburban/rural panel, promote students to have unfavorable attitudes toward school by making schools appear unduly fortified and unwelcoming. Experts were also concerned about the cost

of some technology, as well as the potential for privacy infractions among pupils. Nearly half of the stakeholders emphasized the importance of using non technological ways to support technology.

However, in the article written by Passow (2019) states that there are solutions that school leaders must consider for achieving security in school such as: cameras and sensors that can detect everything from youngsters using e-cigarettes to people entering or exiting school grounds, as well as analytics software that connects to digital surveillance cameras and sensors, allowing administrators to respond proactively to possible threats. Schools cannot have only one product to have a good safety plan. They require a web of interconnected technologies that can provide digital solutions from start to finish in the event of an emergency.

Another study suggest that the use of technology gives an advantage for a better security as mentioned in the findings of Ekpoh, et.al (2020) states that the significance for a safe school environment were reviewed, and one of the proposals was that the university management fund and equip the security unit with modern technology to improve performance.

This implies that VSU Tolosa has implemented the Technological/Electronic Security as part of their School-based security practices as perceived by the employees as “highly Effective”.

#### *DOH-CHED Minimum Public Health Standards*

Figure 4 presents the adopted minimum standards from Department of Health – Commission on Higher Education Public Health Standards. This is the recent joint memorandum circular as Guidelines on the Implementation of Limited Face-to-face classes for all programs of Higher Institutions in the Philippines.

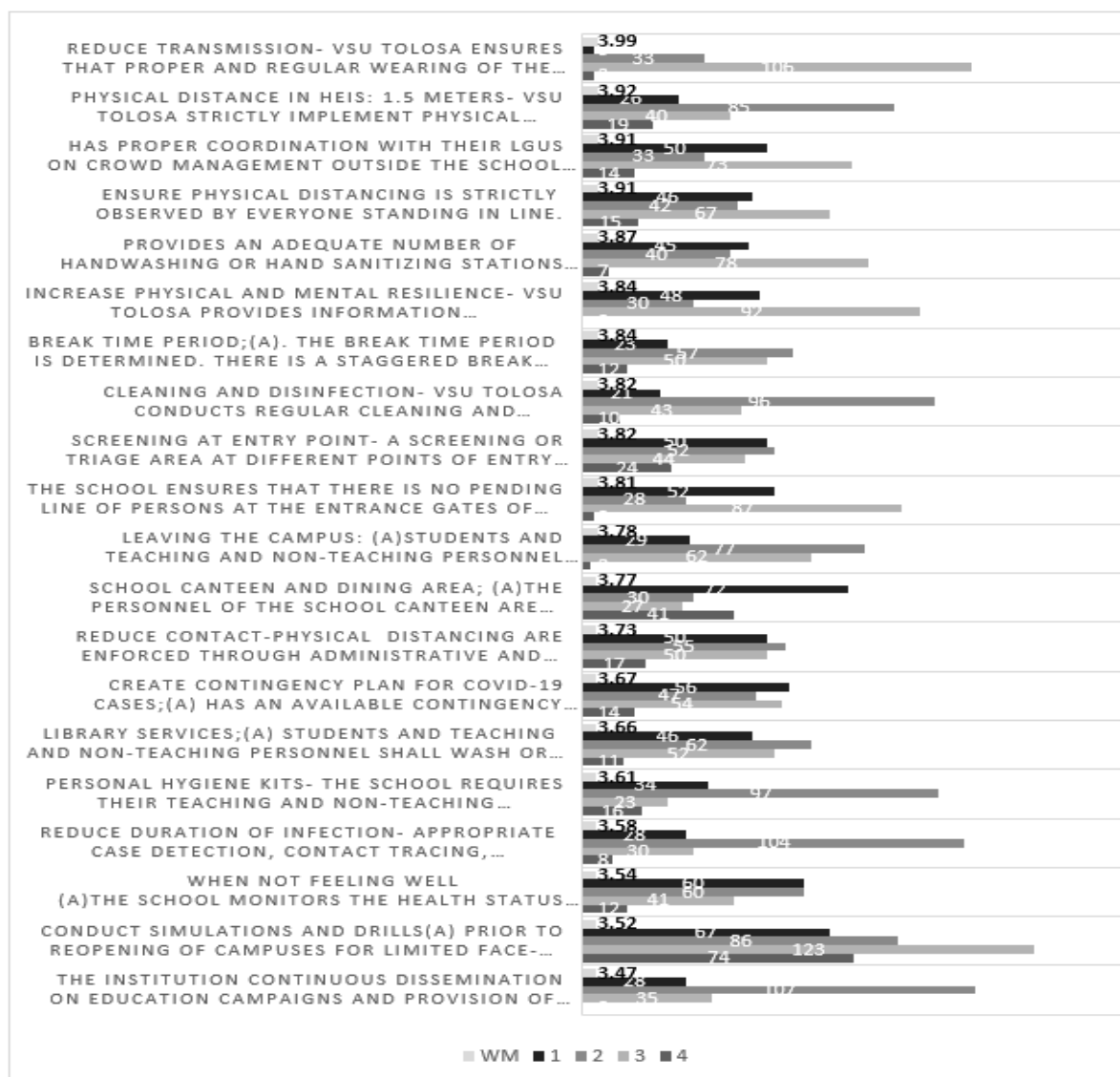


Fig 4. DOH-CHED Minimum Public Health Standards

OVERALL WEIGHTED MEAN RATING: **3.75**  
 OVERALL DESCRIPTIVE RATING: **VERY MUCH EFFECTIVE**

LEGEND:

4	3.26 – 4.00	VERY MUCH EFFECTIVE
3	2.51 – 3.25	MUCH EFFECTIVE
2	1.76 – 2.50	EFFECTIVE
1	1.00 – 1.75	LESS EFFECTIVE
WM	WEIGHTED MEAN	

Figure 4, shows the results of the different indicators as adopted in CHED Joint Memorandum Circular No. 2021-001 known as the Guidelines on the Gradual Reopening of Campus Higher Education Institutions for Limited Face-to-face classes during the Covid-19 Pandemic. This mandate is necessary to every institution under CHED office they must follow and ensures that as students attend classes in in their respective institution's they must be safe, secured and protected this time of Pandemic.

There were 20 indicators set in this survey questionnaire given the category DOH-CHED Minimum Public Health Standards and identified as important security measures especially this “new normal”. The indicator; *Reduce transmission- VSU Tolosa ensures that proper and regular wearing of the appropriate Personal Protective Equipment (PPE) by the students, teaching and non-teaching personnel, and visitors while inside the campus premises* with 3.84 weighted mean interpreted as “very much effective” ranked 1. And the indicator; *Physical Distance in HEIs: 1.5 meters- VSU Tolosa strictly implement physical distancing protocols for their teaching and non-teaching personnel while inside the school premises: The physical distance among teaching and non-teaching personnel attending limited face-to-face classes shall be 1.5 meters* with the weighted mean of 3.92 interpreted as “very much effective” ranked 2.

Meanwhile the study conducted by Lim, et.al (2020) and Cirrincione, et.al (2020) states that the transmission rate was dramatically lowered by social distancing and the use of personal protective equipment (PPE).

Another study conducted by Ingram, et.al (2021) also discusses that in the context of COVID-19 and at the start of future epidemics, early and thorough infection prevention and control measures can allow workers to safely remain in or return to the workplace.

Figure 4 also shows the 2 indicators belonging to the lower ranked; Conduct Simulations and Drills (a) Prior to reopening of campuses for limited face-to-face classes, HEIS shall conduct simulations and drills of their human traffic system, crowd management, and classroom management, and implementation of their health and safety protocols (b) Has a plan how to conduct drills on fire, bomb threat, earthquake, and other emergencies adherent to health and safety protocols most especially physical distancing and use of PPE (c) Has available health and safety officer, at least one (1) per occupied building/area, roaming around the campus to monitor strict implementation and observance of the health and safety protocols at all times, with the weighted mean of 3.52 interpreted as “very much effective”.

This means that among the Ched-DOH guidelines the respondents perceived this as the 2<sup>nd</sup> lowest guidelines implemented or applied at VSU Tolosa. In the study conducted by Unver, et.al (2018) contested that according to the large majority of participants, who disapproved or strongly disagreed. More than 96% agreed or strongly agreed that the simulator would be a useful teaching tool who agreed significantly less strongly, all participants agreed that the simulators closely resembled real-life events, accurately reflected disease states, and heightened the realism of patient evaluation and treatment options during the drill.

And the indicator; *The institution continuous dissemination on education campaigns and provision of adequate sanitation stations are employed*, with the weighted mean 3.47 interpreted as “very much effective” ranked 20. This only means that the respondent observed of less implementation on continuous dissemination of sanitation stations. Though, it is visibly seen upon entrance of VSU Tolosa the sanitation and screening stations is very much implemented in this institution.

Meanwhile the results of the study conducted by Purvis, et.al (2021) discusses how and what form of information dissemination is reliable in this new age, that is through Media and online interactive media were found in all three psychopathology assessments. Avoidance of COVID-19-related knowledge and its links to psychopathology symptoms emerged as a key finding, with larger impact sizes than informational attainment. Presenting up-to-date, curated pandemic information is imperative in the age of social media and fast-paced informational streams in order to mitigate the associated detrimental mental health consequences of information dissemination, and effective communication is important to prevent viral spread, keep populations up to date on the latest hygienic recommendations, and counteract the effects of info-demic misinformation.

This implies that VSU Tolosa also implements the CHED-DOH Mandate Joint Memorandum Circular No.2021-004 known as Guidelines on the implementation of Limited face-to-face classes for all programs of Higher Education Institutions (HEIs) in areas under alert levels system for covid-19 response. With the overall weighted mean rating 3.75 interpreted as “Very much effective”. In addition, the institution was given the certification by CHED for the gradual opening of its doors to graduating undergraduate (BS Fisheries, BEEd, BSEd and BS Criminology) and graduate (MS Fisheries) students for the face-to-face classes.

#### IV. CONCLUSIONS

Based on the data analysis and findings of the study, the researcher deduces the following conclusions; (1) Based on the assessment derived from the respondents; Teaching and Non-teaching employees, that Visayas State University Tolosa has implemented the following security measures namely; physical, human, and technological/electronic security measures as well as the CHED-DOH Public Health Protocol are all implemented; (2) The overall security measures implemented at Visayas State University Tolosa is “very much effective” and among the four (4) classes of security measures the CHED-DOH Minimum Public Health Protocol was the most perceived protocol especially that the institution was given the certification by CHED Regional Office 8 this academic year 2021-2022 for the gradual opening of its doors to graduating undergraduate (BS Fisheries, BEEd, BSEd and BS Criminology) and graduate (MS Fisheries) students for the face-to-face classes.

#### REFERENCES

- [1]. Abad, M. (2021) Face-to-face classes for all degree programs to roll out in phases. Education in the Philippines. <https://www.rappler.com/nation/ched-says-face-to-face-classes-all-degree-programs-roll-out-in-phases/>
- [2]. Athamneh, S. (2018). HR planning for crisis management. In *Human resource planning for the 21st century*. IntechOpen.
- [3]. Auzeen Shariati & Rob T. Guerette (2019) Resident Students' Perception of Safety in On-Campus Residential Facilities: Does Crime Prevention through Environmental Design (CPTED) Make a Difference?, *Journal of School Violence*, 18:4, 570-584, DOI: [10.1080/15388220.2019.1617721](https://doi.org/10.1080/15388220.2019.1617721)
- [4]. Banerjee, D., & Meena, K. S. (2021). COVID-19 as an “infodemic” in public health: critical role of the social media. *Frontiers in Public Health*, 9, 231.
- [5]. Benjamin W. Fisher, Ethan M. Higgins & Emily M. Homer (2021) School Crime and Punishment and the Implementation of Security Cameras: Findings from a National Longitudinal Study, *Justice Quarterly*, 38:1, 22-46, DOI: [10.1080/07418825.2018.1518476](https://doi.org/10.1080/07418825.2018.1518476)

- [6]. Bergeron, Wayne P. (2016) Making a Case for Comprehensive School Safety and Security (S4, Jacksonville State University, Department of Emergency Management.  
[file:///C:/Users/Registered%20User/Downloads/DISSE  
RTATION Making a Case for Comprehen.pdf](file:///C:/Users/Registered%20User/Downloads/DISSE%20RTATION%20Making%20a%20Case%20for%20Comprehen.pdf)
- [7]. Campus Security Act of 2012 Art. XIV Sec 4 paragraph 1
- [8]. CHED-DOH Joint Memorandum Circular No.2021=004 Guidelines on the Implementation of Limited Face-to-face classes for all programs of Higher Education Institutions (HEIs) in areas under alert levels system for Covid-19 Response.
- [9]. Cirrincione, L., Plescia, F., Ledda, C., Rapisarda, V., Martorana, D., Moldovan, R. E., ... & Cannizzaro, E. (2020). COVID-19 pandemic: Prevention and protection measures to be adopted at the workplace. *Sustainability*, 12(9), 3603.
- [10]. Commission on Higher Education and Department of Health Joint Memorandum Circular No. 2021-001. Guidelines on the Gradual Reopening of Campuses of Higher Education Institutions for Limited Face-to-face classes during the Covid-19 Pandemic.
- [11]. Ekpoh, U. I., Edet, A. O., & Ukpog, N. N. (2020). Security challenges in Universities: Implications for safe school environment. *Journal of Educational and Social Research*, 10(6), 112-112.
- [12]. F. Chris Curran, Benjamin W. Fisher & Samantha L. Viano (2020) Mass School Shootings and the Short-Run Impacts on Use of School Security Measures and Practices: National Evidence from the Columbine Tragedy, *Journal of School Violence*, 19:1, 6-19, DOI: [10.1080/15388220.2019.1703713](https://doi.org/10.1080/15388220.2019.1703713)
- [13]. Fisher, B. W., Higgins, E. M., & Homer, E. M. (2021). School crime and punishment and the implementation of security cameras: Findings from a national longitudinal study. *Justice Quarterly*, 38(1), 22-46.
- [14]. Gama, U. G. (2010). A survey of records management practices in circular primary schools in metropolitan local government area (MLGAs) of Kano State. *Samaru Journal of Information Studies*, 10(1-2), 23-30.
- [15]. Gutierrez J, et.al. (2021) With Schools Closed, Covid-19 Deepens a Philippine Education Crisis, *The New York Times*.  
<https://www.nytimes.com/2021/09/13/world/asia/philippines-students-remote-covid.html>
- [16]. Ingram, C., Downey, V., Roe, M., Chen, Y., Archibald, M., Kallas, K. A., ... & Perrotta, C. (2021). COVID-19 prevention and control measures in workplace settings: a rapid review and meta-analysis. *International journal of environmental research and public health*, 18(15), 7847.
- [17]. Jaarsveld, LV 2011, "An Investigation of Safety and Security measures at Secondary Schools in Tshwane, South Africa", *Ph.D. thesis, University of South Africa*
- [18]. Jonathan, G. K., & Mbogo, R. W. (2016). Maintaining Health and Safety at Workplace: Employee and Employer's Role in Ensuring a Safe Working Environment. *Journal of Education and Practice*, 7(29), 1-7.
- [19]. Katarzyna T. Steinka-Fry, Benjamin W. Fisher & Emily E. Tanner-Smith (2016) Visible School Security Measures across Diverse Middle and High School Settings: Typologies and Predictors, *Journal of Applied Security Research*, 11:4, 422-436, DOI: [10.1080/19361610.2016.1210482](https://doi.org/10.1080/19361610.2016.1210482)
- [20]. Kim Nguyen, Yue Yuan & Susan McNeeley (2020) School Security Measures, School Environment, and Avoidance Behaviors, *Victims & Offenders*, 15:1, 43-59, DOI: [10.1080/15564886.2019.1679307](https://doi.org/10.1080/15564886.2019.1679307)  
<https://www.tandfonline.com/doi/full/10.1080/15564886.2019.1679307>
- [21]. Kwon et al., (2021) School-Based Participatory Response for Reopening During the COVID-19 Pandemic: A Case Study of a Metropolitan High School Implementing the Health Promoting School <https://www.frontiersin.org/articles/10.3389/fpubh.2021.578200/full>
- [22]. Lim, C. Y., Bohn, M. K., Lippi, G., Ferrari, M., Loh, T. P., Yuen, K. Y., ... & Horvath, A. R. (2020). Staff rostering, split team arrangement, social distancing (physical distancing) and use of personal protective equipment to minimize risk of workplace transmission during the COVID-19 pandemic: a simulation study. *Clinical biochemistry*, 86, 15-22.
- [23]. Luz E. Robinson, Ashley B. Woolweaver, Dorothy L. Espelage & Grace Little (2021) Restorative justice: a qualitative analysis of school security perspectives, *Contemporary Justice Review*, 24:3, 336-360, DOI: [10.1080/10282580.2021.1938008](https://doi.org/10.1080/10282580.2021.1938008)
- [24]. Masinag, C (2012), "Ched tells schools to tighten security amid rash of on-campus violence", *Interaksyon.com*. Posted October 16, 2012.  
<http://interaksyon.com/article/45681/ched-tells-schools-to-tighten-security-amid-rash-of-on-campus-violence/>
- [25]. Moore, Pauline, Brian A. Jackson, Catherine H. Augustine, Elizabeth D. Steiner, and Andrea Phillips, (2021) A Systems Approach to Physical Security in K-12 Schools. Homeland Security Operational Analysis Center operated by the RAND Corporation, [https://www.rand.org/pubs/research\\_reports/RRA1077-1.html](https://www.rand.org/pubs/research_reports/RRA1077-1.html).
- [26]. Passow, A. (2019), How Technology Can Improve Physical Safety in Schools <https://edtechmagazine.com/k12/article/2019/09/how-technology-can-improve-physical-safety-schools>
- [27]. Patalinghug, M. (2017). Implemented Crime Prevention Strategies of PNP in Salug Valley, Zamboanga Del Sur, Philippines. *Asia Pacific Journal of Multidisciplinary Research*, 5(3).
- [28]. Purvis, R. S., Long, C. R., James, L. P., Kimminau, K., Riklon, S., Carleton, A., ... & McElfish, P. A. (2021). Dissemination protocol for community-based participatory research partnerships with Marshallese Pacific Islanders in Arkansas. *Progress in Community Health Partnerships: Research, Education, and Action*, 15(3), 369-383.
- [29]. Republic Act No. 11032 – Anti-Red Tape Authority.

- [30]. Scheider, T.; Walker, H.; Sprague, J. 2000 "Safe School Design for Educational Leaders applying the principles of crime prevention through environmental design", Office of Education Research and Improvement, Washington, D.C.
- [31]. Schneider, T. (2010) School Security Technologies <https://files.eric.ed.gov/fulltext/ED507917.pdf>
- [32]. Schwartz, Heather L., Rajeev Ramchand, Dionne Barnes-Proby, Sean Grant, Brian A. Jackson, Kristin J. Leuschner, Mauri Matsuda, and Jessica Saunders, (2016) *Can Technology Make Schools Safer?*, Santa Monica, Calif.: RAND Corporation, RB-9922-NIJ, As of March 29, 2022: [https://www.rand.org/pubs/research\\_briefs/RB9922.html](https://www.rand.org/pubs/research_briefs/RB9922.html)
- [33]. Starosta, A. (2014). Anti-crisis management strategies. The case of companies in the Greater Poland Voivodeship. *Management*, 18(1), 255.
- [34]. Thomas J. Mowen & Matthew J. Manierre (2017) School security measures and extracurricular participation: an exploratory multi-level analysis, *British Journal of Sociology of Education*, 38:3, 344-363, DOI: [10.1080/01425692.2015.1081091](https://doi.org/10.1080/01425692.2015.1081091)
- [35]. Tonya Rooney (2015) Higher stakes – the hidden risks of school security fences for children's learning environments, *Environmental Education Research*, 21:6, 885-898, DOI: [10.1080/13504622.2014.936308](https://doi.org/10.1080/13504622.2014.936308)
- [36]. Unver, V., Basak, T., Tastan, S., Kok, G., Guvenc, G., Demirtas, A., ... & Tosune, N. (2018). Analysis of the effects of high-fidelity simulation on nursing students' perceptions of their preparedness for disasters. *International emergency nursing*, 38, 3-9.
- [37]. Wittie, M. C. (2012). School-Based Law Enforcement. *Politics, Bureaucracy & Justice*, 3(1).

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