Management of Risk Communication in Lyceum of the Philippines University-Laguna: Basis for Risk Communication Management Plan

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ABSTRACT

Risk communication management refers to the overall process of handling risk messages within an organization expressed in written or verbal form, which puts organizations at an advantageous position. Considering how risk studies within higher education institutions are limited, this study sought to assess the risk communication management efforts of Lyceum of the Philippines University-Laguna and propose a plan based on the CERC Model and Social Judgment Theory. The study made use of quantitative and qualitative data obtained from a survey among 321 respondents and Focus Group Discussions with 6 respondents comprised of students, faculty, and administrative heads or staff. Results revealed that while online and onsite risk communication management preferences were available, they were not completely effective. There was no established regular schedule as to when risk information is disseminated, and the use of English was observed consistently. The institution currently has several risk communication management efforts which enable them to meet the demands of the five CERC stages, yet such efforts are ineffective and unstable in the long run. There is no difference in the assessment of students, teachers, and administrative heads and staff of the risk communication management of LPU-Laguna To further, a Risk Communication Management Plan which seeks to improve on current policies and standards is recommended which would focus on the five stages of the CERC model and the involvement of students, teachers, and administrative heads and staff as a measure of their acceptance and involvement with the proposed initiatives.

Keywords: Risk communication, risk management, higher education institution

INTRODUCTION

As humanity progresses, the complexities brought about by climate change, social difficulties, technological breakthroughs, infrastructures, and environmental changes create both precedented and unprecedented problems, resulting to increased risks detrimental for the whole community. Risks are defined as the probabilities of an event to occur along with its undesirable consequences, which are unacceptable (Ennouri, 2013). Wright et al. (2013) classified two types of risks. External risks refer to events uncontrolled by the management, while internal risks are events which can be directly controlled by the management to a certain degree. For global industries to thrive, they should have knowledge and expertise in managing high-level risks (Hetamsaria, 2005; Zwikael & Ahn, 2011). With this, risks should be communicated throughout an organization. Risk communication may be either written or verbally expressed which enables organizations to work at an advantageous position (Hussain & Rawjee, 2014).

Through communicating risks, crisis occurrence and severity are likely to decrease. Crisis is any disruptive time or event pertaining to an increased exposure to hazard. Like risk communication, crisis communication is also any visual, verbal, or written form of interaction occurring within the organization. However, it focuses more on research on the “response phase”, while risk communication includes an assessment of threats and understanding risks (Sheppard et al., 2012) with the goal to prevent any crisis from occurring. Basic risk preventive measures can result to bigger outcomes, such as disease control and maintaining safety and hygiene protocols (Arora & Pandey, 2016). In addition, qualified personnel should also ensure their

effective implementation (Zwikael & Ahn, 2011). Recently, the WHO (2019) reported how South-East Asian nations are vulnerable to geophysical dangers caused by natural and man-made hazards resulting to deaths, economic loss, health crises, and frequent emergencies. Considering the Pacific Ring of Fire and the Pacific Typhoon Belt, the Philippines is prone to natural hazards (Ani et al., 2015; Ang & Diaz, n.d.) and was ranked third among 173 countries in the 2012 World Risk Report of the Disaster Management Practices in the Philippines. This engaged the Philippine Government towards improving the Philippines' disaster risk reduction (DRR) system.

On May 2010, Republic Act 10121, also known as "The Philippine Disaster Risk Reduction and Management (PDRRM) Act of 2010", was passed into law (Ani et al., 2015). Stated therein is the importance of implementing an approach to disaster risk reduction and management that is "holistic, comprehensive, integrated, and proactive" towards reducing the impacts of natural calamities on the society. As stated in Section 5, the National Disaster Coordinating Council (NDCC) was changed into the National Disaster Risk Reduction and Management Council (NDRRMC) and is now considered as the supreme policy-making body regarding matters on the disasters and natural hazards faced by the country. It was constituted by people from the Department of Education (DepEd) and Commission on Higher Education (CHED), indicating the essential role played by the educational sector in the implementation of this approach. Following this event, the DepEd formed the Disaster Risk Reduction and Management Office (DRRMO) which served as the center for the implementation of disaster risk reduction methodologies in the field of education. By October 2015, the DRRMO was transformed to a DRMM Service and was granted the same level of authority as other DepEd offices (Kamal & Touch, 2015). Higher education institutions usually follow a set of standards mandated by CHED or as ascribed in accreditation standards (Hoyle, 2017). Most of the academic and policy literature focuses on the management of natural hazards, disasters, and public health emergencies; nevertheless, despite the formation of such committees, risk communication management studies in educational institutions were limited because most academic and policy literature focus on the management of natural hazards, disasters, and public health emergencies (Boholm, 2016; Ruzic-Dimitrijevic & Dakic, 2014).

Lyceum of the Philippines University-Laguna (LPU-Laguna) is one of the 1,710 private higher education institutions in the Philippines as indicated on the World Education News and Reviews (WENR) website. It is a private, stock, and profit institution that houses a total of 220 employees and 3,934 students. Risk communication management within the institution is being done by the safety officer who is concurrently appointed as the director of Physical Plant and Facilities. Since this officer is also doing full-time administrative tasks, there is an absence of a clearly stated risk communication management plan. At present, its Crises Management Team (CMT) had done several risk communication initiatives through conducting safety seminars for employees and students. Safety procedures during natural hazards and disasters are also being posted in its social media page and regularly flashed on television screens inside the campus vicinity. However, there remains no established evaluation or measure to see if these communication plans were effective. Another challenge currently faced by the institution is the failure to conduct regular earthquake and fire drills. Safety and health seminars were conducted after the Taal phreatic eruption, but there were no records to show that they are being done on a regular basis. Since LPU-Laguna just recently migrated to ISO 9001:2015's "quality management standard to any organizational context" (Hoyle, 2017), it is still doing adjustments to adapt with risk register monitoring. With this, there were efforts to generate various communication frameworks to improve the practice of risk communication. However, no single model or theory captured the full range of risk communication in consideration of its impacts. These issues led to the conceptualization of this study.

At present, LPU-Laguna, through its Crises Management Team (CMT), had done several risk communication initiatives through conducting safety seminars for employees and students.

However, there remains no established evaluation or measure to see if these were effective. While there is a Risk Management Manual available, LPU-Laguna needs a risk communication management plan which can better accommodate to the quality management system standards required by ISO 9001:2015. With this, the study aimed to propose a Risk Communication Management Plan for Lyceum of the Philippines University-Laguna, which will effectively manage and highlight the importance of risk communication management.

Review of Literature

Risk

The word "risk" is mutual and generally used as part of today's language relating to personal circumstances. However, there is still no broad agreement on the meaning of this term. This is because its concept is abstract and distinguished only be means of communicative interaction (Boholm, 2016; Ng & Hamby, n.d.). Various national and international standards or guidelines which mentioned risk exist, but the manner by which risk was defined in these documents greatly differ from one another as well as its underlying concepts. Even risk practitioners in various professional bodies continue to debate about the subject matter at the heart of their very discipline. This lack of official agreement on the basic definition of risk is reflected in the huge variation of its general literature.

Risk Management

In this very competitive modern world, issues such as customer demands, innovation, and globalization made companies prioritize risk management by means of conducting comprehensive and effective risk assessment, evaluation, and prediction strategies in order to determine the crucial effects of risks towards their respective business contexts (Hetamsaria, 2015; Boholm & Corvellec, 2014). Risk management refers to the recognition and response towards specific organizational risks. It is the overall process of risk assessment, identification, management, and planning (Merna & Al-Thani, 2011) followed by a coordinated, organized, and economical application of available and needed resources in order to control, lessen, and observe the possibility and consequences of any event (Hubbard, 2020).

Risk Communication

The concept of risk facilitated the formation of an organized and planned communication structure which is prevalent and useful today. Risk communication is not only a field of practice but also a theoretical concept included in the risk management framework. Historically, risk communication was intended to be a one-way transaction where the public is merely being instructed by the management on what needs to be done (Ng & Hamby, n.d.). In addition, the focus of risk communication research was often to investigate on organizational risks in the middle of a crisis which may cover the organization's reputation, response, and failure or success to rise up after the crisis. The term "risk communication" is widely used to encapsulate research on risk and crisis communication (Sheppard, Janoske & Liu, 2012). It revolved around risk-related consequences, counter measures, and information. More specifically, risk communication is often referred to as the professional communication of risks to the public with the aim of creating an acceptance or understanding of the likelihood, magnitude, and severity of collective risks, thereby involving the public in risk processes wherein decisions are needed to be made (Hayenhjelm, 2006).

Risk Communication Management

While risk communication and risk management are different concepts, they are interrelated with one another. According to Gonzales & Paunlagui (2020), the flaw in most research is to consider these two as entirely separate entities untouching one another, thereby resulting to little literature specifically intended for risk communication management which can potentially produce better outcomes. To further, they asserted that an integrative approach to risk communication and risk management will make the community more prepared and reduce the intensity of risks encountered during natural hazards and disasters (Egbelakin, 2013). To further, risk communication management encourages the participation of stakeholders, thereby giving them the opportunity to actively partake in the formulation of public-oriented strategies. As for the management and institution, risk communication management encourages the staff to be responsible in coordinating with the public to maintain reputable image (Stevens, 2020).

Risk communication management involves the incorporation of risk communication principles in the management of risks and crises. This is why making all stakeholders aware of the how, what, and why of risk communication is more than necessary (Qui, 2017). Additionally, the United States National Academic Press (1989) acknowledged how the implementation of risk communication management strategies would require different kind of organizational resources which may also become inadequate over a period of time. Although such scarcity is inevitable, organizations may work on accommodating those which can be supported by the resources provided. To further, they also elaborated how staff expertise supports deliberate planning and evaluation. Risk messages should be handled by expert and professional personnel to avoid possible dangers.

Risk Communication Management Plan in Higher Education Institutions

Existing risk communication management plans and strategies created by experts, policymakers, regulators, and university researchers were found out to be less effective than expected (Boholm & Corvellec, 2014). Unfortunately, not all institutions make an effort towards addressing this issue and are mostly close-minded to other alternatives that would change their traditional strategies of minimizing and reducing risks (Widmer, 2019). UNESCO (2012) identified that education institutions fall down due to lack of construction material, knowledge, guidelines, and policy formulation. To further, although there are existing emergency preparedness measures and risk communication management plans among HEIs, more comprehensive, dynamic, efficient, and intensive efforts in managing disasters are still very much needed (Sabri, 2011), and a more comprehensive and efficient disaster risk reduction management plan is needed to be crafted by higher educational institutions themselves (Paño, Abao, & Boholano, 2015) because risk communication strategies should be specifically constructed to meet the individualized concerns, habits, interests, and needs of all the stakeholders (Ellis, 2020). Ruzic-Dimitrijevic & Dakic (2014) stated that risk management process should incorporate methods on understanding risks in the context of HEIs, determining risks in relation to the university locale, describing risks, scoring risks, and making decisions regarding how risks should be managed.

Risk analysis should not only be done through identifying behavioral issues but also through considering environmental, natural, and other factors (Widmer, 2019). For one, a study by De Carvalho & Rabechini, Jr. (2015) stated that soft skills involved in risk management have significant positive impacts on project success and thus, they recommended the investigation of moderating and controlling variables related to risk management not only in such industry but also in different organizations. This is also in relation to how both recovery and rehabilitation are

essential for an institution to regain normal conditions in the school community (Ani, Daquio & Aquino, 2015; UNESCO, 2012). Bandana & Cochran, Jr. (2019) discussed that community resilience, for one, heavily depends on the appropriate dissemination of risk information to the concerned stakeholders. In a school environment where risks are minimized, the stakeholders become more capable towards devoting their focus and time in fulfilling institutional objectives. To further, if students receive substantial guidance and support from their teachers and that effective institutional management and planning strategies are present, these students will feel safer and be able to move forward (HEFCE, 2005).

In the local set-up, Kamal & Touch (2015) mentioned that through the ASEAN Safe Schools Initiative (ASSI), Philippine schools were required to form a school Disaster Risk Reduction Management (DRRM) team which should be headed by a designated coordinator. The said team had various responsibilities such as (1) conducting a risk identification and mapping activity led by students within the school vicinity, (2) conducting assessments on damages present, (3) ensuring that the implementation of an early warning system, (4) facilitating immediate resumption of classes, (5) implementing and planning disaster preparedness measures, (6) maintaining the safekeeping of learning materials and vital school records, (7) monitoring recovery and rehabilitation interventions being implemented in the school, (8) tracking all school personnel during disasters, among other roles and responsibilities. With this in place, it was suggested to use DRMM data in the formulation of future policies and plans. Data have also been given to other government partners and researchers to aid the development of recommendations on DRMM interventions

Research Framework

Crises and Emergency Risk Communication (CERC) Model

This study is anchored on the Crises and Emergency Risk Communication (CERC) Model by Reynolds and Seeger (2005) which was crafted following the 9/11 and 2001 anthrax attacks. It aimed to use image and reputation research by the means of persuasion and strategic messaging research. In the formulation of this model, risk communication was identified to overlap with previous researches on crises and disasters. Crisis communication and risk communication are two distinct concepts. Because both are interchangeably associated, most researches used risk communication to capture risk and crisis researches (Sheppard et al., 2012) and that crisis communication is also risk communication at the point wherein a threat or danger identified is already being faced (Lundgren & McMakin, 2018). With this, Reynolds and Seeger (2005) formulated a model encapsulating both the principles of effective crisis and risk communication in consideration of the phases by which a risk factor may develop as a crisis event. It sought to focus on how excessive pre-crisis communication may be prevented and how appropriate risk messages may be developed to the target audience, making it preferable most especially when policy makers must create decisions in consideration of time constraints. It is split into five stages, each providing a broad set of risk communication strategies and suggestions. The stages are Pre-crisis, Initial Event, Maintenance Stage, Resolution Stage, and Evaluation Stage.

Social Judgment Theory (SJT)

A crucial component is the power which persuasion holds in producing attitude changes. As proposed by Muzar Sherif, Carolyn Sherif, Carl Hovland, and Roger Nobergall (Granberg, 2016), the Social Judgment Theory (SJT) assumes that for messages to be accepted by a group of people, the sender of such messages should consider the group's pre-existing attitudes so as to obtain increased chances of acceptance from that particular group (Guzman, 2013). To further, people's attitudes about a concept or idea may be mediated or changed depending on the judgmental processes and effects involved (NANOPDF Inc., 2018). In considering the receiver of

the message, the SJT presupposes that the receiver's reaction is dependent on how favorable the concept or idea is to that person, which will then be influenced by how they evaluate the message itself. SJT principles should be considered in understanding risk communication management as it provides a structure as to how a group of people may be made more "invested" into a particular initiative as opposed to mere compliance. An early study by Earle (1988), the importance of SJT in understanding risk judgment and the improvement of hazard management methodologies, primarily as to how individuals are trained to use risk information by making inferences during risk and crisis situations, whether these are derived from their personal experiences or from stories from other individuals.

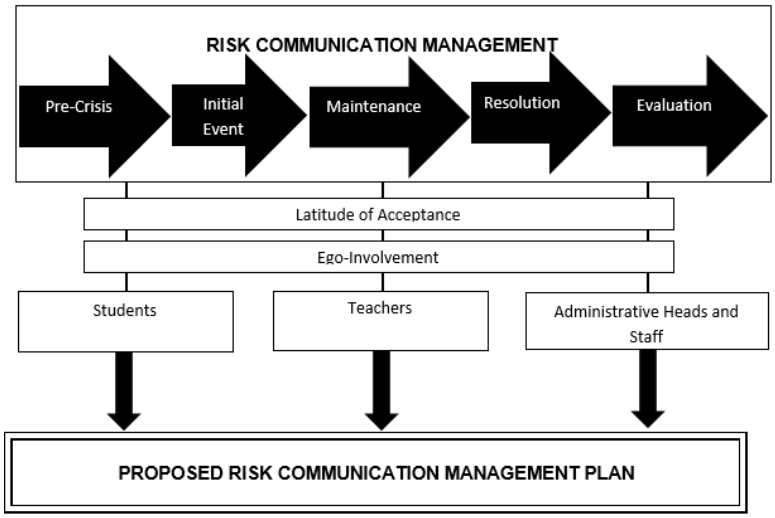

Figure 1. Conceptual Framework of the Study

Figure 1 shows the conceptual paradigm of the study. For this investigation, the researcher incorporated principles from the Crises and Emergency Risk Communication (CERC) Model and Social Judgment Theory (SJT) by adding the five CERC stages and understanding how they influence the latitude of acceptance and ego-involvement of students, teachers, and administrative heads and staff. Through incorporating the target audience, which would be the institutional stakeholders, the whole framework is intended to make the study more appropriate under the context by which it is being observed upon. The conceptual framework will be identified by the responses of the respondents involved as well as the variables under investigation and would not go beyond that.

Objectives of the Study

At present, LPU-Laguna, through its Crises Management Team (CMT), had done several risk communication initiatives through conducting safety seminars for employees and students. However, there remains no established evaluation or measure to see if these were effective. While there is a Risk Management Manual available, LPU-Laguna needs a risk communication management plan which can better accommodate to the quality management system standards required by ISO 9001:2015. With this, the study aims to propose a risk communication management plan for Lyceum of the Philippines University-Laguna which will effectively manage and highlight the importance of risk communication management. Specifically, it aims to determine the status of risk communication management of LPU-Laguna based on the assessment of its internal public in terms of the following stages: Pre-Crisis, Initial Event, Maintenance, Resolution and Evaluation and propose a risk communication management plan for Lyceum of the Philippines University-Laguna.

METHODOLOGY

The methodology was divided into two parts. For the first part, the respondents were asked to complete a self-made survey questionnaire regarding the Risk Management Manual of LPU-Laguna around a time, which was specified by the researcher once appropriate preparations have been conducted. After meeting the needed number of responses, the researcher randomly selected the six individuals where two are students, two are teachers, and two are administrative heads or staff. It is important to consider public involvement in the assessment or risk communication and risk management because such action encourages the engagement and participation of the community involved towards achieving institutional goals and policies. To further, considering the inputs of LPU-Laguna students, teachers, and administrative head and staff made the study more inclusive, considerate, realistic, and relatable for the whole LPU-Laguna community. It would also reduce the number of delays, misinformation, and frustration whenever they are dealing most especially with high-level risk situations. These six individuals were invited by the researcher for a Focus Group Discussion on a date and time agreed upon on the availability of the research respondents. Both quantitative and qualitative data collected were then analyzed, interpreted, and presented.

Research Design

The study employed a mixed-method approach including both quantitative and qualitative research data. According to Johnson et al. (2007) as cited by Schoonenboom and Johnson (2017), a mixed method research is a type of research which utilizes both quantitative and qualitative approaches in order to have a dapper understanding of the subject matter being investigated. For this study, the quantitative research design would serve as the primary methodology. Through this, a systematic empirical investigation of social phenomena will be conducted and analyzed through mathematics and statistics as the tools for the measurement and treatment of data (Bhandari, 2021). This was conducted using a survey questionnaire to be answered by all respondents, namely the student, teachers, and administrative head and staff. On the other hand, there was also a Focus Group Discussion (FGD) where 2 students, 2 teachers, and 2 administrative head and staff were selected and make up three clusters in total. Responses were used to validate the data and generated from the respondents of the study.

Research Instrument

Survey questionnaire is the tool of choice in the collection of quantitative data to determine the respondents' assessment of the Risk Management Manual of LPU-Laguna. Since the institution has a "Just English Please" Policy and caters to international students and staff, the questionnaires are in English language for formality purposes. The questionnaire was divided into three parts. The first part focused on the respondents' demographic profile in terms of age, gender, college, location of classroom, classroom number, length of stay in the institution, and classification. The second part delved on the online risk communication preferences of the responses in terms of the online and onsite risk communication media used, type of risk information being communicated, frequency of risk information being communicated, and risk communication language. They were given open-ended choices and a 5-point Likert Scale where 1 is the lowest and 5 is the highest to indicate the effectiveness of the risk communication preferences. Lastly, the third part encompassed on the Risk Communication Management Plan of LPU-Laguna. The questions were close-ended in a 5-point Likert Scale format where "5" stands

for “strongly agree”, “4” stands for “agree”, “3” stands for “undecided”, “2” stands for “disagree”, and “1” stands for “strongly disagree” upon a given statement. The perspective of the respondents in the institutional risk communication policy was based on the results gathered from the survey. Aside from the questionnaires, the researcher made use of interview to gather qualitative data. A set of questions were prepared, although the format may be semi-structured depending on the flow of the FGD.

RESULTS AND DISCUSSION

Status of Risk Communication Management during Pre-crisis Stage

For the participants’ assessment of the institution’s risk communication management during Pre-crisis stage, an overall composite mean of 3.67 with a verbal interpretation of “agree” is found, thus showing how the community agrees that the institution provides pre-crises preparations before a crisis. Specifically, they claim how “the institution enables [them] to understand what the possible risks around [them] are” which got the highest weighted mean of 3.81. Additionally, they also state how “the institution quickly identifies and recognizes an imminent danger/impending natural hazard” which got the lowest weighted mean of 3.63. All five statements received verbal interpretations of “agree”. As supported by literature, Heydari et al. September 2022 14 Management of Risk Communication in Lyceum of the Philippines University-Laguna: Basis for Risk Communication Management Plan (2021) emphasized how the pre-crisis stage enables the authoritative bodies to provide guidance, risk messages, and warning regarding preparation. To further, it is of necessity to help people understand the possible risks around them so that they can make informed decisions and take necessary actions to respond should a crisis occur as stated by the National Institutes of Health (2016). Additionally, through planning, ample preparations will be made which should focus on needs assessment, which then necessitates the institution’s capability to quickly spot on any imminent danger or impending natural hazard ahead of time so that disastrous impacts can be avoided or reduced (Heydari et al., 2021). The outcomes of RA 10121 demonstrate how the institution can completely avoid the negative effects of impending hazards and dangers (Pao et al., 2015). The said rating, however, is close to “undecided”, and the interviews conducted took an interesting take on this matter. While Pre-crisis risk communication management efforts are present, the interviewees contended how the existing strategies somehow need to be changed or revised so that future risk communication efforts will better improve. Another issue mentioned by the interviewees is related as to how Pre-Crisis risk communication management efforts take place during the crisis itself already, which then beats the purpose of having a risk communication management plan ahead of time. While the institution is successful in helping its community understand the possible risks are, these are already being cascaded during the crisis and therefore may be already too late. To be fair, the interviewees considered how some decisions needed to be made by the institution are dependent on higher authorities. The results may also be interpreted in relation to Sheriff’s Social Judgment Theory (SJT), showing that while the quantitative data summarizes how the participants agreed that risk communication management efforts during the Pre-crisis stage were effective, somehow, their responses were not strong enough to merit higher agreement rates equivalent to “strongly agree”.

Table 1. Status of Risk Communication Management during Pre-Crisis Stage

Pre-Crisis	Weighted Mean	Verbal Interpretation
1. The institution provides specific warning messages whenever an imminent danger/impending natural hazard is expected to happen.	3.70	Agree
2. The institution enables me to understand what the possible risks around me are.	3.81	Agree
3. The institution quickly identifies and recognizes an imminent danger/impending natural hazard.	3.63	Agree
4. The institution has developed contingency plans for hazards based on expert advice and consultation with stakeholders.	3.59	Agree
5. The institution helps me prepare before a hazard actually happens.	3.64	Agree
Composite Mean	3.67	Agree

Risk Communication Management during Initial Event Stage

When it comes to the participants' assessment of the institution's risk communication management during Initial Event stage, an overall composite mean of 3.67 with a verbal interpretation of "agree" was found, thus showing how the community agrees that the institution provides initial event preparations before a crisis. Specifically, participants agree that "the institution uses efficient channels of communicate to cascade risk warnings and updates" which obtained the highest weighted mean of 3.76. On the other hand, the participants also claim that "whenever a natural hazard occurs, the institution makes [them] feel secured and undisturbed under its protection" which obtain the lowest weighted mean of 3.58. All statements received "agree" responses. According to Heydari et al. (2021), through initial event preparations, affected groups are provided with reassurance, self-efficacy, and certainty, which helps them feel less disturbed. To further, as reiterated by Flores and Asuncion (2020), it is important for institutions to assess the efficiency, efficacy, and effectiveness of the communication channels they are utilizing to better inform the community. In this way, risk communication is accomplished by empathy, openness, honesty, empowerment, and proactivity, which subsequently increases interpersonal communication and stakeholder involvement, as Hyland-Wood et al. (2021) have stated. Additionally, as mentioned by Sepillo and Farin (2017), organization, planning, resource usage, and training requirements are essential components of a risk communication management strategy that should be considered to satisfy the requirements of RA 10121. Similar with the Pre-crisis stage, interviewees agreed that while risk communication management efforts are present in relation to the Initial Event stage, these do not guarantee their effectiveness, considering how the scores were close to "undecided", it was clear from the interviewees that the institution has a top-down approach when it comes to disseminating risk information to the community. Another concern raised was related as to how informal communication channels are being utilized by the institution even more than the formal communication channels it actually provides. While this is helpful so that risk information is easily dissemination, a disadvantage to this is that those who are being informed are those who can only see or receive this information as compared to having direct contact with the community.

Table 2. Status of Risk Communication Management during Initial Event Stage

Initial Event	Weighted Mean	Verbal Interpretation
1. The Management Team exhibits knowledge of the incident command system and allied emergency management concepts.	3.65	Agree
2. Whenever a natural hazard occurs, the institution makes me feel secured and undisturbed under its protection.	3.58	Agree
3. Details of the emergency are reported in a clear and concise manner	3.73	Agree
4. The institution has specific personnel designated to communicate with me and accommodate my concerns.	3.63	Agree
5. The institution uses efficient channels of communicate to cascade risk warnings and updates.	3.76	Agree
Composite Mean	3.67	Agree

Risk Communication Management during Maintenance Stage

For the participants' assessment of the institution's risk communication management during Initial Maintenance stage, an overall composite mean of 3.68 with a verbal interpretation of "agree" is achieved, thus showing how the community agrees that the institution provides maintenance actions during a crisis. Specifically, participants agreed that "during the emergency, the institution thoroughly analyzes the situation before coming up with response actions" which got the highest weighted mean of 3.76. On the other hand, they also agreed that "during the emergency, the institution informs me of the support services and assistance packages that I can avail and the procedures to avail them" which got the lowest weighted mean of 3.60. All statements achieved verbal interpretations of agree but were close to ratings of "undecided". According to Meredith (2008), the maintenance stage enables institutions to direct communication to the public and affected groups in a way that the established communication from the previous stage remains sustained so that reassurance and self-efficacy may be obtained, and uncertainty may be continuously reduced. As stated by Kozachenko et al. (2021), coming up with strategic responses during risky situations is important as it facilitates several mechanisms such as the revival of relationships between the institution and its stakeholders and organizational compliance. In relation to these, informing the community where they can get support or assistance is vital. A common theme across all responses were the need for improvements in terms of disseminating information ahead of time and ensuring that all the people within the community are well-informed and reached. In terms of SJT, it is important to manage conflicts that arise during risk or crisis situations, thus showing how essential it is for the institution to listen to the community considering their latitude of acceptance.

Table 3. Status of Risk Communication Management during Maintenance Stage

Maintenance	Weighted Mean	Verbal Interpretation
1. During the emergency, the institution provides accurate and reliable information so that I know what to do and what to expect.	3.69	Agree
2. During the emergency, the institution thoroughly analyzes the situation before coming up with response actions.	3.76	Agree
3. During the emergency, the institution informs me of the support services and assistance packages that I can avail and the procedures to avail them.	3.60	Agree
4. In case misunderstandings or false rumors spread during the emergency, the institution is able to correct these fallacies and inform me of the facts.	3.73	Agree
5. During the emergency, the institution listens to what I have to say about the situation.	3.61	Agree
Composite Mean	3.68	Agree

Status of Risk Communication Management during Resolution Stage

When it comes to the participants' assessment of the institution's risk. For the participants' When it comes to the participants' assessment of the institution's risk communication management during Resolution stage, an overall composite mean of 3.75 with a verbal interpretation of "agree" is achieved, thus showing how the community agrees that the institution provides resolution strategies after a crisis. Specifically, the participants report that "after the emergency, the institution strives to continuously cascade updates or any new information so that [they] stay updated" which got the highest weighted mean of 3.80. On the other hand, participants also agree that "after the emergency, the institution regularly informs me/stakeholders of the ongoing recovery and rehabilitation efforts" which got the lowest mean of 3.71. All statements obtained verbal interpretations of agree yet were also relatively low. Somehow, the interviews conducted show how the institution has made several efforts to respond to the crisis itself. The interviewees appreciate the institution's efforts to inform its people, send support to nearby communities, and mobilize its people to action. As stated by Meredith (2008), it is important to provide updates on the found resolution and that causes, new risks, or new understandings may be discussed. At this point, developing messages is still crucial to instruct people on the appropriate post-event response and help them anticipate what is to come. In this way, recovery will be more effective. Following RA 10121, there are four thematic areas which should be focused on, namely (a) prevention and mitigation, (b) preparedness, (c) response and rehabilitation, and (d) recovery (Sepillo and Farin, 2017). However, these ratings remain low, with interviewees emphasizing how these risk communication management efforts often come as unofficial announcements. Additionally, the institution emphasizes on the maximization of the resources available to minimize costs. During Resolution stage, it is important for progress to be evidently seen by the community. Considering how social and interpersonal contexts influence one's judgment (Earle, 1988), it is important for the institution to lead by example, correct any

misinformation, and open opportunities for the community to provide their own support to the institution.

Table 4. Status of Risk Communication Management during Resolution Stage

Resolution	Weighted Mean	Verbal Interpretation
1. After the emergency, the institution regularly informs me/stakeholders of the ongoing recovery and rehabilitation efforts.	3.71	Agree
2. After the emergency, the institution uses a pre-developed/approved recovery plan incorporating innovative strategies.	3.72	Agree
3. After the emergency, the institution strives to continuously cascade updates or any new information so that I stay updated.	3.80	Agree
4. After the emergency, the institution persuades me to support its actions and initiatives so that the problem becomes fully mitigated through collaborative efforts.	3.75	Agree
5. After the emergency, the institution allocates sufficient resources to sustain recovery.	3.75	Agree
Composite Mean	3.75	Agree

Status of Risk Communication Management during Evaluation Stage

Lastly, for the participants' assessment of the institution's risk communication management during Evaluation stage, an overall composite mean of 3.74 with a verbal interpretation of "agree" is achieved, thus showing how the community agrees that the institution provides evaluation strategies after a crisis. Specifically, participants agree that "after the emergency, the institution cascades improvements/changes on procedures" which obtained the highest weighted mean of 3.78. On the other hand, they also agree that "after the emergency, the institution conducts a review of all actions taken" which obtained the lowest weighted mean of 3.67. As reiterated by Arora and Pandey (2016), during Evaluation stage, communication is directed to agencies and response communities to discuss the adequacy of response and work towards lessons and new understandings. This is where feedback becomes important in understanding the relevant sectors involved and assessing areas for further improvement. As stated by Paño et al. (2015), institutions must constantly review their policies to make their efforts more realistic and congruent with CHED standards as ascribed in RA 10121. However, with the conducted interviews, it was seen how risk communication management efforts in relation to the Evaluation stage, while present, are often not disseminated throughout the entire community. Information related to recently conducted risk efforts tend to stay and get evaluated within a selected group of people. To further, the results showed that any risk communication management effort directly affects people's lives. People who reject such attempts and initiatives may think again and revise their judgment should a same situation occur in the future, expanding their latitude of acceptance, should the institution be effective in minimizing risk or crisis situations. As a result, every danger or crisis circumstance encountered serves as a lesson for the future.

Table 5. Status of Risk Communication Management during Evaluation Stage

Evaluation	Weighted Mean	Verbal Interpretation
1. After the emergency, the institution conducts a review of all actions taken.	3.67	Agree
2. After the emergency, the institution assesses the areas which need to be further improved.	3.74	Agree
3. After the emergency, the institution assesses whether it was able to effectively communicate with everyone during a disaster.	3.77	Agree
4. After the emergency, the institution cascades improvements/changes on procedures.	3.78	Agree
5. After the emergency, the institution opens an honest discussion on the disaster's causes, the people to be held responsible, and the efficiency of the responses provided.	3.73	Agree
Composite Mean	3.74	Agree

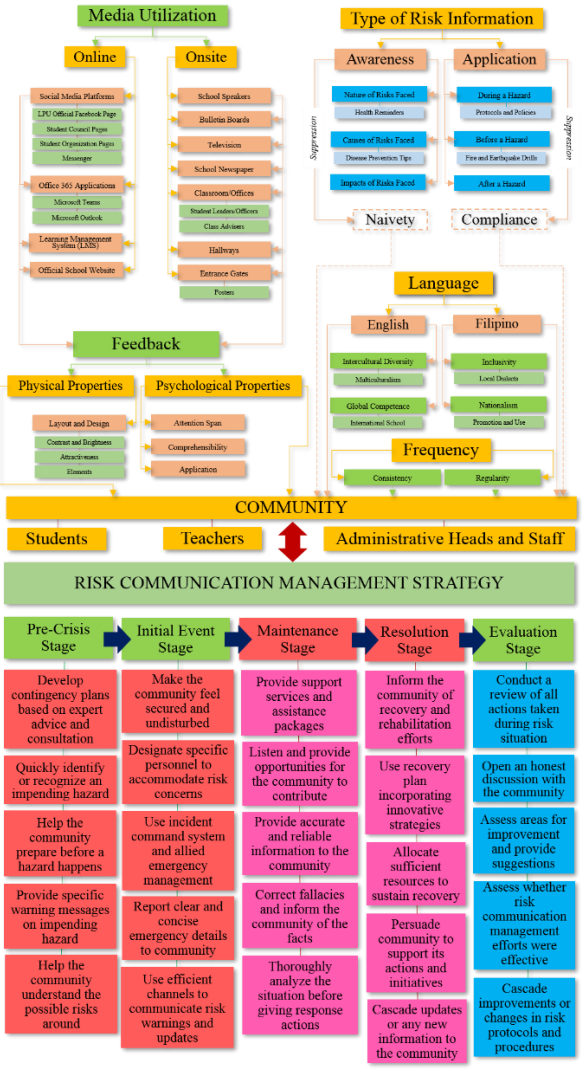

Figure 2: Proposed Risk Communication Management Plan

CONCLUSIONS

The 21st Century has brought fast-paced changes on the education sector which calls for HEIs to be much more adaptive in accommodating the needs of a very diverse population. More and more members from the community are coming from Generation Z and Millennials considering how internet and technology plays a huge role in today's education. The ratio of female to male shows an interesting trend in the workforce as women continue to get more job opportunities in the 21st century. In relation to this, it can be said that the institution has acceptable rates of retention considering how the sample's average length of stay in the institution is about five years, showing how they were mostly staying in the institution all the way from 2017. This is crucial considering how there have been many changes in the institution in the last five years such as the establishment of the Olive Residences, Sinsai Restaurant, SHL Building, renovation and/or changing of offices, the Taal eruption, and the COVID-19 pandemic, not to mention the different typhoons which have also passed from 2017 to present. In relation to these, most of the

respondents were students followed by teachers then the administrative heads and staff which is also representative of the population in its entirety.

For the risk communication preferences of the respondents in terms of media utilization, it was proven how social media plays a huge role in today's time. Not only is it a way of advertising or marketing what the institution has to offer, but also, it can serve as a communication channel which the institution may utilize to mitigate its risk communication management efforts. On the other hand, LPU-Laguna has also proven that it could also manage onsite risk communication management efforts through utilizing its existing equipment such as school speakers and bulletin boards. Onsite risk communication management was also found to involve its people, specifically as to how student leaders and employers disseminate information inside their respective classrooms and offices. While online and onsite risk communication preferences were present, however, feedback is often a huge concern, of which the respondents mentioned how physical and psychological properties should be considered in risk communication management. Providing risk information related to the nature of the risks faced which often comes in the form of general health reminders was also found to aid in increasing awareness and application of risk communication management efforts. As for disseminating risk information, efforts were found to be inconsistent, meaning, there are no regular procedures or schedules. Having a regular schedule as to when risk information is to be expected will likewise help the institution have a wider reach in terms of dissemination. Lastly, as an international institution catering to students, teachers, and administrative heads and staff from culturally diverse populations, the use of the English language paves the way for intercultural diversity and global competence. However, the respondents also noted the use of the Filipino language and suggested how it may also be vital to have risk communication management efforts be cascaded in a language that would be easily understood by people outside of the community who visit the school.

While each of the stages as determined by the CERC Model was found to be effective, the conducted interviews proved otherwise, thereby showing how risk communication management efforts are already good but some aspects should be changed to achieve better and more effective outcomes that would be beneficial for the entirety of the community. There were no significant differences observed on the assessment of risk communication management of LPU-Laguna as assessed by students, teachers, and administrative heads and staff. While the result may have been affected by the fact that there were more students in the sample, it may also be related as to how students, teachers, and administrative heads and staff, while having different statuses, are all equally part of the institutional community and are thus predisposed to cooperate and collaborate with one another in order to mitigate risk situations. They emphasized on how risk communication management efforts are existent, yet some of the policies and procedures being followed are no longer effective and should therefore be changed. With this, a Risk Communication Management Plan is to be recommended.

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