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FACTORS RELATED TO COVID-19 VACCINE HESITANCY BASED FROM THE PERCEPTIONS OF SCHOOL OF HEALTH SCIENCE PROFESSIONS STUDENTS IN ST. DOMINIC COLLEGE OF ASIA

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ABSTRACT

Vaccines are one of the most reliable and effective public health strategies available today in the fight against viral epidemics. The global response to the COVID- 19 vaccine for coronavirus disease, on the other hand, is overwhelmingly negative. As a result, in order to boost vaccine coverage and lower the slope of the virus curve, it is essential to have a thorough understanding of the behavior around immunization. This study examines public perceptions of the COVID-19 vaccination and identifies factors associated with vaccine reluctance. The study primarily focuses on students at St. Dominic College of Asia's School of Health and Science Profession. The respondents selected were either vaccinated or unvaccinated members of the school, aging 18 to 29. The researchers purposely had chosen the School of Health and Science Profession Students in St. Dominic College of Asia as they were most likely to be knowledgeable in terms of the COVID-19 since their programs were related to health and science. In addition, they were asked about their demographic profile and the factors related to COVID-19 vaccine hesitancy. The sample population of this study were randomly chosen from 1st to 5th year students in the program of BS Biology, BS Medical Technology, BS Nursing, BS Pharmacy, BS Physical Therapy, and BS Radiologic Technology.

KEYWORDS: *COVID-19, Immunization Vaccines, Viral Epidemics, Vaccine Hesitancy.*

INTRODUCTION

The COVID-19 virus was first identified in December 2019 at Wuhan, China. The acute respiratory infection caused by the coronavirus 2 (SARS-CoV-2) is known as a pandemic and was brought on by the coronavirus disease in 2019 (also known as "COVID-19"), and has had significant implications around the globe (Acter, 2019). It has a negative impact on people's lives, bodily and mental wellbeing, and finances. While efforts are being made in every country to put strategies and procedures in place to manage the virus, the fatality rate keeps increasing.

Vaccination is encountering a lot of focus as a means of better addressing the pandemic. As a result, sufficient numbers of individuals must be willing to receive vaccinations in addition to vaccine research and availability. Yet, vaccine hesitancy affects significant portions of the global population (Bendau, Plag, Petzold, & Ströhle, 2021). The refusal or delay in receiving a vaccine despite its availability is referred to as vaccine hesitancy. The complexity and context-dependence of vaccination apprehension are influenced by the time, location, and vaccine that is accessible. It encompasses things like complacency, convenience, and trust.

Antibodies against a particular pathogen can be prompted in the immune system through vaccination. By helping individuals who get vaccinated and safeguarding communities from the disease's spread, they have been used to eliminate and significantly lower morbidity and mortality from the disease. The effectiveness of a vaccine depends not only on its availability and adoption but also on the community's openness and eagerness to receive vaccination. Different regional, cultural, and societal factors contribute to vaccine refusal differently. Vaccine apprehension, skepticism, rejection, and anti-vaccine movements are significant barriers to mass vaccination. There is a pressing need for a more thorough investigation of vaccine attitudes and the parameters impacting vaccine intention so that relevant public health messaging can be developed and disseminated. Despite the growing understanding of people's mass vaccination, people are still hesitant to be vaccinated.

COVID-19

In December 2019 the first ever COVID-19 case was discovered in Wuhan, China. The pandemic, which was

caused by the coronavirus disease 2019 (also referred to as "COVID-19") was characterized by a severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and has had major implications around the globe (Acter, 2019).

A group of viruses known as coronaviruses can make people sick with respiratory conditions. Because the virus's surface is covered in spikes that resemble crowns, they are known as "corona." Examples of coronaviruses that affect people include the severe acute respiratory syndrome (SARS), Middle East respiratory disease (MERS), and the common cold (Cleveland Clinic, 2022).

ORIGIN

According to the study of BS and Nambiar (2020) entitled "COVID-19: An Insight into SARS-CoV-2 Pandemic Originated at Wuhan City in Hubei Province of China," On December 31 of that year, a group of individuals living in the vicinity were confirmed with an unexplained kind of pneumonia. Investigations have conclusively shown that SARS-CoV-2 new have caused the (previously known as 2019-nCoV).

The infection first appeared and started to spread in Wuhan, province of Hubei, the virus can propagate from person to person and even from animal to humans through a trade of seafood and livestock. As such, a rising number of people inside and outside of Wuhan City who had no contact with an animal market contracted the disease.

When an infected person talks, coughing or sneezing, the infection can be transmitted through little particles on one's mouth or nose. Everyone's life, bodily, emotional wellbeing, or even economic status have all been disrupted. Every country is currently working to implement plans and processes to control the virus, but the number of fatalities continues to rise.

COVID-19 has morphed into an international public-health crisis, putting a strain on people's health, economies, and lives. Growing numbers are all at risk of falling into extreme impoverishment as result of the epidemic, and the estimated 132 million undernourished people might increase up to 690 million over the course of the year. That living standards with over 50% of the 3.3 billion workers worldwide are in serious trouble. Workers employed in the informal sector seem to be highly susceptible, since a lot of them are deprived of access to public security, good health care, and perhaps tangible resources (WHO, 2020).

HISTORY

Morens et al. (2020) discussed the basis of COVID-19 in their article entitled "The Origin of COVID-19 and Why It Matters" that the development of a sizable reservoir of SARS-CoV-like viruses in horseshoe bats is a ticking bomb, coronavirus researchers warned in 2007. It's important to take into account the potential for the reemergence of SARS and other new viruses.

Following the disappearance of SARS after the initial outbreak in 2002, not so many people paid attention. After 18 years, COVID-19 has surpassed the 1918 "Spanish" influenza pandemic, which is believed to have killed 50 million individuals, and is known as one of the deadliest respiratory infection outbreaks. To prevent a recurrence and to be better equipped to deal with pandemics at their outset, people need to understand what transpired.

That genetically related SARS-CoV, which later produced a devastating pandemic in 2002–2003, served as the inspiration for COVID-19. Prior to 2019, neither SARS-CoV-2 genetic sequences nor the virus have been identified in either humans or any animal virus.

VACCINATION/IMMUNIZATION

As a means of better managing the pandemic, vaccination is gaining more consideration. Since early 2020, scientists around the world have been developing and testing COVID-19 vaccines. A reliable and effective COVID-19 vaccination is anticipated to become available in late 2020 or early 2021 (Halton, 2020). Several COVID-19 vaccines can now be created and introduced. In December 2020, a number of businesses, including Moderna in the US, Pfizer-Biontech in the US and Europe, Oxford-AstraZeneca in the UK, and Sinopharm in China, were granted emergency permits by various health agencies. The European Medicines Agency (EMA) has not yet approved other vaccinations, such as the Russian Sputnik V vaccine, which is in phase III. To achieve herd immunity when vaccine is launched, it is crucial to pinpoint the factors and health ideologies that will affect people's decision to get vaccinated.

Based to data obtained from the National Task Force (NTF) Against Covid- 19, nearly 27 million Filipinos would have received the current mass vaccination in the Philippines by October 2021, providing them with complete protection against coronavirus infections. In order to meet its objective of safeguarding a minimum of fifty-million Filipinos by year's end, the NTF chief implementer stated that the government plans to boost the daily average provided to up to 1.5 million doses (Philippine News Agency, 2021). The nationwide pediatric immunization campaign, which began on November 3 and is aimed at the estimated 12.7 million children between the ages of 12 and 17, resulted in an increase in vaccination rates.

Given the following statistics, Philippines currently have roughly of 110 million residents. Since 1960, when it was 3.3%, to the present, when it is approximately 1.3%, the yearly increase in population has declined dramatically (World Population Review, 2022). After the highly transmissible Delta variant increased herd immunity thresholds for the illness, the Philippines is increasing its goal COVID-19 vaccine coverage to encompass 90 percent of the country's population (Tomacruz, 2021). With the current numbers and figures,

it is still significant to determine the knowledge, attitudes, practices and concerns of unvaccinated Filipinos and on how these factors can influence their COVID-19 vaccine decisions.

According to the study of Taylor et al. (2002), entitled "Association Between Parents' Preferences and Perceptions of Barriers to Vaccination and the Immunization Status of Their Children: A Study from Pediatric Research in Office Settings and the National Medical Association," recent vaccinations appeared irrelevant in terms of parents' opinions of vaccination strategies intended to decrease missed chances. A small minority of parents reported personal barriers to vaccination, despite the fact that multiple barriers were connected to immunization status.

According to the study of Groom et al. (2015), entitled "Immunization Information Systems to Increase Vaccination Rates: A Community Guide Systematic Review," the occurrence of diseases that can be prevented by vaccines can be decreased most effectively by vaccination. Immunization systems of information (IISs) are actually confidential, a population-specific electronic databases which monitor each vaccination doses administered by cooperating clinicians among individuals of a defined geographical location. They make it easier for healthcare professionals to combine vaccination histories and utilize them to decide which immunizations are best for a client. In order to evaluate vaccination coverage, program effectiveness, and inform public health initiatives, immunization databases also give composite immunization records.

COVID-19 VACCINE HESITANCY
Vaccination programs can only succeed if an effective vaccine is available and widespread coverage is primarily achieved. The creation of an effective vaccine was a pipe dream during the early stages of the COVID-19 epidemic. The success of immunization programs is increasingly viewed as being threatened by a lack of trust in immunizations. Fear of vaccination is assumed to be the reason for lower vaccination rates and a higher risk of epidemics and outbreaks of diseases that can be prevented by vaccination. According to the World Health Organization (2020), Vaccine safety worries are one of the most prevalent reasons for immunization reluctance. Before, the majority of these concerns came from widely read media reports that highlighted an extremely uncommon case of a vaccine-related adverse reaction or connected specific conditions to immunizations or their components.

Concerns about vaccine safety are among the most frequent reasons for immunization reluctance. In the past, such worries originated primarily from extensively publicized media articles highlighting a rare case involving a vaccine- related problem or relating specific conditions to vaccinations and their constituents. Several of all these fear, on the contrary, depended out of reports instead of evidence, yet they were enough to frighten parents. Unsurprisingly, rationale for this depends upon results from clinical studies supported using autopsy, which attribute numerous deaths to Dengvaxia in 2019. These data might be used as evidence against vaccine safety, potentially affecting other immunization efforts (Alfonso et al., 2021).

According to the research of Amit et. al (2022), limited access to vaccines, especially in resource-constrained settings, exacerbates the problem, leading to unequal distribution and disparities in immunization coverage. The ongoing inquiry has shown that a person's decision to get vaccinated is greatly influenced by their perceptions. The perception of the system's rigidity and inefficiency, especially among marginalized and vulnerable communities, is a significant obstacle to the country's vaccination rollout.

Concerns must be identified and addressed at all levels in order to increase COVID-19 immunization uptake and reach. Increasing health literacy is a key tactic in the fight against incorrect information that undermines public confidence in vaccines. Systems for immunization must also take into account the requirements of underprivileged and marginalized persons to ensure that they have access to vaccines.

CONTEXTUAL INFLUENCES
Communication and Media Environment
While interaction lacks a specific factor such trust, complacency, or accessibility, it is capable of having an unwanted effect on vaccine reluctance provided the situation is poor or insufficient. Acceptance can be harmed by any type of substandard service, including poor communication. Among wealthy nations having adequately funded vaccination programs, vaccine hesitancy and outright rejection can be exacerbated by insufficient or bad immunization program communications.

Influential Leaders, Gatekeepers and Anti or Pro Vaccination Lobbies
Vaccines possess several features of scarce items that drive demand: they are made by a small number of enterprises, and supply is constrained. Vaccines, on the other hand, are usually sourced and disseminated by governments, healthcare providers, the World Health Organization, or other international organizations with access control (gatekeepers). Gatekeepers in healthcare systems are persons, institutions, or systems that decide who gets care and under what circumstances. Without going through the gatekeeper, the individual is unable to make a decision.

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other international organizations with access control (gatekeepers). Gatekeepers have direct control over who can and should have access to a resource. Gatekeepers in healthcare systems are persons, institutions, or systems that decide who gets care and under what circumstances. The individual is not in a position to decide without first going through the gatekeeper (Pereira et al., 2021).

Historical Influence
Religious leaders wield considerable power over their communities across Africa. There are several examples of religious leaders who have had a big effect on how their followers and societies regard vaccinations in recent history. Religious leaders in northern Nigeria rejected the World Health Organization's "Kick Polio Out of Africa" campaign in 2003. (Jegede, 2007). Because they are afraid of being publicly ridiculed and chastised, or even shunned from their communities, some community members have gotten vaccinated in secret.

Religion/Culture/Gender/ Socio-Economic
Because of morality conspiracy beliefs, there is a clash between vaccine science and religious individuals. As a result, some religious people choose to forego or postpone vaccination. According to this study, religion is a substantial predictor of anti-vaccine sentiments. In light of their influence on society, both healthcare professionals along with religious leaders can serve an essential role in changing people's vaccination attitudes. For the purpose of improving public awareness about vaccines, periodic community efforts emphasizing the vaccine's benefits are required (Biswas et al., 2021).

Politics/Policies (Mandates)
Vaccine apprehension affects all demographic groups and contexts, but it is mostly unstudied for countries with a low or middle income. Understanding regional, and cultural variables, as well as specific training for health-care workers, are required for successful efforts to alleviate hesitation. Vaccine confidence problems must be handled as soon as possible. Health care professionals and political figures hold the most important roles and responsibilities in fighting vaccination reluctance. Encouraging immunization and developing supporting mechanisms believed to guarantee equitable availability.

Geographic Barriers
Vaccine reluctance was also seen among indigenous peoples. Additionally, this could overlap with cultural events if there are vaccine refusals among native tribes. Geographic obstacles may reduce vaccination rates in some rural places, although they are unrelated to vaccine apprehension. There are no anti-vaccine organizations in the nation, and vaccine rejection is rare.

Pharmaceutical Industry
New vaccinations were specifically picked under extra inspection due to an alleged absence of effectiveness and safety assessment. Furthermore, while Health Care Workers (HCWs) had high trust in health authorities, they had significant concern about of drug corporations due to suspected harmful effects.

INDIVIDUAL AND GROUP INFLUENCES
Experience with Past Vaccination
Individuals' knowledge, information, and understanding of when, where, and who should be vaccinated are all factors in vaccine acceptability. In some circumstances, vaccine apprehension is caused by a fear of needles, discomfort, or past negative vaccination experiences.

Beliefs, Attitudes about Health and Prevention
There are several medical opinions regarding vaccination concerns within each under vaccinated group (UVG) found. Moreover, some of these groupings have comparable characteristics. Communication approaches which deal with the aforementioned factors, including informing individuals concerning the detrimental effects of not receiving vaccines, addressing their concerns as well as and exposing vaccination misconceptions within people associated with a particular UVG through a reliable source, can help build trust along with strengthen vaccination uptake (Shen & Dubey, 2019).

Despite the fact that the majority of respondents were concerned about influenza and felt the vaccine was effective, the study found a low prevalence of influenza vaccination. The desire to avoid medication, the fact that the Ministry of Health has not made vaccination mandatory, concerns side effects, assumption that one is at minimal risk of catching influenza, as well as the opinion that the influenza constitutes a simple disease that does not require prophylaxis are all reported as barriers to vaccination. To address various stated hurdles to vaccination, more public education and improved vaccination arrangements are needed in the hospital system (Sagor & AlAteeq, 2018).

Knowledge/Awareness
A person's level in one's education gained has been linked to vaccination apprehension, and studies have shown that groups with less formal education have a higher level of distrust for medical personnel. Because of their lower educational level, they have less information regarding vaccinations and their effects than more educated persons, and they turn to alternate sources for accurate information, such as family members and other people in the neighborhood, or the media.

Health System and Providers Trust and Personal Experience
Despite the availability of high-quality vaccine treatments, health systems throughout the world are seeing an alarming increase in situations where people hesitate, postpone, or even refuse immunization. To reduce and battle this condition, currently known as vaccine hesitancy by the World Health Organization (WHO), we must first understand the elements that contribute to its development in an era of widespread availability to safe and effective vaccinations.

Risk/Benefit (perceived, heuristic)

Vaccine advantages are frequently overlooked or undervalued. When the public debates vaccination safety, quality, or efficacy, disinformation frequently infiltrates the debate via the internet and other media outlets, jeopardizing immunization programs. Vaccines are one of the most effective medical breakthroughs in recent history. Individuals, on the other hand, are afraid of them because they are unaware of the dangers. Vaccines should be handled like any other ordinary drug to dispel myths and rumors regarding them. This implies that every vaccine's risk/benefit analysis should be presented to and understood by all parties involved.

Immunization as a Social Norm vs. Not Needed/Harmful

Social norms have been used to modify behavior in various health situations, such as alcohol consumption and energy saving. In poorer nations, social norms have also proved effective in encouraging immunization. Vaccines are accepted by the vast majority of families. Giving this message and the parents who choose immunization a voice will help counter the widely known anti-vaccine messaging.

VACCINE/VACCINATION - SPECIFIC ISSUES
Risk/Benefit (Scientific Evidence)

For the four vaccinations tested (measles, HPV, HBV, and SI), vaccine hesitation (VH) was linked with uncertainty regarding and/ or an unfavorable to some impression of risk-benefit balance (RBB), although correlations between VH and self- reported vaccination uptake were weaker and not systematic. The link between VH and a negative assessment of RBB for the four vaccinations tested is consistent with prior studies, indicating that vaccine safety is one of the most common concerns among the general public.

Although neurological problems are rare following COVID-19 immunization, new research shows that they are far more prevalent after SARS-CoV-2 infection. Bayesian network models, for example, may integrate the most recent global evidence with local characteristics to improve decision-making and help the global immunization effort (Lau & Galea, 2022).

Introduction of a New Vaccine or New Formulation

The impact of new vaccine introductions on vaccination and health systems has been called out into doubt by a rush of new and underused vaccine that launches to immunization programs nationally. Countries debating whether to incorporate a new or underused vaccine into their routine vaccination program should consider the impact on existing vaccine distribution and coverage. The study's findings suggest that new vaccine introductions, as well as numerous vaccine introductions, should be closely evaluated for immunization and health-system implications (Hyde et. al., 2012).

Mode of Administration

The children in the study shared similar views on influenza vaccine characteristics, emphasizing the importance of vaccination effectiveness and manner of administration. Children may be educated participants in influenza prevention and engaged in influenza vaccine talks (Nowak et. al., 2015).

Mode of Delivery

When compared to vaccination rates during the 2009 influenza pandemic and after the Great East Japan Earthquake, the national regular immunization program demonstrated an increase in pneumococcal vaccination rates. In the next three years, this campaign may attain greater immunization rates than those in the United States or Europe (Naito et. al., 2018).

Reliability and/or Source of Vaccine Supply

Eight months after the first COVID-19 vaccine was certified for emergency use, the immunizations' positive effects on public health and economic activity were still being felt. In total, 4 billion doses will have been administered by the end of July 2021. Most people require two doses; if current trends continue, it will take around 14 billion injections to immunize everyone on the planet. This number does not account for the potential for boosters or other issues brought on by viral variants (Doucleff, 2021).

Vaccination Schedule

A growing number of parents choose alternative vaccination regimens for their children, which deviate from the standard childhood vaccine schedule. Currently, more than one out of every ten parents of young children use an alternate immunization regimen. Furthermore, many parents who are now following the suggested schedule appear to be "at risk" of moving to a different schedule.

Vaccination is an essential technique for lowering the morbidity and mortality associated with infectious diseases. The study found out that complete immunization coverage in the Burkina Faso has improved in recent years, with rural regions having greater coverage than urban ones. The disparity between rural and urban locations may be explained by the organization of healthcare systems with systematic outreach operations in rural areas (Sibeudu et al., 2019).

Costs

The figures depict the overall costs of accomplishing the vaccination goals of saving millions of lives by expanding equal access to the most recent immunizations for people from all walks of life by the year 2020. Our findings may help to elicit higher government and donor pledges to appropriate resource mobilization and effective allocation by predicting the actual costs of vaccination programs. As service delivery expenses are increasingly becoming the main source of vaccination program costs, it is critical to consider more about

improving the health system (Portnoy et. al., 2015).

A global competition to create an anti-COVID19 vaccine has erupted in reaction to the pandemic. The initial vaccination rollout is scheduled for late 2020. In the current political climate, the majority of the population, even those demographics who were not sensitive to the severe effects of COVID-19, and especially those in the youngest demographic, may be obliged to get vaccinated (Briggs et. al., 2020).

One study's findings imply that, even in the face of extremely high production and distribution costs, the government may work with manufacturers to keep public sector pricing as low as possible while satisfying demand and ensuring that each manufacturer makes a profit. Furthermore, these prices are in line with what the media is predicting right now (Behzad et. al., 2021).

Role of Healthcare Professionals
Family healthcare professionals (FHPs) were shown to have high sensitivity to immunization and favorable opinions regarding it in general. A large number of healthcare professionals have expressed willingness to embrace COVID-19 vaccine, it will serve as an integral part towards strengthening overall immunization rates and battling the pandemic (Kaplan & Milstein, 2021).

MATERIALS AND METHODS
RESEARCH RESIGN
In this study, the research design is descriptive cross-sectional with a questionnaire as the primary instrument for gathering data and information. A descriptive cross-sectional is a study in which the researchers examine the connection in between conditions (or other health-related status) and other factors that are relevant within a particular group of people at a single juncture during a brief amount of time. Researchers are primarily interested in describing relationships among variables. Furthermore, it explains and forecasts the means by which factors have been genuinely related in the actual world, without seeking to alter them or attribute correlation (Sutton & Austin, 2015).

SAMPLE
The study primarily focuses on students at St. Dominic College of Asia's School of Health Science Profession. The respondents selected were either vaccinated or unvaccinated members of the school, aging 18 to 29. The researchers purposely had chosen the School of Health Science Profession Students in St. Dominic College of Asia as they were most likely to be knowledgeable in terms of the COVID-19 since their programs were related to health and science. In addition, they were asked about their demographic profile and the factors related to COVID-19 vaccine hesitancy. The sample population of this study were randomly chosen from 1st to 5th year students in the program of BS Biology, BS Medical Technology, BS Nursing, BS Pharmacy, BS Physical Therapy, and BS Radiologic Technology.

RESEARCH PROCEDURE
In sample selection, researchers used probability sampling to avoid being biased in the study. According to McCombes (2019), probability sampling is a random selection that allows researchers for making quantitative assessments about the entire group. Simple random sampling is utilized in identifying the respondents of this research for everyone to have a chance to be selected.

The researchers used the entire population of students in the School of Health Science Profession in the second semester of the academic year 2021-2022. Using Raosoft calculations, the sample size was determined with a 5% error margin, a 95% degree of confidence, and a 50% response distribution. Out of the study's 819 respondents, a sample size of 262 was determined.

THE INTSTRUMENTS
The respondents answered a five-part questionnaire. The researchers asked assistance from the experts to check the adopted instrument, which included professional faculty members and their research adviser, for further improvement of the research instrument. The first part are inquiries on the background information of the students such as age, sex, year level, program, student status, and vaccinated status. The second to fifth parts are about the factors related to recipient's COVID-19 vaccine hesitancy which are based on Centers for Disease Control and Prevention and Unicef.

DATA ANALYSIS
The following were subjected to statistical analysis:
Frequency. Frequency can be calculated by simply counting the instances associated with each parameter.

Mean. Evaluates the entire set of scores, and is used to get the average of the factors under contextual influences, individual and group influences, and vaccine/vaccination - specific issues.

Percentage. Proportional representation regards each respondent's response was provided by this relative frequency.

T-Test for independent Sample. Used to determine if there is enough statistical evidence that connects population means of significantly different metrics of two independent groups (KSU, 2023). In this case, T-test served to identify the p-values in order to compare 2 groups like sex, and student status.

One-Way Analysis of Variance. Used to identify statistical differences between means of two or more groups (KSU, 2023). In this case, it was used to identify significant differences for more than 2 groups like age, year level, college course, and such.

RESULTS AND DISCUSSION
1. What is the socio-demographic profile of the respondents in terms of:
Table 6
Frequency Distribution per Demographic Profile
Table 6.1: Age.

Profile		Frequency	%	Rank
Age	19-21	200	76	1
	22-29	59	23	2
	Above 30	3	1	3
	Total	262	**100**	

Table above shows the frequency distribution of respondents according to age. Among the total of 262 respondents, 200 or 76 percent belong to age group of 19-21, 59 or 23 percent belong to 22-29, and 3 or 1 percent are above 30. This entails that the majority of the respondents are people aged from 19-21 years old. The result is aligned with the study of Marzo et al. (2022) that the majority of participants are generally young adults. The findings signified that young adults are more hesitant to take vaccines compared to other age brackets.

Table 6.2: Sex.

Profile		Frequency	%	Rank
Sex	Male	95	36	2
	Female	167	64	1
	Total	262	**100**	

Table above shows the frequency distribution of respondents according to sex. Among the total of 262 respondents, 95 or 36 percent are males, and 167 or 64 percent are females. This entails that the majority of the respondents are females. The findings are aligned with the study of Lazarus et al. (2021) that a COVID-19 vaccination was more likely to be accepted by females than males. Many people who objected to vaccinations did so out of concern about their safety and lack of belief in vaccines. There were notable socio-demographic disparities in vaccination acceptability in the study, despite a high prevalence of acceptance of the COVID-19 vaccine.

Table 6.3: Year Level.

Profile		Frequency	%	Rank
Year Level	1st Year	62	24	3
	2nd Year	85	32	1
	3rd Year	82	31	2
	4th Year	33	13	4
	Total	262	**100**	

The table shows 62 or 24 percent are first year students, 85 or 32 percent are second year students, 82 or 31 percent are third year students, and 33 or 13 percent are fourth year students. This entails that most of the respondents are 2nd year students. According to one study Tang et al. (2021), Education level had a substantial impact on vaccination willingness, with individuals with less than a bachelor's level of education being more inclined to declare resistance. The findings revealed that COVID-19 vaccination reluctance was linked with education levels.

Table 6.4: Program.

Profile		Frequency	%	Rank
Program	BS Pharmacy	47	18	3
	BS Medical Technology	54	21	2
	BS Nursing	55	21	1
	BS Biology	35	13	5
	BS Radiologic Technology	30	11	6
	BS Physical Therapy	41	16	4
	Total	262	**100**	

Table above shows the frequency distribution of respondents according to program. Among the total of 262 respondents, 47 or 18 percent belong to the program of BS Pharmacy, 54 or 21 percent belong to the program

of BS Medical Technology, 55 or 21 percent belong to the program of BS Nursing, 35 or 13 percent belong to the program of BS Biology, 30 or 11 percent belong to the program of BS Radiologic Technology, and 41 or 16 percent belong to the program of BS Physical Therapy. This entails that most of the respondents are from the program of BS Nursing. According to a study related to

the table Morris et.al. (2021) According to sources, nursing students have a moderate or high level of confidence in the vaccine's safety. With Covid-19 being one of the most significant risks, nursing, the profession with the highest level of public confidence, will continue to be at the forefront of campaigns to eradicate infectious diseases.

Table 6.5: Student Status.

Profile		Frequency	%	Rank
Student Status	Regular	229	87	1
	Irregular	33	13	2
	Total	262	**100**	

Table above shows the frequency distribution of respondents according to student status. Among the total of 262 respondents, 229 or 87 percent are regular students, and 33 or 13 percent are irregular students. This entails that the majority of the respondents are regular students. Based on the study of Hamden et.al.

(2022) The status of the student was substantially correlated with hesitation. Additionally, there was a strong correlation between hesitation and agreement or disagreement with the conspiracy-related thinking questions.

Table 6.6: Vaccine Status.

Profile		Frequency	%	Rank
Vaccine Status	Fully Vaccinated 2 doses & Booster	110	42	2
	Fully Vaccinated 2 doses	114	44	1
	Partially Vaccinated	24	9	3
	Unvaccinated	14	5	4
	Total	262	**100**	

Table above shows the frequency distribution of respondents according to vaccine status. Among the total of 262 respondents, 110 or 42 percent are Fully Vaccinated of 2 doses & with Booster, 114 or 44 percent are Fully Vaccinated of 2 doses, 24 or 9 percent are Partially Vaccinated, and 14 or 5 percent are Unvaccinated. This entails that the majority of the

respondents are people who are fully vaccinated of 2 doses. The result supported the experimental study of World Bank Group Philippines (2021), that Filipinos are hesitant to accept COVID-19 vaccinations, with over half refusing or unclear if they should be vaccinated. There are still individuals who refused to take up vaccines due to widespread hesitancy.

2. What is the perception of the respondents on the factors related to COVID-19 recipients' hesitancy in terms of:

Table 7

Mean Scores for Level of Perception

Table 7.1: Mean Scores for Level of Perception According to Age.

Factor	Age	Mean	Description	Interpretation
Contextual Influences	19-21	3.94	Agree	Contextual Influences contribute to vaccine hesitancy
	22-29	3.79	Agree	Contextual Influences contribute to vaccine hesitancy
	Above 30	3.53	Agree	Contextual Influences contribute to vaccine hesitancy
	Overall	**3.75**	**Agree**	**Contextual Influences contribute to vaccine hesitancy**
Individual and Group Influences	19-21	4.05	Agree	Individual and Group Influences contribute to vaccine hesitancy
	22-29	3.96	Agree	Individual and Group Influences contribute to vaccine hesitancy
	Above 30	3.93	Agree	Individual and Group Influences contribute to vaccine hesitancy
	Overall	**3.98**	**Agree**	**Individual and Group Influences contribute to vaccine hesitancy**

Table 7.1.1: Mean Scores for Level of Perception According to Age (Vaccine/vaccination - Specific Issues).

Factor	Age	Mean	Description	Interpretation
Vaccine/vaccination - Specific Issues	19-21	3.92	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	22-29	3.87	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	Above 30	3.92	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	Overall	**3.90**	**Agree**	**Vaccine Specific Issues contribute to vaccine hesitancy**

The table above shows the mean scores per factor according to the respondents' age. For Contextual Influences, the overall total of 262 respondents corresponding to their age group got a mean score of 3.75 with a verbal description of "*Agree*" and interpreted as "*Contextual Influences contribute to vaccine hesitancy.*" All age groups considered that the contextual influences and statements that were given to them may contribute to their decision of getting vaccinated or not, thus leading to vaccine hesitancy.

For Individual and Group Influences, the overall total of 262 respondents corresponding to their age group got a mean score of 3.98 with a verbal description of "Agree" and interpreted as "Individual and Group Influences contribute to vaccine hesitancy." All age groups considered that the Individual and Group Influences and statements that were given to them may contribute to their decision of getting vaccinated or not, thus leading to vaccine hesitancy.

For Vaccine/vaccination - Specific Issues, According to a study Gorman et.al. (2022), the majority of the vaccine-hesitant individuals held erroneous beliefs about how vaccines are created, were prone to concentrating exclusively on stories of poor effects rather than on facts and were prone to individualistic thinking while yet believing they were knowledgeable about vaccines. The overall total of 262 respondents corresponding to their age group got a mean score of 3.90 with a verbal description of "Agree" and interpreted as "Vaccine Specific Issues contribute to vaccine hesitancy."

Table 7.2: Mean Scores for Level of Perception According to Sex.

Factor	Sex	Mean	Description	Interpretation
Contextual Influences	Male	3.88	Agree	Contextual Influences contribute to vaccine hesitancy
	Female	3.91	Agree	Contextual Influences contribute to vaccine hesitancy
	Overall	**3.89**	**Agree**	**Contextual Influences contribute to vaccine hesitancy**

Table 7.2.1: Mean Scores for Level of Perception According to Sex (Individual and Group Influences, and Vaccine/vaccination - Specific Issues).

Factor	Sex	Mean	Description	Interpretation
Individual and Group Influences	Male	4.02	Agree	Individual and Group Influences contribute to vaccine hesitancy
	Female	4.04	Agree	Individual and Group Influences contribute to vaccine hesitancy
	Overall	**4.03**	**Agree**	**Individual and Group Influences contribute to vaccine hesitancy**
Vaccine/vaccination - Specific Issues	Male	3.95	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	Female	3.88	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	Overall	**3.92**	**Agree**	**Vaccine Specific Issues contribute to vaccine hesitancy**

The table above shows the mean scores per factor according to the respondents' sex. Despite the fact that we may believe our decisions are motivated by logic or emotion, research reveals a variety of factors that affect both what we do and how we view the world. According to Pilar (2022), Context is one of the most significant aspects in decision-making. Our actions, feelings, and perception of reality are all influenced by context. For Contextual Influences, the overall total of 262 respondents corresponding to their sex category got a mean score of 3.89 with a verbal description of "Agree" and interpreted as "Contextual Influences contribute to

vaccine hesitancy." All respondents, regardless of sex, considered that the contextual influences and statements that were given to them may contribute to their decision of getting vaccinated or not, thus may lead to vaccine hesitancy.

For Individual and Group Influences, According to Teeboom (2018), a group can collect more detailed information than an individual while making decisions. A person makes use of their own opinions and judgment. A group's different ideas and approaches result in better decision-making because of the vast number of participants. influencing the process by which decisions are made. The overall total of 262 respondents corresponding to their sex category got a mean score of 4.03 with a verbal description of "Agree" and interpreted as "Individual and Group Influences contribute to vaccine

hesitancy." All respondents, regardless of sex, considered that the Individual and Group Influences and statements that were given to them may contribute to their decision of getting vaccinated or not, thus may lead to vaccine hesitancy.

For Vaccine/vaccination - Specific Issues, the overall total of 262 respondents corresponding to their sex category got a mean score of 3.92 with a verbal description of "Agree" and interpreted as "Vaccine Specific Issues contribute to vaccine hesitancy." All respondents, regardless of sex, considered that the Vaccine/vaccination - Specific Issues and statements that were given to them may contribute to their decision of getting vaccinated or not, thus may lead to vaccine hesitancy

Table 7.3: Mean Scores for Level of Perception According to Year Level.

Factor	Year Level	Mean	Description	Interpretation
Contextual Influences	1st Year	4.02	Agree	Contextual Influences contribute to vaccine hesitancy
	2nd Year	3.90	Agree	Contextual Influences contribute to vaccine hesitancy
	3rd Year	3.78	Agree	Contextual Influences contribute to vaccine hesitancy
	4th Year	3.95	Agree	Contextual Influences contribute to vaccine hesitancy
	Overall	**3.91**	**Agree**	**Contextual Influences contribute to vaccine hesitancy**
Individual and Group Influences	1st Year	4.09	Agree	Individual and Group Influences contribute to vaccine hesitancy
	2nd Year	3.99	Agree	Individual and Group Influences contribute to vaccine hesitancy
	3rd Year	3.97	Agree	Individual and Group Influences contribute to vaccine hesitancy
	4th Year	4.17	Agree	Individual and Group Influences contribute to vaccine hesitancy
	Overall	**4.06**	**Agree**	**Individual and Group Influences contribute to vaccine Hesitancy**

Table 7.3.1 Mean Scores for Level of Perception According to Year Level (Vaccine/vaccination - Specific Issues)

Factor	Year Level	Mean	Description	Interpretation
Vaccine/vaccination - Specific Issues	1st Year	3.98	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	2nd Year	3.89	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	3rd Year	3.85	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	4th Year	3.96	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	Overall	**3.92**	**Agree**	**Vaccine Specific Issues contribute to vaccine hesitancy**

The table above shows the mean scores per factor according to the respondents' year level. For Contextual Influences, the overall total of 262 respondents corresponding to their year level got a mean score of 3.91 with a verbal description of "Agree" and interpreted

as "Contextual Influences contribute to vaccine hesitancy." All respondents, regardless of their year level, considered that the contextual influences and statements that were given to them may contribute to their decision of getting vaccinated or not, thus leading to vaccine

hesitancy.

For Individual and Group Influences, the overall total of 262 respondents corresponding to their year level got a mean score of 4.06 with a verbal description of "Agree" and interpreted as "Individual and Group Influences contribute to vaccine hesitancy." All respondents, regardless of their year level, considered that the Individual and Group Influences and statements that were given to them may contribute to their decision of getting vaccinated or not, thus leading to vaccine hesitancy.

For Vaccine/vaccination - Specific Issues, the overall total of 262 respondents corresponding to their year level got a mean score of 3.92 with a verbal description of "Agree" and interpreted as "Vaccine Specific Issues contribute to vaccine hesitancy." All respondents, regardless of their year level, considered that the Vaccine/vaccination - Specific Issues and statements that were given to them may contribute to their decision of getting vaccinated or not, thus leading to vaccine hesitancy. According to Cerda & Garcia (2021), the severity of COVID-19 and its related side effects, as well as the efficiency are primary rejection factors.

Table 7.4: Mean Scores for Level of Perception According to Program.

Factor	Program	Mean	Description	Interpretation
Contextual Influences	BS Pharmacy	3.70	Agree	Contextual Influences contribute to vaccine hesitancy
	BS Medical Technology	3.79	Agree	Contextual Influences contribute to vaccine hesitancy
	BS Nursing	4.02	Agree	Contextual Influences contribute to vaccine hesitancy
	BS Biology	3.87	Agree	Contextual Influences contribute to vaccine hesitancy
	BS Radiologic Technology	4.04	Agree	Contextual Influences contribute to vaccine hesitancy
	BS Physical Therapy	4.02	Agree	Contextual Influences contribute to vaccine hesitancy
	Overall	**3.91**	**Agree**	**Contextual Influences contribute to vaccine hesitancy**
Individual and Group Influences	BS Pharmacy	3.95	Agree	Individual and Group Influences contribute to vaccine hesitancy
	BS Medical Technology	3.93	Agree	Individual and Group Influences contribute to vaccine hesitancy
	BS Nursing	4.11	Agree	Individual and Group Influences contribute to vaccine hesitancy
	BS Biology	4.02	Agree	Individual and Group Influences contribute to vaccine hesitancy
	BS Radiologic Technology	4.08	Agree	Individual and Group Influences contribute to vaccine hesitancy
	BS Physical Therapy	4.11	Agree	Individual and Group Influences contribute to vaccine hesitancy
	Overall	**4.03**	**Agree**	**Individual and Group Influences contribute to vaccine hesitancy**

Table 7.4.1: Mean Scores for Level of Perception According to Program (Vaccine/vaccination - Specific Issues).

Factor	Program	Mean	Description	Interpretation
Vaccine/vaccination - Specific Issues	BS Pharmacy	3.83	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	BS Medical Technology	3.87	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	BS Nursing	3.97	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	BS Biology	3.82	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	BS Radiologic Technology	3.98	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	BS Physical Therapy	3.99	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	Overall	**3.91**	**Agree**	**Vaccine Specific Issues contribute to vaccine hesitancy**

The table above shows the mean scores per factor according to the respondents' program. According to Jiang et.al. (2021), the acceptance rates of vaccines by nursing students were satisfactory. Academic background was the primary factor affecting knowledge. Students studying nursing are more likely to be knowledgeable with the facts relating to COVID vaccinations because they are studying medicine. For Contextual Influences, the overall total of 262 respondents corresponding to their programs got a mean score of 3.91 with a verbal description of "Agree" and interpreted as "Contextual Influences contribute to vaccine hesitancy." All the students of School of Health Science Profession (SHSP) considered that the contextual influences and statements that were given to them may contribute to their decision of getting vaccinated or not, thus may lead to vaccine hesitancy.

For Individual and Group Influences, the overall total of 262 respondents corresponding to their programs got a mean score of 3.91 with a verbal description of "Agree" and interpreted as "Individual and Group Influences contribute to vaccine hesitancy." All the students of School of Health Science Profession (SHSP), considered that the Individual and Group Influences and statements that were given to them may contribute to their decision of getting vaccinated or not, thus may lead to vaccine hesitancy.

For Vaccine/vaccination - Specific Issues, the overall total of 262 respondents corresponding to their programs got a mean score of 4.03 with a verbal description of "Agree" and interpreted as "Vaccine Specific Issues contribute to vaccine hesitancy." All the students of School of Health Science Profession (SHSP), considered that the Vaccine/vaccination - Specific Issues and statements that were given to them may contribute to their decision of getting vaccinated or not, thus may lead to vaccine hesitancy.

Table 7.5: Mean Scores for Level of Perception According to Student Status.

Factor	Status	Mean	Description	Interpretation
Contextual Influences	Regular	3.93	Agree	Contextual Influences contribute to vaccine hesitancy
	Irregular	3.68	Agree	Contextual Influences contribute to vaccine hesitancy
	Overall	**3.81**	**Agree**	**Contextual Influences contribute to vaccine hesitancy**
Individual and Group Influences	Regular	4.06	Agree	Individual and Group Influences contribute to vaccine hesitancy
	Irregular	3.85	Agree	Individual and Group Influences contribute to vaccine hesitancy
	Overall	**3.95**	**Agree**	**Individual and Group Influences contribute to vaccine hesitancy**
Vaccine/vaccination - Specific Issues	Regular	3.94	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	Irregular	3.70	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	Overall	**3.82**	**Agree**	**Vaccine Specific Issues contribute to vaccine hesitancy**

The table above shows the mean scores per factor according to the respondents' student status. According to Sallam (2022), worldwide problems with vaccine acceptance and reluctance are a widespread issue. Additionally, it has been found that young people frequently express vaccine hesitation. For Contextual Influences, the overall total of 262 respondents corresponding to their student status got a mean score of 3.81 with a verbal description of "Agree" and interpreted as "Contextual Influences contribute to vaccine hesitancy." All respondents, regardless of their status, considered that the contextual influences and statements that were given to them may contribute to their decision of getting vaccinated or not, thus leading to vaccine hesitancy.

For Individual and Group Influences, the overall total of 262 respondents corresponding to their student status got a mean score of 4.03 with a verbal description of "Agree" and interpreted as "Individual and Group Influences contribute to vaccine hesitancy." All respondents, regardless of their status, considered that the Individual and Group Influences and statements that were given to them may contribute to their decision of getting vaccinated or not, thus leading to vaccine hesitancy.

For Vaccine/vaccination - Specific Issues, the overall total of 262 respondents corresponding to their student status got a mean score of 3.92 with a verbal description of "Agree" and interpreted as "Vaccine Specific Issues contribute to vaccine hesitancy." All respondents, regardless of their status, considered that the Vaccine/vaccination - Specific Issues and statements that were given to them may contribute to their decision of getting vaccinated or not, thus leading to vaccine hesitancy.

Table 7.6: Mean Scores for Level of Perception According to Vaccine Status.

Factor	Vaccine Status	Mean	Description	Interpretation
Contextual Influences	Full 2 Doses & Booster	3.91	Agree	Contextual Influences contribute to vaccine hesitancy
	Full 2 Doses	3.88	Agree	Contextual Influences contribute to vaccine hesitancy
	Partially Vaccinated	4.30	Strongly Agree	Contextual Influences greatly contribute to vaccine hesitancy
	Unvaccinated	3.34	Neutral	Contextual Influences may or may not contribute to vaccine hesitancy
	Overall	**3.85**	**Agree**	**Contextual Influences contribute to vaccine hesitancy**
Individual and Group Influences	Full 2 Doses & Booster	4.04	Agree	Individual and Group Influences contribute to vaccine hesitancy
	Full 2 Doses	4.04	Agree	Individual and Group Influences contribute to vaccine hesitancy
	Partially Vaccinated	4.34	Strongly Agree	Individual and Group Influences greatly contribute to vaccine hesitancy
	Unvaccinated	3.32	Neutral	Individual and Group Influences may or may not contribute to vaccine hesitancy
	Overall	**3.94**	**Agree**	**Individual and Group Influences contribute to vaccine hesitancy**

Table 7.6.1: Mean Scores for Level of Perception According to Vaccine Status (Vaccine/vaccination - Specific Issues).

Vaccine/vaccination-Specific Issues	Full 2 Doses & Booster	3.91	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	Full 2 Doses	3.91	Agree	Vaccine Specific Issues contribute to vaccine hesitancy
	Partially Vaccinated	4.22	Strongly Agree	Vaccine Specific Issues greatly contribute to vaccine hesitancy
	Unvaccinated	3.33	Neutral	Vaccine Specific Issues may or may not contribute to vaccine hesitancy
	Overall	**3.84**	**Agree**	**Vaccine Specific Issues contribute to vaccine hesitancy**

The table above shows the mean scores per factor according to the respondents' vaccine status. For Contextual Influences, the overall total of 262 respondents corresponding to their vaccine status got a mean score of 3.85 with a verbal description of "Agree" and interpreted as "Contextual Influences contribute to vaccine hesitancy." All respondents, regardless of their vaccine status, considered that the contextual influences and statements that were given to them may contribute to their decision of getting vaccinated or not, thus may lead to vaccine hesitancy.

For Individual and Group Influences, the overall total of 262 respondents corresponding to their vaccine status got a mean score of 4.03 with a verbal description of "Agree" and interpreted as "Individual and Group Influences contribute to vaccine hesitancy." All respondents, regardless of their vaccine status, considered that the Individual and Group Influences and statements that were given to them may contribute to their decision of getting

vaccinated or not, thus may lead to vaccine hesitancy.

For Vaccine/vaccination - Specific Issues, the overall total of 262 respondents corresponding to their vaccine status got a mean score of 3.92 with a verbal description of "Agree" and interpreted as "Vaccine Specific Issues contribute to vaccine hesitancy." All respondents, regardless of their vaccine status, considered that the Vaccine/vaccination - Specific Issues and statements that were given to them may contribute to their decision of getting vaccinated or not, thus may lead to vaccine hesitancy.

According to Rhaman (2021), A major public health issue on a global scale is COVID-19. To stop the epidemic, safe and efficient vaccines are needed. However, for a vaccination campaign to be successful, people must also have a favorable opinion about the vaccine. Since the outbreak started, there has been an abundance of misinformation about the virus, risking

mass immunization. Vaccination programs are also plagued by similar issues with misinformation.

3. *Is there any significant difference on the perception of the respondents in terms of contextual influences, individual and group influences, and vaccine/vaccination - specific issues.*

Table 8
Test for Significant Difference According to Demographic Profile
Table 8.1: Test for Significant Difference According to Age.

Factor	p-value	Significant	H₀ Decision
Contextual Influences	0.028	Significant	Reject
Individual and Group Influences	0.512	Not Significant	Accept
Vaccine/vaccination - Specific Issues	0.699	Not Significant	Accept
Alpha level = 0.05			

For vaccine/vaccination specific issues, the resulting p-value is 0.699. Among the three values, only the p-value of contextual influences is said to be less than the alpha level of 0.05. Therefore, the null hypothesis is rejected for that particular factor. This would mean that regardless of age, the respondents could have the same degree of agreement about the factors.

According to Alam (2022), World Health Organization (WHO) listed vaccine reluctance as a significant danger to global health in 2019. This hesitation was also noted with the introduction of the COVID-19 vaccine in numerous nations. The said statistical results are there to determine whether there is a significant difference among the mean scores per each factor between the respondents' age categories. Marzo et.al. (2022), the severity of COVID-19 instances and the information flow in various social media have both had an impact on how people perceive vaccination acceptance. Grouped by age, some age groups believe the COVID 19 vaccinations are unlikely to be safe. For Contextual Influences, the resulting p-value is 0.028. For individual and group influences, the resulting p-value is 0.512.

Table 8.2 Test for Significant Difference According to Sex

Factor	p-value	Significant	H₀ Decision
Contextual Influences	0.788	Not Significant	Accept
Individual and Group Influences	0.824	Not Significant	Accept
Vaccine/vaccination - Specific Issues	0.181	Not Significant	Accept
Alpha level = 0.05			

The table above shows the results of significance tests for the respondents' demographic profile according to their sex. The said statistical results are there to determine the difference among the mean scores per each factor between the respondents' sex categories. According to a study Zintel et.al. (2022), men often expressed a higher intention to immunize against COVID-19, which is consistent with early patterns that point to systemic gender disparities in these reviews. Compared to women, men were more likely to get the immunization For Contextual Influences, the resulting p-value is 0.788. For individual and group influences, the resulting p-value is 0.824. For vaccine/vaccination specific issues, the resulting p-value is 0.181. Since, all of the resulting p-values are greater than the alpha level 0.05, it means that there is no difference among the respondents' mean scores and thus the null hypothesis must be accepted.

For this particular demographic profile, sex, a different statistical method is used other than One Way ANOVA analysis. The test used for demographic profiles with only two groups like sex and student status, is T-test. A T-test is a statistical analysis that examines whether there is significant difference between the means of two distinct groups. This parametric test is used to determine if there is enough evidence to suggest that the population means associated with each group are significantly different. On the other hand, One Way ANOVA is a statistical technique that compares the means of two or more independent groups (KSU, 2023).

Table 8.3 Test for Significant Difference According to Year Level

Factor	p-value	Significant	H₀ Decision
Contextual Influences	0.193	Not Significant	Accept
Individual and Group Influences	0.027	Significant	Reject
Vaccine/vaccination - Specific Issues	0.108	Not Significant	Accept
Alpha level = 0.05			

The table above shows the results of significance tests for the respondents' demographic profile according to their year level. The said statistical results are there to determine whether there is a significant difference among the mean scores per each factor between the respondents' year level categories. For Contextual Influences, the resulting p-value is 0.193. For individual and group influences, the resulting p-value is 0.027. For vaccine/vaccination specific issues, the resulting p-value is 0.108. Among the three values, only the p-value of Individual and Group Influences is said to be less than the alpha level of 0.05. Therefore, the null hypothesis is rejected for that particular factor. This would mean that regardless of year level, the respondents could have the same degree of agreement about the factors such as: Contextual Influences, and vaccine specific issues, having the possibility of affecting an individual's decision about getting vaccinated.

Table 8.4 Test for Significant Difference According to Program.

Factor	p-value	Significant	H_0 Decision
Contextual Influences	0.007	Significant	Reject
Individual and Group Influences	0.039	Significant	Reject
Vaccine/vaccination - Specific Issues	0.002	Significant	Reject
Alpha level = 0.05			

The table above shows the results of significance tests for the respondents' demographic profile according to their program. According to Kaim et.al. (2021), educational programs are able to change people's attitudes about vaccination acceptance. The incorporation of such succinct educational initiatives by authorities may increase COVID-19 immunization rates and help allay public vaccine reluctance. The said statistical results are there to know the difference among the mean scores per each factor between the respondents' college programs. For Contextual Influences, the resulting p-value is 0.007. For individual and group influences, the resulting p-value is 0.039. For vaccine/vaccination specific issues, the resulting p-value is 0.002. The resulting p-values for each factor for this category all fell below the alpha level of 0.05, thus, rejecting the null hypothesis for each factor. We can say from the statistical results that the respondents coming from various programs have various opinions and answers from each other about the given factors and situations affecting vaccine hesitancy.

Table 8.5 Test for Significant Difference According to Student Status.

Factor	p-value	Significant	H_0 Decision
Contextual Influences	0.044	Significant	Reject
Individual and Group Influences	0.009	Significant	Reject
Vaccine/vaccination - Specific Issues	0.000	Significant	Reject
Alpha level = 0.05			

The table above shows the results of significance tests for the respondents' demographic profile according to their student status. According to Elliott & Yang (2022), the relationship between hesitation and increasing age seemed to be debunked by the finding that undergraduate students were less reluctant to accept the vaccine than graduate students. Within categories of student status, researchers evaluated vaccine hesitation by age and discovered significant correlations between hesitancy and advancing age in the undergraduate group. For Contextual Influences, resulting p-value is 0.044. For individual and group influences, the resulting p-value is 0.009. For vaccine/vaccination specific issues, the resulted p-value is 0.000. The resulting p-values for each factor for this category all fell below the alpha level of 0.05, thus, rejecting the null hypothesis for each factor. We can say from the statistical result that the respondents coming from various programs have various opinions and answers from each other about the given factors and situations affecting vaccine hesitancy.

Although, the statistical result shown above has a value of 0. The exact p-value is not entirely 0. This also entails a strong significant difference among the mean values that the respondents got if they were categorized into their particular student status.

Table 8.6 Test for Significant Difference According to Vaccine Status.

Factor	p-value	Significant	H_0 Decision
Contextual Influences	0.000	Significant	Reject
Individual and Group Influences	0.000	Significant	Reject
Vaccine/vaccination - Specific Issues	0.000	Significant	Reject
Alpha level = 0.05			

The table above shows the results of significance tests for the respondents' demographic profile according to their vaccine status. The said statistical results are there to determine whether there is a significant difference among the mean scores per each factor between the respondents' vaccine status. For Contextual Influences, the resulting 0.000. Therefore, rejecting the hypothesis. For individual and group influences, the resulting is 0.000; therefore, rejecting the hypothesis. For vaccine/vaccination specific issues, the resulting is 0.000; therefore, rejecting the hypothesis. The resulting p-values for each factor for this category all fell below the alpha level of 0.05, thus, repeatedly rejecting the null hypothesis for each factor. We can say from the statistical result that the respondents with a different vaccination status have various opinions and answers from each other about the given factors and situations affecting vaccine hesitancy. According to Cordina et.al. (2021), there are respondents who are already vaccinated, some are partially, some are not. Thus, having a very significant result from each respondent can be expected.

Although, the statistical result shown above has a value of 0. The exact p-value is not entirely 0. Moreso, this also entails a strong significant difference among the mean values that the respondents got if they were categorized into their vaccine status.

CONCLUSION
The students from School of Health Science Profession in St. Dominic College of Asia perceived factors and situation presented to them in the questionnaire, particularly related to Contextual Influences, Individual and Group Influences, and Vaccine/vaccination - Specific Issues can have some degree of effect towards vaccine hesitancy. These factors may affect an individual's decision whether he or she will decide to become vaccinated. Students from different colleges/programs have a wide variety of opinions towards the topic given as they have a wide variety of particular knowledge about the subject as well. Students who are vaccinated and unvaccinated also have a wide variety of opinions towards the topic given. The respondents who are already vaccinated tend to agree more that the factors could affect one's decision while the ones that are not yet vaccinated lean towards neutrality and uncertainty.

RECOMMENDATION
1. The school of St. Dominic College of Asia is suggested to have a strategic planning regarding the dissemination of information regarding vaccines and Covid-19 vaccine in particular.

2. For government, it is suggested that the availability and exposure of the said vaccines must be at the top during a crisis like the pandemic. If the pandemic ceases to exist, it is always good to have the exposure of such vaccines and medicines to be always on the mainstream.

3. Conducting community health information campaigns may help people who are not yet knowledgeable about the vaccines.

4. The teaching of elective subjects about vaccines is a good practice and addition to the school's curriculum for the students to be more knowledgeable of the subject. Thus, they themselves would know the right thing to do during this time of pandemic.

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