

## Does the Covid-19 Vaccine Guarantee Students in Indonesia Willing to Study Offline?

Eka Hendi Andriansyah<sup>1\*</sup>, M. Riadhos Solichin<sup>2</sup>, Deddy Setiawan<sup>2</sup>, Vina Budiarti Mustika Sari<sup>2</sup>, Siti Mazilatus Sholikha<sup>2</sup>, Naning Eko Noviana<sup>2</sup>, Muhammad Miftah Farid<sup>2</sup>

<sup>1\*</sup>Universitas Negeri Surabaya, Surabaya, Indonesia

<sup>2</sup>IKIP Widya Darma Surabaya, Surabaya, Indonesia



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### ABSTRACT

**Objective:** The Covid 19 pandemic brought changes to all aspects of people's social life. The obligation to carry out vaccines as a way of preventing this virus is growing and is mandatory for children to adulthood. Learning activities carried out online during the Covid 19 pandemic changed students' thoughts and habits that learning can be done online and they began to feel comfortable in these educational activities. However, is the administration of vaccines able to restore public confidence to return to activities, especially carrying out education offline? This study explores information about whether students in Indonesia are willing to study offline after receiving the COVID-19 vaccine. **Method:** The author uses a quantitative approach to get this answer. 3449 respondents who are students in all provinces of Indonesia were taken randomly through a questionnaire. **Results:** The results of the study said that students are willing to study offline when they have been vaccinated against Covid-19. Other results state that older students are increasingly reluctant to be vaccinated (Gitiyarko, 2020). **Novelty:** The novelty of this study is that researchers are trying to find answers to students' enthusiasm for offline lectures which must later be carried out after the Covid 19 pandemic and this research has never been researched by previous research.

## INTRODUCTION

The Covid 19 pandemic has had an impact not only on the economies of countries in the world but also on the world of education, especially in Indonesia. Efforts to prevent the spread of the Covid 19 virus have been carried out by the Indonesian government. In 2020 the corona virus has entered Indonesia (Kirana & Bhawiyuga, 2021), the government is trying to go through several policies including on March 15, 2020 the president of the republic of Indonesia called for work from home, study from home, and worship at home which is campaigned as a form of social distancing (social distancing) to prevent transmission Covid 19 (Cheshmehzangi et al., 2023; Gitiyarko, 2020; R. Wong et al., 2022).

Government policy in the world of education instructs face-to-face learners to be replaced by distance learning using online media. Distance learning is no less effective than face-to-face learning, as long as the teacher uses the right methods and media. The teaching and learning process uses constructive learning media and can improve student achievement and create knowledge and skills significantly (Vebrianto & Osman, 2011). Online learning does not always have the effect of reducing student achievement. through digital literacy and mediation parents can reduce the impact of online risks in the teaching and learning process. This effort is the first step to alert schools and parents in assisting and considering appropriate and safe media using technology (Purnama et al., 2021). In other studies, it was found that during the Covid 19 pandemic in Indonesia, students were still motivated to study, to participate in learning, to remain

optimistic about living their lives, all of which came from within themselves (Rahiem, 2021). This is very important to support online learning carried out during the Covid 19 Pandemic.

It is hoped that the Covid 19 pandemic will not forever limit the social activities of the Indonesian people. The emergence of vaccines is considered a solution to overcome the development of the Covid 19 virus. Research says vaccines are better applied even without social restrictions, with a body that has received the vaccine, immunity will increase and reduce the risk of being infected with the virus (Beraud et al., 2023; Cuschieri et al., 2023; Giesen et al., 2022; Saha et al., 2022). Indonesia is one of the countries that approved the entry of the Covid 19 vaccine as a solution to eradicating this dangerous virus. As of July 2021 more than 3 billion doses of vaccine have been administered globally and approved by many countries. A small number of countries have approved this vaccine for use in adolescents and young children. It turns out that global vaccination efforts have problems in terms of equity, especially in low-income countries, this illustrates that the need for these vaccines is very high (Li et al., 2022; Sharma et al., 2021; Sun, 2022; Teperowski Monrad et al., 2022).

Based on the theories above, the research hypothesis is:

H1. College status influences Willing to Vaccine of student

H2. Gender influences the Willing to Vaccine of student

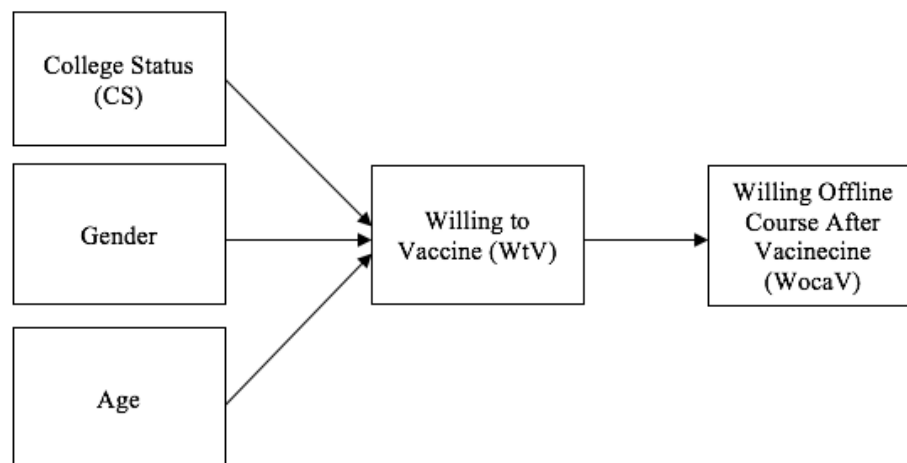
H3. Age influences the Willing to Vaccine of student

H4. Willing to Vaccine has an effect on Willing Offline Course After Vaccine

H5. Willing to Vaccine mediates the influence of College status on Willing Offline Course After Vaccine

H6. Willing to Vaccine mediates the influence of Gender on Willing Offline Course After Vaccine

H7. Willing to Vaccine mediates the influence of Age on Willing Offline Course After Vaccine



**Figure 1. Research Model**

The potential for vaccine recipients is quite high in the Asia Pacific region, especially for health workers and workers, they are willing to receive vaccines (Chew et al., 2021; Katz et al., 2022; Nicola et al., 2020; Saito et al., 2022; Ta Park et al., 2021; E. L. Y. Wong et al., 2022), the importance of building public trust through giving examples of vaccine administration to agencies that are the center of public attention such as health workers



Questionnaires were distributed and got 3449 respondents. The results (Table 2) show that respondents are dominated by students from public colleges (72%) and private colleges (28%). Then for gender dominated by Female (69.5%) and Male (30.5%).

**Tabel 2.** Responden Characteristic (N=3449)

		$\Sigma$	%
College Status	Public	2483	72
	Private	966	28
Gender	Male	1053	30.5
	Female	2396	69.5

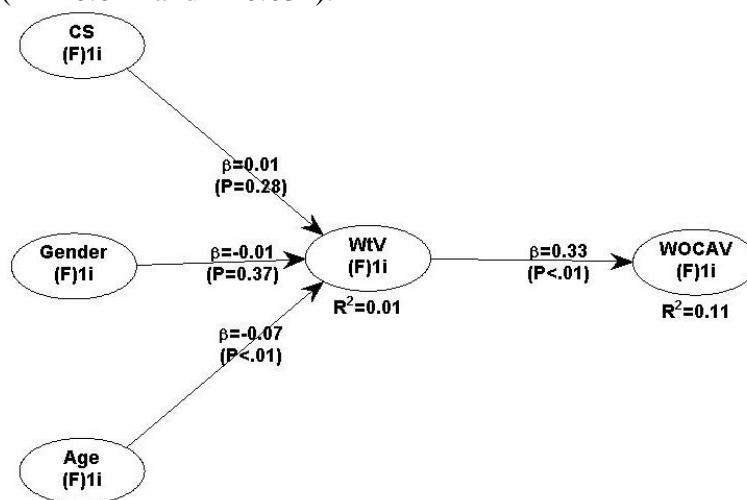
Table 3 shows the correlation between variables in this study. The results show that only Age correlates with WtV. While WtV correlated with Wocav. The rest CS and gender are not correlated with WtV.

**Tabel 3.** Correlation Among Variables (N=3449)

	CS	Gender	Age	WtV	Wocav
CS	-				
Gender	0.020	-			
Age	-0,079**	0.127**	-		
WtV	0,010	-0.015	-0.068**	-	
Wocav	0.009	0.034*	-0.045**	0.311**	-

Note: \*\*p < 0.01; \*p<0.05; CS = College Status; WtV = Willing to Vaccine; Wocav = Willing Offline Course After Vaccine

Running data uses WarpPLS to test the hypothesis. CS and gender have no effect on WtV (H1 and H2) because they have a P-Value above 0.05. Age has a negative and very significant effect on WtV (H3) ( $\beta = -0.07$  and  $P < 0.01$ ). WtV had a positive and very significant effect on Wocav (H4) ( $\beta = 0.33$  and  $P < 0.01$ ). In addition, WtV did not mediate the effect of CS or Gender on Wocav (H5 and H6). However, WtV mediates the effect of Age on Wocav (H7) in a negative and significant way ( $\beta = -0.022$  and  $P = 0.032$ ).



**Figure 2.** WarpPLS Data Analysis Results

### Discussion

Figure 2 shows us that students from public and private universities do not influence them whether they are willing to be vaccinated against Covid-19 or not. Likewise with gender, both male and female do not necessarily differentiate them in their willingness to receive the co-19 vaccine. This finding contrasts research which states that male gender has a higher willingness to be vaccinated than female because the transmission rate in males is higher than female and research in Japan which shows male gender has lower confidence in the Covid 19 vaccine due to negative information from the outside world (Osama El-Gendy et al., 2020; Yoda & Katsuyama, 2021). Another thing shows that the older the students, the more reluctant they are to get the Covid-19 vaccine. A survey

conducted in America stated that more than half of people are willing to be vaccinated based on age or maturity of society, one of which is that people who are getting older with their congenital diseases will be more aware of the importance of their health because of their knowledge about the importance of vaccines, and other percentages are based on politics and so on (Reiter et al., 2020; Serrazina et al., 2021). The government in carrying out vaccinations should not be guided by college status or gender. However, the government should be guided by the age of students. The main priority is to vaccinate students in the early semester because that's when they have a lot of activities on campus. On the other hand, socialization about the importance of the Covid-19 vaccination is more appropriate for students who are older. Communities receiving vaccines are more concerned with the effects and safety of the vaccination for them, ownership of health insurance and public finances in efforts to obtain the vaccine and trust in the government (Guidry et al., 2021; Wang et al., 2021; Wentzell & Racila, 2021).

The important findings of this study provide information to the government in Indonesia to focus more on giving confidence to older aged students so that they want to be vaccinated. The importance of outreach by the government and public trust in the government regarding vaccination (Ehde et al., 2021; Lazarus, Ratzan, et al., 2021; Paul et al., 2021; Wentzell & Racila, 2021). Since the age of the respondents in this study ranged from 17-25 years, the upper limit was 22 to 25 years. If traced further, students between the ages of 22 and 25 are on average in their final semester or currently pursuing a thesis. Thus it is this group of students who need to get information about the benefits of the co-19 vaccine. Agree with the results which explain that students after the pandemic will still experience doubts in carrying out learning offline so that high confidence from the government is needed for them to be able to return to face-to-face studies in the future (Bork-Hüffer et al., 2021; Cohen et al., 2020; Ghazi-Saidi et al., 2020; Zhao & Xue, 2023).

After students get the covid-19 vaccine, they are willing to study offline. This gives them a belief in protecting themselves when they are in a crowd in the form of online lectures. In other words, if the Indonesian government wants lectures offline, then it must make them willing to be vaccinated against Covid-19 first. In the next stage, it is necessary to have the participation of educational institutions to cooperate in adjusting education in the New Normal era, starting from the leaders of educational institutions, management, and including teachers (BIELIAIEVA, 2020; Hanafi et al., 2021; TÄfnase, 2020).

#### ***Indirect Effect of WtV (Mediating)***

The results of data analysis show that Willing to Vaccine does not mediate the effect of College Status and Gender on Willing Offline Course After Vaccine. This means that both public and private college students are not concerned about whether they have to be vaccinated beforehand or not to attend offline lectures. Likewise with male and female students, they are willing to study offline without having to be vaccinated first. Insufficient information regarding vaccine safety, types of vaccines and the benefits of being vaccinated also influences the public's perception of the importance of being vaccinated (Black et al., 2023; Guzoglu et al., 2021; Nong et al., 2022). Likewise with male and female students, they are willing to study offline without having to be vaccinated first. The problems that the academic community faces are more the mental fatigue they face during a pandemic which can be influenced by the provision of media, methods and special treatment in the world of education during a pandemic compared to physical fatigue which can be overcome easily rather than mental fatigue (Ghasemi et al., 2021). Returning to

socializing with the community is one of the efforts to eliminate the social fatigue they have experienced after the pandemic.

On the other hand, Willing to Vaccine mediates the effect of Age on Willing Offline Course After Vaccine in a negative and significant way. This means that to make final semester students and those who are currently doing their thesis willing to take offline lectures, they actually want not to be vaccinated. This is because they feel that they rarely go to campus or only at certain times, for example collecting files or doing research in a laboratory.

## CONCLUSION

This research found that the factors that make students in Indonesia want to be vaccinated against Covid-19 are not college status or gender but Age. To make students want to study offline, students should be vaccinated against Covid-19 first. Finally, the government should also prioritize vaccination of students before carrying out offline lectures. In addition, the government should focus on socializing the importance of the Covid-19 vaccination to final semester students and those currently pursuing their thesis. For future researchers, they should only look for factors that influence students to Willing to Vaccine Covid-19.

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**\*Eka Hendi Andriansyah (Corresponding Author)**

Department of economic Education Faculty of economics and business,  
Universitas Negeri Surabaya,  
Jl. Lidah Wetan, Lidah Wetan, Kec. Lakarsantri, Surabaya, Jawa Timur 60213  
Email: [ekaandriansyah@unesa.ac.id](mailto:ekaandriansyah@unesa.ac.id)

**M. Riadhos Solichin**

Department of Economic Education Faculty of Social Sciences Education,  
IKIP Widya Darma Surabaya,  
Jl. Ketintang No.147-151, Wonokromo, Kec. Wonokromo, Surabaya, Jawa Timur 60213  
Email: [riadhos1986@gmail.com](mailto:riadhos1986@gmail.com)

**Deddy Setiawan,**

Department of Economic Education Faculty of Social Sciences Education,  
IKIP Widya Darma Surabaya,  
Jl. Ketintang No.147-151, Wonokromo, Kec. Wonokromo, Surabaya, Jawa Timur 60213  
Email: [deddyinsan2@gmail.com](mailto:deddyinsan2@gmail.com)

**Vina Budiarti Mustika Sari,**

Department of Economic Education Faculty of Social Sciences Education,  
IKIP Widya Darma Surabaya,  
Jl. Ketintang No.147-151, Wonokromo, Kec. Wonokromo, Surabaya, Jawa Timur 60213  
Email: [vinabudiarti1990@gmail.com](mailto:vinabudiarti1990@gmail.com)

**Siti Mazilatus Sholikha,**

Department of Economic Education Faculty of Social Sciences Education,  
IKIP Widya Darma Surabaya,  
Jl. Ketintang No.147-151, Wonokromo, Kec. Wonokromo, Surabaya, Jawa Timur 60213  
Email: [sitimazilatus@gmail.com](mailto:sitimazilatus@gmail.com)

**Naning Eko Noviana,**

Department of Economic Education Faculty of Social Sciences Education,  
IKIP Widya Darma Surabaya,  
Jl. Ketintang No.147-151, Wonokromo, Kec. Wonokromo, Surabaya, Jawa Timur 60213  
Email: [naning.ekonoviana@gmail.com](mailto:naning.ekonoviana@gmail.com)

**Muhammad Miftah Farid**

Department of Economic Education Faculty of Social Sciences Education,  
IKIP Widya Darma Surabaya,

Jl. Ketintang No.147-151, Wonokromo, Kec. Wonokromo, Surabaya, Jawa Timur 60213  
Email: [miftahmenganti@gmail.com](mailto:miftahmenganti@gmail.com)

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