



Application of an Extended Model of Goal-Directed Behavior to the Effect of Covid-19 Virus Risk Perception and Vaccine Implementation on the Intention to Study Offline

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Abstract. This study aims to look at students' plans to study offline during the Covid-19 pandemic. The extended goal-directed behavior model (EMGB) is used in this study, which integrates two constructs: perception of Covid-19 risk and Covid-19 vaccination. The information was gathered using an online poll that included 362 respondents from 67 universities across Bandung. According to the findings, subjective norms and pleasant anticipated emotions had a substantial impact on the willingness to study offline. Meanwhile, the desire was unaffected by attitude or apparent behavioral control. The desire and behavioral intention are not directly affected by the impression of the covid-19 virus's risk, but the perception of the Covid-19 vaccination is significant. The study's findings offer government authorities, university administrators, and the pandemic response committee realistic advice on facilitating educational activities during a pandemic.

Keywords: Covid-19 · Vaccine · Study Offline · Model Of Goal-Directed Behavior

1 Introduction

A novel species of coronavirus was identified as a cause of lethal pneumonia in December 2019 in China [1], has become a universal threat within a few weeks [2], and caused severe consequences as a result of its rapid spread worldwide [3]. The disease caused by the novel coronavirus, SARS-CoV-2, has quickly become one of the most significant global health threats of the past century [4]. In March 2020, the World Health Organization (WHO) characterized Coronavirus Disease 2019 (COVID-19) as a pandemic, which led to interruptions in daily life, such as the closing of businesses and schools and limiting social gatherings to prevent the spreading of the virus [5]. The number of instances has been rising worldwide, with significant alert circumstances necessitating various emergency responses from governments worldwide [6]. Many countries and cities are on complete lockdowns to prevent COVID-19 from spreading [3]. This epidemic has posed a challenge to the global education system [7]. It urged countries to shift to an entire distance mode of learning [8]. Because of the wide-spread availability of Internet access,

online learning is often referred to as web-based learning [9]. Regarding education, the Indonesian government issued a policy under which schools are no longer doing things as usual because the government has imposed a large-scale social restriction policy under which all activities carried out outside the home must be halted, forcing teaching and learning to take place at home.

In Indonesia, the Covid-19 spread peaked in the first Quarter of 2021, and the next wave with the highest degree of spread occurred in Quarter III, with a spread rate three times higher than in Quarter I. When the Indonesian government implemented a lockdown strategy and provided free immunizations to the entire community, the spread of Covid-19 was dramatically reduced. Regarding educational activities, the Indonesian government quickly issued a hybrid learning policy, a mix of online and offline learning. Many students are dissatisfied with online learning because they wish to communicate with their classmates again. However, some pupils are accustomed to and love learning online. Students' perceptions may differ from their parents' perceptions because they consider the potential consequences of contracting the Covid-19 virus. Young individuals' perspectives as a subset of the broader public are crucial to comprehend since they have fewer co-morbidities and fewer overall health concerns, resulting in a fundamentally different concept of disease risk than older adults [10]. This study focuses on the perspectives of college students with more mature opinions in responding to government and university decisions surrounding offline learning policies. Investigating what students want if they had to return to offline courses during the Covid-19 outbreak is fascinating. Several studies employ the Model of Goal-directed Behavior (MGB) theory to evaluate decision-making. MGB is extensively utilized as a model in research to gain decision-making analysis, such as in marketing [11], Psychology [12], sociology [13], and tourism [6, 14–16]. Perugini & Bagozzi, [17] created this model, and They also explained that widening and deepening this theory requires improved human behavior predictions in many circumstances. As a result, this study added to the MGB by integrating views of Covid-19 risk Perception and the Covid-19 vaccination, which were important in interpreting human behavior.

This study uses MGB theory and models to describe students' decision-making processes, which include risk perceptions of the Covid-19 disease and Covid-19 vaccines as prevention methods. Three goals were set for the study. To begin, investigate University Students' decision-making process for offline lectures during the Covid-19 pandemic by building a goal-directed behavior model (EMGB) that describes the aim of offline lectures, including risk perceptions of Covid-19 and Covid-19 vaccinations. Second, test a sample of college students' perceptions of Covid-19 and Covid-19 vaccinations in the context of the proposed theory. Third, provide practical guidance for government institutions, university administrators, and committees to resist the spread of Covid-19 so that learning conditions can be maintained during a pandemic and the virus can be monitored and prevented.

1.1 Literature Review

Risk Perception of Covid-19

Risk perception is the subjective assessment of a risky situation's risk based on its characteristics and severity [18]. Risk perception refers to people's subjective assessments of the likelihood of a risk's unfavorable result [19]. Researchers looked at perceived risk from two perspectives: cognitive and affective [20]. Risk perception is divided into two categories by theorists: personal risk perception and social risk perception [21]. Higher levels of risk perception have been linked to a greater desire to engage in preventive behaviors [22]. In the interrelationships between health risk perception (measured as perceived likelihood of infection) and preventive behavior, there are three possible paths: relative accuracy (risk perception accurately reflects the adoption or non-adoption of protective behavior), behavior motivation (risk perception causes protective behavior adoption), and risk reappraisal (protective behavior lowers risk perception) [23]. Following the proclamation of COVID-19 as a pandemic, numerous studies were carried out to better understand public opinion and behavioral responses to the pandemic on a local level. [4, 24–28], national [1, 29–31] or global scale [32, 33]. The COVID-19 pandemic, a global public health emergency, necessitates widespread behavioral changes, putting tremendous psychological strain on individuals [34]. In the case of viral outbreaks, researchers discovered that fear of a pandemic is linked to social and economic activities [35].

Perception of Covid-19 Vaccine

Vaccination is one of the most important public health interventions for minimizing the mortality and morbidity associated with many infectious diseases [36]. Vaccination is a critical component of the ongoing COVID-19 pandemic's containment plan [37]. The majority of persons were willing to get the COVID-19 vaccination, with higher levels of perceived susceptibility, perceived severity, perceived effectiveness, and moderate or liberal political leaning being the strongest predictors [38]. The likelihood of vaccination acceptance was linked to participants' judgments of vaccine-related features and their political allegiance [39]. The severity of the virus, the reported increased COVID-19 vaccination benefit, and the respondents' overall general vaccine advantages were all predictors of their decision to acquire a COVID-19 vaccine [40]. Understanding how the COVID-19 vaccine is perceived in the community is crucial to providing equitable vaccine education that addresses concerns and misconceptions [41]. People with sufficient understanding of a vaccine can better grasp its potential benefits and importance, which can help to form positive vaccine beliefs and enhance vaccination confidence [42]. Those who believed they were at a higher risk of catching the virus were more likely to accept the vaccine than those who thought they were at a lesser risk [43].

Model of Goal-Directed Behavior (MGB)

MGB is a continuation of Theory of Reasoned Action (TRA) [44] and TPB [45] by including affective and motivational processes, as well as previous behavior, in the TPB. This theory was proposed by [17]. Their research aims to develop a new model of purposeful behavior, which shows that desire is the proximal cause of intention and that

traditional antecedents in TPB work through desire. According to prior research, MGB is more effective than TRA and TPB at predicting behavioral intention [14, 46]. MGB is extensively utilized as a model in many research to gain decision-making analysis, such as in marketing [11], psychology [12], sociology [13]. Perugini & Bagozzi [17] proposed that the MGB may be improved even more by incorporating new structures known as 'extended MGB (EMGB). EMGB has been used in a number of research to increase the model's predictive power, such as extending risk aspects, [6, 47], gender [48, 49], financial and psychological [50, 51], environmental [52, 53], authenticity [14, 54], social identity/ community [55–57], Experience [58, 15, 46], Awareness [59, 60], Individual's behavioral [48, 53, 61–65].

1.2 Hypothesis Development

TPB believes that behavioral control is equally vital to understand the mentality of customers, based on TRA, which assumes that customers make decisions based on attitude and subjective norms [66]. The primary distinction between TPB and MGB is that MGB explains behavioral intention using desire rather than attitude [17]. A preference for a specific object is an attitude, but a desire demonstrates whether incentives exist to accomplish or achieve something in mind. M. J. Kim et al. [6] found that attitude significantly affected the desire not to travel to Hong Kong during protests. Further, attitude positively affects the desire to adopt Airbnb [47].

Similarly, Travelers' attitude towards a particular brand mapp has a significant effect on their desire to book travel products/services via that mapp. [51] Hence, the current study hypothesizes:

H1: Attitude positively affects the desire to study offline during the pandemic Covid-19

MGB reconstructs TPB and assumes that attitude and subjective norms indirectly affect behavioral intention through desire [17]. Further, Subjective norm has a positive relationship with the desire to attend the Oriental medicine festival [52]. Similarly, Subjective norm has a positive impact on desire [67]. Thus, the following hypothesis has been proposed:

H2: Subjective norm positively affects the desire to study offline during the pandemic Covid-19

Numerous investigations have already discovered that predicted positive and negative emotions are pivotal components in want determination [52, 59]. Yi et al. [47] found that positive and negative anticipated emotion positively affects the desire to adopt Airbnb. Similarly, Positive and negative anticipated emotion has a positive influence on desire [54]. Therefore, the following hypotheses have been proposed:

H3: Positive anticipated emotion positively affects the desire to study offline during the pandemic Covid-19

H4: Negative anticipated emotion positively affects the desire to study offline during the pandemic Covid-19

Not only is perceived behavioral control a strong predictor of desire, but it also has an impact on behavioral intention and actual behavior [17]. The desire and intention to

use Airbnb in a tourism environment have been shown to be positively influenced by perceived behavioral control Yi et al. [47] further, perceived behavioral control positively influences the desire and intention not to travel to Hong Kong during the protest [6]. As a result, the current research proposes the following hypothesis:

H5: Perceived behavior control positively affects the desire to study offline during the pandemic Covid-19

H6: Perceived behavior control positively affects the behavioral intention to study offline during the pandemic Covid-19

TPB antecedents and behavioral intention are communicated through desire [17]. Desire has a positive relationship with behavioral intention to attend the Oriental medicine festival [52]. Further, the desire for the behavior is significantly related to visiting intention [59]. Similarly, desire has a significant effect on travelers' intention to book travel products/services via a particular brand's mapp [51]. Hence, the following hypothesis is proposed in the current study:

H7: Desire positively affects the behavioral intention to study offline during the pandemic Covid-19

Various sorts of risk may induce adoption resistance among potential users; recognizing this constraint is critical in understanding potential users' decision-making process [52, 68] included the influenza virus's perceived risk perception as a barrier to visitors visiting abroad to the MGB Model. Non-pharmaceutical treatments, according to the study, have a direct or indirect effect on tourists' desire and intention to travel as a result of their impressions of the 2009 H1N1 influenza [69]. The dangerous impact of the covid-19 virus causes concern among students who desire to study offline, but the covid-19 vaccine is expected to boost students' confidence in doing so. Hence, the current study proposes the following:

H8: Risk perception of Covid-19 negatively affects the desire to study offline during the pandemic Covid-19

H9: Risk perception of Covid-19 negatively affects the perception of the Covid-19 vaccine

H10: Risk perception of Covid-19 negatively affects the behavioral intention to study offline during the pandemic Covid-19

H11: perception of the Covid-19 vaccine positively affects the desire to study offline during the pandemic Covid-19

H12: perception of the Covid-19 vaccine positively affects the behavioral intention to study offline during the pandemic Covid-19

2 Methods

2.1 Sample and Data Collection

Questionnaires were distributed through online surveys, and the respondents in this study were students aged between 17–19 years, with a percentage of 17 years (0.9%), 18 years (31%), 19 years (22.4%), 20 years (25.1%), 21 years (16.1%), 22 years (3%), and 23 years (1.5%). The proportion of gender is male (24.9%) and female (75.1%).

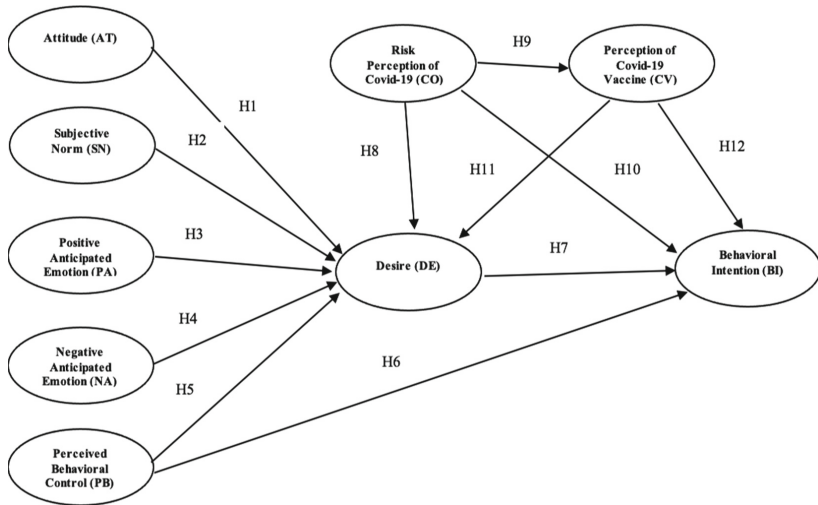


Fig. 1. A proposed research models.

Respondents came from 67 universities spread across the city of Bandung. A total of 362 data were collected, and the questionnaires that could be used in the measurement were 335 data.

2.2 Measurement and Analysis Method

The research model includes nine variables, seven of MGB (attitudes, subjective norms, positive anticipated emotions, negative anticipated emotions, perceived behavioral control, desires, and behavioral intentions), and two more are perception variables, namely perceptions of covid-19 and perceptions of the covid-19 vaccine. Items modified from the previous literature and tailored to the current topic of this research. Items of MGB were adapted from [14, 47, 69], and [6]. All characteristics were rated using three items on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). AMOS 22.0 was used to analyze the gathered data using structural equation modeling (SEM). After doing confirmatory factor analysis (CFA) on the measurement model, the structural linkages were investigated, and hypotheses were evaluated. Additionally, a bootstrap approach was used to test indirect effects. The proposed research model can be seen in Fig. 1.

3 Result and Discussion

3.1 Measurement Model

The constructs' reliability and validity were investigated using CFA. Table 1 describes the results of the measurements. According to Bagozzi and Yi [70], the majority of fit indices meet the requirement of over 0.9. Although GFI and AGFI do not reach 0.9, it fulfills Baumgartner and Homburg's [71] 0.8 acceptability criteria. Referring to the

Table 1. Summary of Measurement Model Suitability Test Results.

Test Statistics	Statistics
Chi square	525.271
Degree of Freedom	263
p-value	0.00
Cmin/DF	1.997
Root Mean Square Residual (RMR)	0.031
Root Mean Square Error of Approximation (RMSEA)	0.055
Goodness of Fit Index (GFI)	0.894
Adjusted Goodness of Fit (AGFI)	0.859
Comparative Fit Index (CFI)	0,971
Tucker Lewis Index (TLI)	0,964

results of the goodness of fit test, Table 1 provides information that the multi-factor measurement model can be generalized to the population.

The validity was tested based on the coefficient (weighted factor) with criteria significant and standardized 0.50, ideally, not less than 0.70 [72], While the reliability was tested using the coefficient of Construct Reliability (CR) and Average Variance Extracted (AVE) with the Criteria value of CR 0.60 or 0.70 and AVE value 0.50 [72]. Based on the results of the standardized loading estimate significance test in Table 2, objective information is obtained that all indicators provide a very significant standardized loading estimate value ($p < 0.001$) with a value greater than 0.50. This indicates that all indicators are valid in measuring the latent variables after the model is improved. As well as the AVE square root value of each construct compared to the correlation value between constructs in Table 2, the results show that all AVE square root values of each construct have a greater value than the correlation value between constructs. This indicates that each construct measurement model has adequate discriminant validity. The measurement results of AT, SN, PB, CO, VC, DE, PA, NA, and BI in Table 2, gave a CR (construct reliability) value greater than 0.70. This indicates that the ten measurement models have an adequate level of reliability in measuring their latent variables (Table 3).

3.2 Hypothesis Test

The initial stage of measurement is to evaluate the suitability index of the model. From data processing, the following results were obtained ($\chi^2 = 730.112$, $df = 272$, $p < 0.001$, $Cmin/df = 2.684$, $RMSEA = 0.057$, $RMR = 0.141$, $AGFI = 0.829$, $CFI = 0.949$, $GFI = 0.867$, $TLI = 0.939$). The results show that the structural equation model fits the data. That is, the proposed structural model can be generalized to the population. However, AGFI (0.829) and GFI (0.867) do not meet the criteria (>0.9). The results of the calculation of the hypothesis in Table 4, show that the perception of Covid-19 on the perception

Table 2. Reliability and confirmatory factor analysis.

Variable	Items	Factor loadings	C.R.	AVE	Cronbach's α
Attitude (AT)	I think going back to study offline during the Covid-19 pandemic is useful	0.742 0.881 0.829	0.895	0.671	0.898
	I think going back to study offline during the Covid-19 pandemic is interesting	0.880			
Subjective norm (SN)	I think going to study offline during a pandemic Covid-19 is fun	0.923 0.937	0.938	0.835	0.950
	Most people who are important to me think it is okay for me to study offline during the COVID-19 pandemic.	0.873 0.908 0.888			
Perceived behavioral control (PB)	Most of the people who are important to me support me in studying offline during the COVID-19 pandemic.	0.997 0.584	0.789	0.668	0.739
	Most people who are important to me agree with me going back to study offline during the pandemic Covid-19	0.836 0.805 0.830			
Risk Perception of Covid-19 (CO)	I am able to study offline during the COVID-19 pandemic.	0.934 0.945 0.910	0.950	0.864	0.958
Perception of Covid-19 Vaccine (CV)	I have enough opportunities to study offline during the pandemic Covid-19	0.930 0.914 0.937	0.948	0.859	0.948
	I am sure that if I want to, I can study offline during the COVID-19 pandemic				
Desire (DE)	.	0.909 0.897 0.701	0.877	0.707	0.882
	It is dangerous to study offline because of the covid-19 virus Covid-19 is a very scary virus	0.933 0.918 0.940			
Positive anticipated emotion (PA)	With the vaccine, it is safer for me to study offline during the COVID-19 pandemic.				
Negative anticipated emotion (NA)	I believe vaccines can reduce my contracting the covid-19 virus				
	I believe vaccines can prevent the spread of Covid-19				
	I want to study offline college during the COVID-19 pandemic in the near future.				

(continued)

Table 2. (continued)

Behavioral intention (BI)	<p>I hope to be able to study offline during the pandemic Covid-19</p> <p>My wish to study offline during the COVID-19 pandemic in the near future can be described well.</p> <p>If I go back to studying offline during the COVID-19 pandemic, I will be excited.</p> <p>If I go back to studying offline during the COVID-19 pandemic, I will be lucky.</p> <p>If I go back to studying offline during the COVID-19 pandemic, I will be happy.</p> <p>If I cannot go back to studying offline during the COVID-19 pandemic, I will be behind.</p> <p>If I cannot go back to studying offline during the COVID-19 pandemic, I will be sad.</p> <p>If I cannot go back to studying offline during the COVID-19 pandemic, I will be disappointed.</p> <p>I intend to study offline during the pandemic Covid-19</p> <p>I am trying to study offline during the pandemic Covid-19</p> <p>I plan to study offline during the pandemic Covid-19</p>
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of the covid-19 vaccine has a negative and significant effect ($\beta = -0.286, p < 0.001$). This means that the hypothesis is accepted. Meanwhile, attitude towards desire has a positive and significant effect ($\beta = 0.064, p = 0.308$), which means that the hypothesis is rejected. Subjective norm on desire had a positive and significant effect ($\beta = 0.115, p = 0.065$), indicating the hypothesis was accepted as well as positive anticipated emotion on desire had a positive and significant effect ($\beta = 0.686, p < 0.001$). The negative anticipated emotion on desire had a positive and insignificant effect ($\beta = 0.002, p = 0.961$), and the perception of Covid-19 on desire had a negative and insignificant effect ($\beta = -0.007, p = 0.850$). The hypothesis was rejected. The perception of the covid-19 vaccine on desire has a positive and significant effect ($\beta = 0.166, p < 0.001$), meaning that the hypothesis is accepted, in contrast to the perceived behavioral control test on the desire that has a positive and insignificant effect ($\beta = 0.078, p = 0.210$), the hypothesis is rejected. The perception of the Covid-19 vaccine on behavioral intention had a positive

Table 3. Measures of discriminant validity.

	AT	SN	PB	CO	CV	DE	PA	NA	BI
AT	0.819								
SN	0.818	0.914							
PB	0.801	0.838	0.890						
CO	-0.368	-0.358	-0.279	0.817					
CV	0.652	0.632	0.720	-0.209	0.824				
DE	0.817	0.816	0.830	-0.325	0.747	0.930			
PA	0.807	0.797	0.808	-0.321	0.680	0.923	0.927		
NA	0.550	0.575	0.590	-0.256	0.531	0.606	0.628	0.841	
BI	0.763	0.799	0.863	-0.340	0.738	0.907	0.887	0.650	0.930

*Diagonal elements (bold) show the square root of the average variance extracted (AVE).

and significant effect ($\beta = 0.059$, $p = 0.061$), the desire for behavioral intention had a positive and significant effect ($\beta = 0.591$, $p < 0.001$), and perceived behavioral control on behavioral intention had a positive and significant effect. Significant ($\beta = 0.078$, $p = 0.210$) all three hypotheses were accepted, while the perception of Covid-19 on behavioral intention had a negative and insignificant effect ($\beta = -1.711$, $p = 0.087$) which meant the hypothesis was rejected. The summary of the estimation results on the hypothesis, then for H2, H3, H6, H7, H9, H11, and H12, is accepted, while the hypothesis H1, H4, H5, H8, H10 is rejected.

Table 4. Summary of model estimation results.

Model	Estimate			SE	CR	p-Value
	RW	SRW	R ²			
Model CV			0.082			
CV <--- CO	-0.206	-0.286		0.051	-4.046	***
Model DE			0.884			
DE <--- AT	0.074	0.064		0.072	1.020	0.308
DE <--- SN	0.106	0.115		0.057	1.846	0.065
DE <--- PA	0.649	0.686		0.059	11.047	***
DE <--- NA	0.001	0.002		0.029	0.049	0.961
DE <--- CO	-0.006	-0.007		0.030	-0.189	0.850
DE <--- CV	0.205	0.166		0.036	5.691	***
DE <--- PB	0.080	0.078		0.064	1.254	0.210
Model BI			0.858			
BI <--- CV	0.070	0.059		0.037	1.873	0.061
BI <--- DE	0.571	0.591		0.056	10.125	***
BI <--- CO	-0.052	-0.061		0.031	-1.711	0.087
BI <--- PB	0.332	0.335		0.053	6.205	***

RW = Regression Weight, SRW = standardized Regression Weight, *** = $p < 0.001$

Table 5. Direct effect, indirect effect, total effect, and bootstrap (standardized values).

Effect between variables	Indirect effect	Total effect	Standardized Indirect effects test: bootstrap		
			Lower bounds	Upper bounds	Two tailed significance
AT → BI	0.038	0.038	-0.084	0.145	0.381
SN → BI	0.068	0.068	-0.009	0.178	0.074
PA → BI	0.405	0.405	-0.032	0.582	0.061
NA → BI	0.001	0.001	-0.043	0.051	0.945
PB → BI	0.046	0.381	-0.045	0.253	0.288
CO → DE	-0.048	-0.054	-0.358	-0.012	0.008
CO → BI	-0.049	-0.110	-2.867	0.007	0.065
CV → BI	0.098	0.157	0.031	0.247	0.026

3.3 Indirect and Total Effects

The estimation of model parameters is done by the bootstrap procedure. Several bootstrap samples, usually 500 to 1,000 or 5,000, and a 95% confidence interval (CI) [72]. Table 5 shows that the perception of Covid-19 has an indirect and significant adverse effect on desire (-0.054). The most significant indirect effect on behavioral intention was positive anticipated emotion (0.405), followed by perceived behavioral control (0.381), then subjective norm (0.068), attitude (0.038), and negative anticipated emotion (0.001), which gave positive but not significant effects. The perception of Covid-19 has an indirect negative effect on behavioral intention of (-0.110) and is not significant. Meanwhile, the perception of the Covid-19 vaccine has a positive and significant effect of (0.157).

4 Conclusion

The proliferation of the Covid-19 virus has forced the world of education to shift from face-to-face to online instruction. Universities are either ready or not ready to provide online courses. Unpreparedness will result in a less-than-optimal style of learning, which is why many students dislike online learning. The research findings of Coman et al. [73], Many of the participants in this study had unfavorable feelings about online learning and its potential role in helping them achieve their goals, have high-quality learning experiences, and improve their communication skills. Lack of exposure to online learning and difficulties coping with online educational materials can lead to increased academic stress and, as a result, make learning time-consuming and unpleasant [7]. The deployment of vaccinations to reduce the spread of Covid-19 provides a chance for institutions to experiment with a hybrid teaching method. What is fascinating is that, although the outbreak has decreased, the virus remains to propagate.

The current study focuses on the impact of Covid-19’s dissemination and the Covid-19 vaccine’s adoption on students’ decisions to try offline lectures. We can get a sense of the relationship between the retrieval process and the pandemic situation at the time by using EMGB. To adequately explain desires, this study examines prediction by theory, attitudes, social norms, predicted emotions, and behavioral control. The study also

discusses how the effects of perceived risk on the desire and intention to study offline were investigated.

Theoretical implications

This work adds to the literature on policy, decision-making, and crises with various theoretical insights. First, this study creates a model to predict student behavior in making decisions during a pandemic by incorporating student perceptions of covid-19 danger and covid-19 vaccination risk, both of which are linked to behavioral goals and intentions. When factors are added to the EMGB, it provides improved explanatory power when making decisions in crises, according to a study conducted by C.-K. Lee et al. [69] and J. Kim et al. [6]. Furthermore, this research backs up Perugini & Bagozzi [17]. The assertion that expanding the MGB model by adding variables will provide a complete explanation.

Second, according to the findings of a study based on the MGB, subjective norms are positive anticipated emotions, and all have a substantial impact on the motivation to study offline. The positive anticipated emotion has the greatest and most significant impact on desire. This indicates that students really want to be able to study offline. It also explained that although there were also students who preferred online schools, most of them wanted offline schools.

Third, the desire was unaffected by attitude, unpleasant predicted emotion, or perceived behavioral control. This condition explains the recent pandemic in Indonesia, particularly in the city of Bandung. As previously stated, Covid-19 has spread in two waves in Indonesia, the second of which has had a significant impact on society. Even if the spread rate has dropped, student judgments will be based on this information when they return to offline lectures during the pandemic. Their skepticism deepened as the threat of the third wave spread.

Fourth, the perception of the Covid-19 virus's risk did not significantly effect on behavioral intentions, which is consistent with C.-K. Lee et al. [69] findings but differs from Reisinger & Mavondo's [74] proposal, which explains a possible link between disease perceptions, responses, attitudes, and intentions. Covid-19 vaccine perception leads to the reinforcement of behavioral desires and intents. This demonstrates that the vaccine used was effective in reducing the risk of the Covid-19 virus spreading.

Practical implications

The current study's findings have various ramifications: To begin with, because the anticipation of pleasant feelings is the most powerful want component, the government must issue policies quickly, accurately, honestly, and consistently in order to boost students' confidence when they attend college offline. Second, offering free immunizations to the entire community is an excellent way to combat the spread of Covid-19. The government must continue to conduct periodic evaluations in order to aid in the improvement of public confidence. Third, there is a need for collaboration between the government and university officials, particularly in regard to delivering the COVID-19 vaccination to students as quickly as possible. Fourth, the university administration must maintain and set a good example in implementing health protocols that adhere to WHO world standards. Fifth, the COVID-19 reaction committee discusses the present state of the

spread on a regular and transparent basis. It also includes details on the countermeasures plan that will be implemented in the future.

Limitations and future research directions

Because of the shifting pandemic condition, the research outcomes are dependent on the situation at the time the questionnaire is distributed. For example, if a pandemic is still ongoing, even though the spread has decreased, but there are still concerns about a new variant entering, the results of the study will be different than if the situation is the same during a pandemic where the spread is decreasing, but there are no concerns about new variants entering. Because of the research area's scope, this study cannot be generalized.

There are multiple ideas for further research, the first of which is to use the same approach, namely to look at the wishes and intents of students who will study offline during a pandemic, as investigated utilizing various scenarios that happened during the epidemic. The second is to add another risk perception variable to the MGB development variable, which will offer management a more comprehensive and clearer image when making decisions and establishing policies. It is intended that by submitting this proposal, it will get a better knowledge of public perceptions in the event of a pandemic.

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