

Determinants of Public Interest in Telemedicine Use with UTAUT and Social Cognitive Model Approaches

Determinan Minat Masyarakat dalam Penggunaan Telemedis dengan Pendekatan Model UTAUT dan Kognitif Sosial

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Abstract

The current lack of public knowledge regarding telemedicine correlates with its low utilization as a remote health service. This is supported by Central Statistics Agency survey data, which indicates that 58,2% of subjects are unaware of telemedicine, compared to only 41,8% who are familiar with it. This research intended to analyze the determinants of public interest in utilizing telemedicine, employing the Unified Theory of Acceptance and Use of Technology or UTAUT model, and also social cognitive theory. Quantitative methodology was used, with data collected through a survey of subjects familiar with or using telemedicine. Structural Equation Modeling (SEM) was employed to investigate the correlation among many variables by assessing both the direct and indirect influences of exogenous variables on endogenous ones. The study was conducted in 2024, involving a total of 215 subjects from various regions, specifically Surakarta, Yogyakarta, and Kalimantan. The study revealed that social influence, self-efficacy, and performance expectancy were significant predictors of individuals' interest in adopting telemedicine. Conversely, effort expectancy, gender, age, and moderating variables did not show a significant effect. This study concludes that strategies focused on increasing self-efficacy, performance expectancy, and social influence need to be optimized to encourage wider adoption of telemedicine services in the community.

Keywords: telemedicine, UTAUT model, social cognitive model

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Abstrak

Mayoritas masyarakat saat ini belum mengetahui tentang telemedisin, sehingga menyebabkan kurangnya pemanfaatan telemedisin sebagai media layanan kesehatan jarak jauh. Hal ini dibuktikan dari data survei Badan Pusat Statistik menunjukkan bahwa 58,2% subjek belum mengenal telemedisin, sedangkan sisanya yang mengetahui jumlahnya lebih sedikit, yaitu hanya 41,8%. Penelitian ini bertujuan untuk menganalisis determinan minat masyarakat terhadap pemanfaatan telemedisin dengan menggunakan model UTAUT (*Unified Theory of Acceptance and Use of Technology*) dan Teori Kognitif Sosial. Studi ini dilaksanakan dengan metode kuantitatif melalui survei yang melibatkan subjek yang telah mengenal maupun memakai telemedisin. Dalam penelitian ini, analisis data memanfaatkan metode *Structural Equation Modeling* (SEM) guna menguji hubungan antar variabel yang diteliti, termasuk pengaruh variabel eksogen secara langsung dan tidak langsung pada variabel endogen. Penelitian dilakukan pada tahun 2024 dengan melibatkan subjek dari berbagai daerah yaitu Surakarta, Yogyakarta, dan Kalimantan dengan total keseluruhan 215 subjek. Hasil penelitian menunjukkan bahwa efikasi diri, harapan kinerja, dan pengaruh sosial mempunyai pengaruh yang signifikan terhadap atensi telemedisin, sedangkan harapan upaya, jenis kelamin, usia, dan variabel moderasi tidak menunjukkan pengaruh yang signifikan. Studi ini menyimpulkan bahwa strategi untuk meningkatkan motivasi, efikasi diri, dan pengaruh sosial perlu difokuskan untuk mendorong adopsi layanan telemedisin yang lebih luas di masyarakat.

Kata Kunci: telemedis, model UTAUT, model kognitif sosial

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Highlight:

- The study identified self-efficacy, performance expectancy, and social influence as significant predictors of public interest in adopting telemedicine services. On the other hand, effort expectancy, age, gender, and various moderating effects were found to have no significant influence on telemedicine interest
- Motivation does not directly influence attention to telemedicine. However, it has a significant indirect effect through self-efficacy. This means that increased motivation enhances self-efficacy, which in turn raises public interest in telemedicine use.
- The findings suggest that strategies to promote telemedicine should prioritize strengthening self-efficacy, performance expectancy, and social influence. This can be achieved through educational initiatives and public campaigns to build awareness, motivation, and confidence in using telemedicine services.

INTRODUCTION

Advancements in information and communication technology have led to substantial transformations across multiple sectors, notably within the healthcare industry (Cahyono et al., 2022). Telemedicine, which utilizes technology to deliver remote healthcare services, is growing in popularity, especially amid the challenges faced throughout the pandemic of COVID-19 (Putri, 2022). The utilization of telemedicine not only improves healthcare accessibility but also provides a practical

solution for people who cannot access healthcare services in person (Andriani et al., 2023). However, despite the great potential of telemedicine, there are still objections in adoption and acceptance of this technology by the public.

The UTAUT model has been widely used to understand the factors that influence technology acceptance. This model identifies several key variables, such as effort expectancy, facilitating conditions, performance expectancy, and social influence, which can influence individual decisions in using technology (Napitupulu et al., 2021). By applying the UTAUT model, this research intends to seek the determinants of public interest in the use of telemedicine, understand how these factors interact, and influence people's decisions to adopt telemedicine services (Yuwono and Ellyawati, 2022).

In addition to the UTAUT model approach, the social cognitive approach also provides an important perspective in understanding individual behavior. The theory of social cognitive theory emphasizes the role of individual beliefs and their influence on individual behavior. In the context of telemedicine, understanding how social norms and individual beliefs about the effectiveness and benefits of telemedicine can influence the decision to use this service is highly relevant (Hapsari et al., 2023). Social cognitive theory is one of the underlying theories that informs UTAUT, particularly regarding concepts like performance expectancy and self-efficacy. By integrating these two approaches, this research offers a more in-depth understanding of the factors influencing public interest.

Previous research shows that there are variations in the acceptance of telemedicine across different sections of society. Some studies indicate resistance to new technologies, while others show high interest in telehealth services. This creates a need to explore the factors that affect an individual's determination to use telemedicine, as well as how the interaction between cognitive and social factors may affect the adoption of this technology. The goal of this study is to examine the determinants of public interest in the use of telemedicine with the UTAUT and social cognitive model approaches.

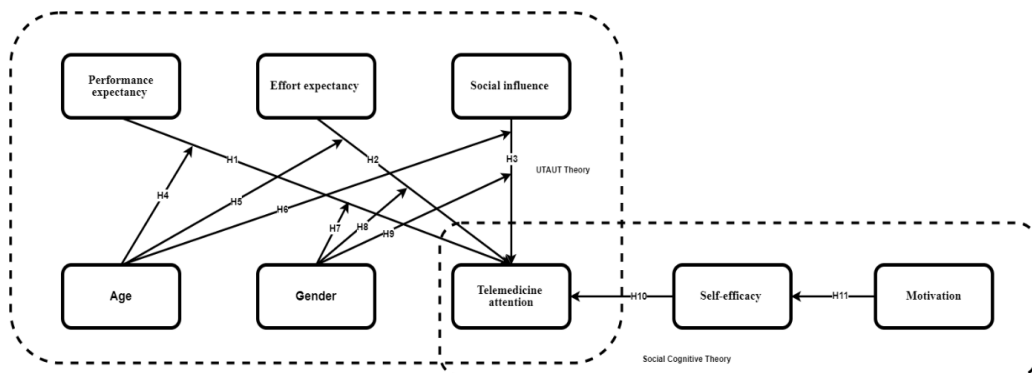
METHOD

The conceptual framework below shows the theoretical model that exists in this basic research, namely by integrating the Social Cognitive Theory (SCT) model and the UTAUT model. This research applies a quantitative methodology, sampling in this study utilizes accidental sampling with the criteria that prospective subjects are subjects who already know about the Telemedicine application with an age above 17 years with a maximum period of telemedicine use of 6 months. This study employed a questionnaire based on five-point Likert scale (ranging from point 1 is strongly disagree until point 5, meaning strongly agree) to assess the influence of behavioral factors on the adoption of telemedicine applications, as part of the digital transformation efforts of healthcare services. Participants were recruited through accidental sampling, utilizing both offline methods (approaching willing groups) and online electronic forms. The questionnaire, which included items on public attention to telemedicine, resulted in 215 subjects meeting the study's criteria.

Table 1. Subject demographics

	Category	Frequency	Percent
Gender	Male	58	27
	Female	157	73

	Category	Frequency	Percent
Age	17-25 years	99	46
	26-35 years	50	23,3
	36-45 years	36	16,7
	46-55 years	19	8,8
	>55 years	11	5,1
Use	Last 6 months	113	52,6
	Last 1 year	61	28,4
	Last 2 years	41	19,1
Education	Elementary School	6	2,8
	Junior High School	13	6
	High School	115	53,5
	College	81	37,7
Job	Private employee	71	33
	PNS	9	4,2
	Entrepreneur	18	8,4
	Housewife	40	18,6
	POLICE/TNI	3	1,4
	Not working	74	34,4
Total		215	100



Picture 1. Conceptual framework

The first adoption of the approach in this research model is Social Cognitive Theory (SCT), which consists of self-efficacy or self-belief that can be influenced by motivation, which can be explained if users feel able to overcome obstacles in using technology, someone is more likely to adopt it. The second approach model is the UTAUT, where the model is an integration of eight leading theories, including the Theory of Reasoned Action or TRA and the Technology Acceptance Model or TAM, so that this integration can enrich understanding of technology acceptance and use, The approach in the UTAUT model consists of performance expectations related to user perceptions of the usefulness of technology that can improve one's performance, then effort expectancy related to user perceptions of how easy technology can be used, then there are social influences related to the influence of others on a person's interest in using technology, and other predictor factors used are age and gender. The analysis in the approach model uses linear regression analysis with the Partial Least Squares method to measure the relationship between variables or what is called multivariate

analysis. This research underwent an ethical review under number 56/X/AUEC/2024.

- H1: Performance expectancy exerts a positive influence on individuals' intention to use telemedicine.**
- H2:** Effort expectancy positively impacts users' attention toward telemedicine utilization.
- H3:** Social influence positively affects users' attention toward the adoption of telemedicine services.
- H4:** Age enhances the strength of the relationship between job expectancy and individuals' interest in using telemedicine.
- H5:** Age strengthens the positive connection between business expectations and attention toward telemedicine.
- H6:** Age acts as a positive moderator in the link between social influence and interest in telemedicine adoption.
- H7:** Gender positively moderates the connection between job expectancy and telemedicine attentiveness.
- H8:** Gender positively moderates the link between business expectations and telemedicine attention.
- H9:** Gender positively moderates the link between social influence and telemedicine attention.
- H10:** Self-efficacy has a positive result on telemedicine attention.
- H11:** Motivation has a positive result on self-efficacy.

In this study using analysis explanation or explanatory analysis. In explanatory research, the method utilized to explain the causal connection between variables via hypothesis testing. explanatory is research that aims to explain the connection between a variable and another variable to test a hypothesis (Muhajirin and Maya, 2017). Explanatory research is conducted on samples and the results of this research could be generalized to the population.

RESULTS

Validity test

Validity testing assesses the extent to which a questionnaire accurately reflects the construct it aims to measure. As noted by Latan and Ghozali (2015), a questionnaire is valid when its items correspond to the intended measurement. Sugiono *et al.* (2020) further emphasize that validity indicates how well a test measures what it is supposed to.

Convergent validity and discriminant validity

The factor loading values between latent variables and their corresponding indicators are referred to as convergent validity. It is utilized to assess the validity of every indicator within a construct, typically evaluated through factor loadings (also known as outer loadings). According to Latan and Ghozali (2015), an indicator is considered valid if it has a correlation greater than 0.7 with the construct it intends to measure. However, during the early stages of scale development, a loading value above 0,5 is deemed acceptable. By looking at cross-loadings and comparing the AVE (Average Variance Extracted) with the squared relation between constructs (or by comparing the square root of AVE with the inter-construct correlations), discriminant

validity in reflective measurement models is evaluated. A construct is considered to have adequate discriminant validity if its AVE value exceeds 0,5 (Latan and Ghozali, 2015).

Table 2. Validity test

Indicator	FL	α	CR	AVE
Performance expectancy		0,804	0,859	0,505
HK-1	0,689			
HK-2	0,774			
HK-3	0,723			
HK-4	0,692			
HK-5	(*)			
HK-6	0,734			
HK-7	0,645			
Effort expectancy		0,862	0,901	0,647
HU-1	0,865			
HU-2	0,725			
HU-3	0,732			
HU-4	(*)			
HU-5	0,835			
HU-6	0,850			
Social Influence		0,768	0,840	0,514
PS-1	0,617			
PS-2	0,774			
PS-3	0,733			
PS-4	0,681			
PS-5	0,766			
Telemedicine Attention		0,846	0,883	0,520
AT-1	0,730			
AT-2	0,721			
AT-3	0,702			
AT-4	0,787			
AT-5	0,732			
AT-6	0,677			
AT-7	(*)			
AT-8	0,694			
Motivation		0,804	0,859	0,505
M-1	0,738			
M-2	0,700			
M-3	(*)			
M-4	0,688			
M-5	0,755			
M-6	0,752			
M-7	0,619			
Self-Efficacy		0,848	0,888	0,571
ED-1	0,622			
ED-2	0,779			
ED-3	0,824			
ED-4	0,819			

Indicator	FL	α	CR	AVE
ED-5	0,744			
ED-6	0,728			
Gender Type	1,000	1,000	1,000	1,000
Age	1,000	1,000	1,000	1,000
Moderating Effect 1 -> PE_Age_Telemedicine Attention	0,852	1,000	1,000	1,000
Moderating Effect 2 -> EE_Age_Telemedicine Attention	1,017	1,000	1,000	1,000
Moderating Effect 3 -> SI_Age_Telemedicine Attention	0,915	1,000	1,000	1,000
Moderating Effect 4 -> PE_Gender_Telemedicine Attention	1,094	1,000	1,000	1,000
Moderating Effect 5 -> EE_Gender_Telemedicine Attention	1,053	1,000	1,000	1,000
Moderating Effect 6 -> SI_Gender_Telemedicine Attention	1,123	1,000	1,000	1,000

Note: (*) = item excluded from the model

The results of the convergent validity analysis appear that most of the indicators used in this study have a fairly high factor loading, although some indicators do not meet the ideal threshold. For the job expectancy variable, the loading factor values range from 0,645 to 0,774, with an average loading factor (FL) value of 0,804, which is close to the minimum recommended limit of above 0,7. The business expectancy variable shows better results, where all indicators have factor loadings above 0,725, and the average FL value reaches 0,862. Similarly, the social influence and telemedicine attention variables have FL values between 0,617 to 0,787 and 0,677 to 0,787, respectively. However, there are indicators that have loading factors below 0,7, such as HK-5, HU-4 and AT-7 has a value that is less than the minimum standard, so further attention is needed for evaluation and revision of indicators in a better measurement scale. On the other hand, AVE values for all variables are above 0,5, with effort expectancy (0,647) and self-efficacy (0,571) indicating good construct validity, so it could be stated that most of the variables in this study have sufficient convergent validity.

Meanwhile, for discriminant validity, the analysis was conducted by contrasting the square root of the AVE value and the correlation between constructs. Discriminant validity is expected to strengthen the validity of existing constructs by ensuring that the indicators used in a variable are not highly correlated with indicators from other variables. The results show that all constructs, including moderating effects that have a perfect FL value of 1,000, provide evidence that the indicators on the variable do not overlap and are able to reflect different constructs well. This indicates that the reflective model used in this study has good discriminant validity. This finding is important because it provides confidence that the measurements taken are reliable in describing the construct under study, while confirming that the factors tested in the model are not only valid but can also provide significant insight into understanding the determinants of public interest in the use of telemedicine.

Reliability test

The reliability test is carried out to assess the consistency and stability of

questionnaire responses in measuring a particular phenomenon or condition. This test ensures that the instrument used is dependable, consistent, and stable over time. Composite reliability is employed to evaluate the reliability of the indicators within a construct. If a construct's combination reliability value is $> 0,7$, it is deemed dependable, indicating high reliability; however, a value above $0,6$ is still acceptable in certain contexts (Latan and Ghozali, 2015). In addition to composite reliability, Cronbach's Alpha is also used to reinforce the reliability assessment. A value for Cronbach's Alpha $> 0,7$ for each variable suggests that the instrument has satisfactory internal consistency and can be deemed reliable (Latan dan Ghozali, 2015).

Table 3. Reliability test

	Composite Reliability	Cronbach's Alpha
Telemedicine Attention	0,883	0,846
Self-efficacy	0,888	0,848
Performance Expectancy (PE)	0,859	0,804
Effort Expectancy (EE)	0,901	0,862
Gender	1,000	1,000
Moderating Effect 1 -> PE_Age_Telemedicine Attention	1,000	1,000
Moderating Effect 2 -> EE_Age_Telemedicine Attention	1,000	1,000
Moderating Effect 3 -> SI_Age_Telemedicine Attention	1,000	1,000
Moderating Effect 4 -> PE_Gender_Telemedicine Attention	1,000	1,000
Moderating Effect 5 -> EE_Gender_Telemedicine Attention	1,000	1,000
Moderating Effect 6 -> SI_Gender_Telemedicine Attention	1,000	1,000
Motivation	0,859	0,804
Social Influence	0,840	0,768
Age	1,000	1,000

The reliability test conducted in this study showed very satisfactory results, with all variables measured meeting the established reliability criteria. The composite reliability values for each variable, such as telemedicine attention (0,883), self-efficacy (0,888), performance expectancy (0,859), effort expectancy (0,901), and motivation (0,859), are all above the required threshold of $0,7$, indicating that the indicators used in measuring the constructs are reliable and consistent. In addition, the Cronbach's Alpha values also show satisfactory results, with all variables, except social influence which is slightly below the threshold, showing values above $0,7$. Overall, these findings show that the tools employed in this investigation are trustworthy and effectively measure the relevant constructs or phenomena.

The moderating variables which include various interactions show perfect composite reliability and Cronbach's Alpha values of $1,000$, indicating that the instruments used for these variables are very reliable and stable. This indicates that the moderating factors have consistent measurements, providing additional confidence in the results of analyses involving interactions between variables. Thus, the high

reliability of all these variables strengthens the validity of the study, indicating that the results obtained are reliable and can be used as a basis for further analysis of the determinants of public interest in the use of telemedicine. These results also support the applicability of the theories and models used, such as the UTAUT model and social cognitive theory, in the context of this study.

Goodness of fit

Coefficient of determination

The coefficient of determination (R^2) is used to evaluate the extent to which an endogenous construct can be elaborated by one or more exogenous constructs. The R^2 value ranges from 0 to 1, an R^2 value of 0,75 reflects a strong model, 0,50 signifies a moderate model, and 0,25 suggests a weak model in terms of explanatory capacity. According to Chin, R^2 values of 0,67, 0,33, and 0,19 are categorized as weak, moderate, and substantial, separately. An R^2 value below 0,19 is considered low, between 0,33 and 0,67 is regarded as moderate, and a value above 0,67 reflects a strong model.

The Q-square value reflects the predictive relevance of the model, indicating how accurately the model and its estimated parameters reproduce observed data. A Q-square value above zero (>0) signifies meaningful predictive power, with its value typically falling within the range of $0 < Q^2 < 1$.

Normed Fit Model (NFI)

The NFI or Normed Fit Index, introduced by Bentler and Bonett (1980), was among the earliest fit indices proposed in the SEM literature. It assesses model fit by comparing the χ^2 value of the specified model with that of a null model. Because the χ^2 value of the proposed model alone is insufficient for evaluating model fit, the NFI provides a relative comparison. It is calculated as 1 minus the ratio of the χ^2 value of the proposed model to that of the null model, resulting in a value between 0 and 1. An NFI value closer to 1 indicates a better model fit, with values above 0,9 generally considered acceptable.

Multicollinearity test

The purpose of this test is to determine whether the regression model exhibits correlations among the independent variables, thereby identifying the presence or absence of multicollinearity. A commonly used criterion is that if the Variance Inflation Factor (VIF) value is below 3,5 to 5, the model is considered free from multicollinearity issues (Latan and Ghozali, 2015). In particular, the purpose of this test is to ensure that the predictor variables in the model are not highly correlated, which can distort the estimated path coefficients and reduce the explanatory power of the model.

Table 4. Goodness of fit

Analysis	Telemedicine Attention	Self-efficacy
Q-Square	0,290	0,230
R-Square	0,603	0,409
NFI (Model Fit)	0,665	
Multicollinearity Statistics (VIF)		
Telemedicine Attention (TA)		
Self-Efficacy (SE)	2,028	
Performance Expectancy (PE)	1,582	

Analysis	Telemedicine Attention	Self-efficacy
Q-Square	0,290	0,230
Effort Expectancy (EE)	2,065	
Gender	1,037	
Moderating Effect 1 -> PE_Age_Telemedicine Attention	1,509	
Moderating Effect 2 -> EE_Age_Telemedicine Attention	1,871	
Moderating Effect 3 -> SI_Age_Telemedicine Attention	1,666	
Moderating Effect 4 -> PE_Gender_Telemedicine Attention	1,829	
Moderating Effect 5 -> EE_Gender_Telemedicine Attention	1,618	
Moderating Effect 6 -> SI_Gender_Telemedicine Attention	2,032	
Motivation (M)		1,000
Social Influence (SI)	1,582	
Age	1,233	

The results of the multicollinearity test on the regression model show that all of independent variables analyzed have VIF values that are below the threshold of 3,5, which indicates the absence of significant multicollinearity problems in the model. The VIF values for telemedicine attention and self-efficacy were 2,028 and 1,582 respectively, while those for other variables such as PE, EE, and SI were also in the range of 1,037 to 2,065. These relatively low VIF values indicate that there is no high correlation between the independent variables, so the path coefficient estimates generated from the regression analysis can be considered stable and reliable. Thus, these results provide confidence that each independent variable contributes significantly and independently to the model built, without any distortions that can affect the explanatory power of the model.

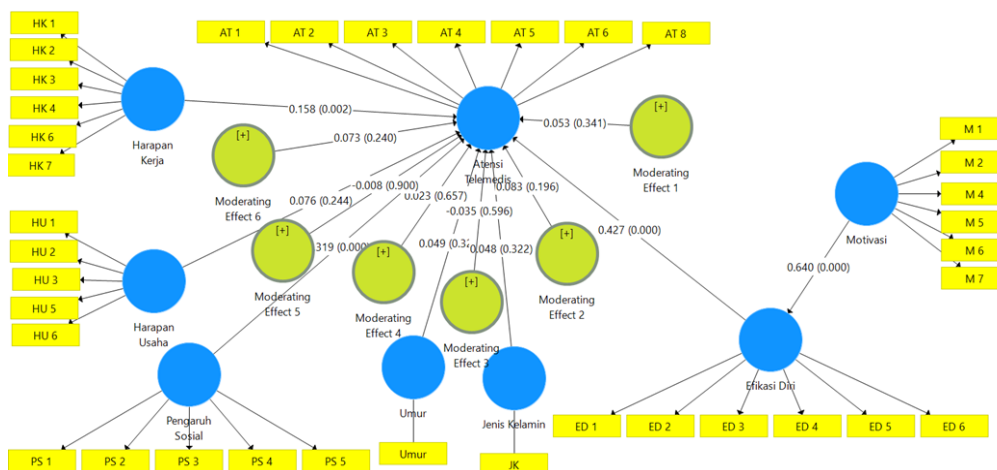
The goodness of fit table appears that the R-Square value for telemedicine attention is 0,603 and for self-efficacy is 0,409, indicating that approximately 60,3% and 40,9% of the variability of the dependent variable can be elaborated by the independent variables in the model. The Q-Square values of 0,290 for telemedicine attention and 0,230 for self-efficacy also indicate a fairly good influence in explaining the model. The NFI (Normed Fit Index) of 0,665 indicates that the resulting model also has a fairly good fit, although there is still room for improvement. With all these indicators, it can be summed up that the regression model utilized in this study is able to provide a clear and accurate picture of the relationship between the variables studied, as well as support the proposed hypothesis without any distortion from multicollinearity.

DISCUSSION

Direct effects

Direct effect analysis is advantageous for verifying the hypothesis regarding the direct impact of an exogenous variable (influencing variable) on an endogenous variable (influenced variable). A variable has a unidirectional influence if the path coefficient value is positive; that is, if the value of an exogenous variable rises, the value of the endogenous variable rises as well. A variable's effect is in the opposite direction if the

path coefficient value is negative; if the value of an exogenous variable rises, the value of the endogenous variable falls. It is considered significant if the probability or significance value (p-value) is less than 0,05 (5%). The p-values are not significant if they are more than 0,05 (5%).



Picture 2. Hypothesis analysis model

Indirect effects

Indirect effect analysis is conducted to examine the hypothesis that an exogenous variable influences an endogenous variable through a mediating (intervening) variable. A p-value less than 0,05 indicates a statistically significant indirect effect, suggesting that the mediator successfully transmits the effect from the exogenous to the endogenous variable. Conversely, if the p-value exceeds 0,05, the indirect effect is not significant, implying that the mediator does not play a mediating role, and the relationship between the exogenous and endogenous variables is direct.

Table 5. Hypothesis analysis test

	Original Sample (O)	T Statistics (O/STDEV)	p-values
Direct Effects			
Self-Efficacy -> Attention to Telemedicine	0,427	6,143	0,000*
Performance expectancy -> Attention to Telemedicine	0,158	3,126	0,002*
Effort expectancy -> Attention to Telemedicine	0,076	1,167	0,244
Gender -> Attention to Telemedicine	0,048	0,992	0,322
Moderating Effect 1 -> PE_Age_Telemedicine Attention	0,053	0,952	0,341
Moderating Effect 2 -> EE_Age_Telemedicine Attention	0,083	1,294	0,196
Moderating Effect 3 -> SI_Age_Telemedicine Attention	-0,035	0,531	0,596
Moderating Effect 4 -> PE_Gender_Telemedicine Attention	0,023	0,444	0,657

	Original Sample (O)	T Statistics (O/STDEV)	p-values
Moderating Effect 5 -> EE_Gender_Telemedicine Attention	-0,008	0,126	0,900
Moderating Effect 6 -> SI_Gender_Telemedicine Attention	0,073	1,175	0,240
Motivation -> Self-Efficacy	0,640	16,158	0,000*
Social Influence -> Attention to Telemedicine	0,319	5,368	0,000*
Age -> Attention to Telemedicine	0,049	0,984	0,326
Indirect Effects			
Motivation -> Self-Efficacy -> Attention to Telemedicine	0,273	5,352	0,000*

Note: *Analysis using smart PLS

The results of the indirect effect analysis show that the motivation variable has a significant influence on attention to telemedicine through self-efficacy as a mediator. The p-value for this indirect effect is 0,000, which is below the 0,05 threshold, indicating that self-efficacy indeed acts as a mediating variable for the influence of motivation on attention to telemedicine. This suggests that increasing an individual’s motivation can strengthen self-efficacy, which in turn enhances attention to telemedicine. In other words, self-efficacy is not only an outcome of motivation but also plays a crucial role in facilitating the influence of motivation on attention to telemedicine.

On the other hand, the analysis for direct effects shows that only the self-efficacy and performance expectancy variables have a significant influence on attention to telemedicine, with p-values of 0,000 and 0,002, respectively. Meanwhile, effort expectancy, gender, and other moderating effects do not show a significant influence on attention to telemedicine, with p-values greater than 0,05. This indicates that not all expected variables have a significant impact in this context, suggesting that researchers should consider other factors that may play a role in increasing attention to telemedicine.

Performance expectancy has a positive outcome on attention to telemedicine

The analysis results show that performance expectancy has a positive and significant effect on attention to telemedicine, with an original sample value of 0,158 and a p-value of 0,002. This indicates that when individuals have high expectations related to their work, they tend to pay more attention to the available telemedicine services. In other words, strong performance expectancy serves as a driver to increase attention to telemedicine, which can potentially impact the acceptance and use of these services (Cobelli et al., 2023). Therefore, hypothesis H1 is accepted, affirming the significance of performance expectancy in the condition of attention to telemedicine.

Effort expectancy has a positive effect on attention to telemedicine

In the analysis, effort expectancy showed an original sample value of 0,076 and a p-value of 0,244, indicating that its influence on attention to telemedicine is not significant. This means that although effort expectancy may influence certain aspects of individual behavior, its effect is not strong enough to increase attention to telemedicine in the context of this study (Nawarini et al., 2022). Thus, hypothesis H2 is rejected,

showing that effort expectancy does not have a significant positive effect on attention to telemedicine.

Social influence has a positive effect on attention to telemedicine

The analysis shows that social influence contributes positively and significantly to attention to telemedicine, with an original sample value of 0,319 and a p-value of 0,000. This indicates that social factors, such as support from friends, family, or the community, can enhance individuals' attention to telemedicine services (Schwalb and Klecun, 2019). Social influence creates norms and expectations that encourage individuals to more actively seek and use telemedicine services, thus supporting hypothesis H3 that social influence has a positive effect on attention to telemedicine.

Age positively moderates the relationship between performance expectancy and attention to telemedicine

In the analysis, the moderation effect of age on the relationship between performance expectancy and attention to telemedicine showed non-significant results, with a p-value greater than 0,05. This indicates that age does not function as a moderator that enhances or strengthens the relationship between performance expectancy and attention to telemedicine (Venz and Woehrmann, 2022). Therefore, hypothesis H4 is rejected, indicating that an individual's age does not significantly modify the influence of performance expectancy on attention to telemedicine.

Age positively moderates the relationship between effort expectancy and attention to telemedicine

The analysis results show that the moderation of age on the relationship between effort expectancy and attention to telemedicine is also not significant. With a p-value above 0,05, it can be concluded that age does not act as a moderator in this relationship. Therefore, hypothesis H5 is rejected, confirming that age does not influence the extent to which effort expectancy affects attention to telemedicine. The results indicate that age does not play a significant role in influencing how effort expectancy can drive individual attention toward telemedicine services (Schmitz *et al.*, 2022).

Age positively moderates the relationship between social influence and attention to telemedicine

The analysis results show that the moderation of age on social influence and attention to telemedicine is also not significant. A p-value greater than 0,05 indicates that age does not function as a factor that strengthens the relationship between social influence and attention to telemedicine. Thus, hypothesis H6 is rejected, showing that changes in age do not impact the strength of social influence on attention to telemedicine (Kung *et al.*, 2024).

Gender positively moderates the relationship between performance expectancy and attention to telemedicine

With a p-value larger than 0,05, the analysis's gender-moderation of the association between performance expectancy and telemedicine attentiveness yielded non-significant results. This means that gender does not act as a moderator that strengthens the influence of performance expectancy on attention to telemedicine (Schmitz *et al.*, 2024). Therefore, hypothesis H7 is rejected, indicating that both men and women show similar responses to performance expectancy in the context of

attention to telemedicine.

Gender positively moderates the relationship between effort expectancy and attention to telemedicine

With a p-value of 0,900, the research demonstrates that gender has no distinguishable moderating effect on the partnership between effort expectancy and telemedicine attention. This indicates that gender does not affect the extent to which effort expectancy impacts attention to telemedicine (Schmitz et al., 2022). Thus, hypothesis H8 is rejected, indicating that gender does not provide a significant influence in this context.

Gender positively moderates the relationship between social influence and attention to telemedicine

With a p-value of 0,240, the analysis's findings indicate that gender's moderating effect on the association between social influence and telemedicine attentiveness is likewise not significant. This indicates that gender does not act as a moderator in this relationship, meaning that both men and women exhibit similar social influence on attention to telemedicine (Gumpartha and Srivastava, 2024). Therefore, hypothesis H9 is rejected, confirming that social influence is not affected by gender in the context of attention to telemedicine.

Self-efficacy has a positive outcome on attention to telemedicine

With a p-value of 0,000 and an original sample value of 0,427, the analysis's findings demonstrate that self-efficacy significantly and favorably influences telemedicine attention. This suggests that telemedicine services are more likely to be noticed by those who have higher levels of self-efficacy. An increase in self-efficacy can enhance individuals' confidence in their ability to utilize telemedicine services (Grover and Alexander, 2019). Thus, hypothesis H10 is accepted, confirming the importance of self-efficacy in the context of attention to telemedicine.

Motivation has a positive effect on self-efficacy

With an initial sample value of 0,640 and a p-value of 0,000, the analysis's findings show that motivation significantly and favorably affects self-efficacy. This shows that motivated individuals tend to have higher self-efficacy. Increased motivation can encourage individuals to believe in their abilities, which in turn contributes to higher self-efficacy (Yentür, 2023). Therefore, hypothesis H11 is accepted, highlighting the critical role of motivation in enhancing individuals' self-efficacy.

CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis of both direct and indirect effects on public interest in telemedicine, it can be concluded that self-efficacy and social influence have a significant impact on intention to use telemedicine, while performance expectancy, effort expectancy, gender, and moderating variables do not show significant influence. Additionally, motivation plays an important role in enhancing self-efficacy, which in turn affects attention to telemedicine. Therefore, it is recommended to develop educational programs and campaigns that increase public motivation and self-efficacy regarding telemedicine, as well as strengthen positive social influence to promote the adoption of these services, ensuring the increased and optimal use of telemedicine.

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