

# Analysis of Factors Affecting the Implementation of “Remaja Sehat” Application

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## Abstract

This study aims to determine the effect of relative profitability, compatibility, complexity, trialability, and observability about knowledge regarding adolescent reproductive health in the use of the “Remaja Sehat” application. Implementation of the use of the media “Aplikasi Remaja Sehat” was carried out by 302 students of SMAN 19 Surabaya and SMA Muhammadiyah 7 Surabaya. Effectiveness measurement used pre-experiment methods with post-only design. The results of this study showed that there are relative advantages (0.013) and trialability (0.000) have an effect while compatibility (0.666), complexity (0.464) and observability (0.281) have no effect on the implementation of the use of “Remaja Sehat” application.

**Keywords:** *Relative advantage, compatibility, complexity, trialability, observability, implementation, adolescent reproductive health.*

## Introduction

Indonesia so far has implemented various education regarding adolescent reproductive health. Adolescents have been given education with not a short period of time<sup>(1)</sup>. Starting from education in schools, counseling in health facilities, and most importantly, environmental support and parents. Indonesia itself is a country that has a variety of cultures and religions. It is well known that different eras will cause cultural change with the increase of technological sophistication which makes it easy to share information. In Indonesia, the lecture method is still used in providing information and discussion about adolescent reproductive health. However, with social, cultural, and even religious changes in every era, the lecture method is less capable in the process of adolescent education<sup>(2)</sup>.

One of the applications “Remaja Sehat” is a media as a channel of information regarding adolescent reproductive health apart from the education provided from schools, and from parents or health workers. This application explains various information related to

HIV/AIDS, Sexuality, and Narcotics. In addition to the information, there is also a game in the form of a quiz about reproductive health with scores and discussions so that the adolescents will be encouraged to get the best score. After the adolescents use the application and implement it in the form continuously using the application, choose to not uninstalling the application and implementing it in daily life, whether the application will be more effective or not in terms of relative benefits, stability, complexity, trialability, and observability according to adolescents.

## Material and Method

### *Research Design*

This research used pre-experiment. Researchers will present an application “Remaja Sehat” to the students then the researchers will provide a questionnaire related to the relative advantages, stability, complexity, trialability, and observability of the application. This research design used a post-only design.

### *Research Location*

This research was conducted in SMAN 19 Surabaya and SMA Muhammadiyah 7 Surabaya.

### *Population and Sample*

The population in this study were SMAN 19

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Surabaya and SMA Muhammadiyah 7 Surabaya's students whose age around 15-19 years old. The sample in this study amounted to 302 students conducted by simple random sampling.

### Data Collection

Data collection techniques and instruments in this study after being given an explanation regarding the study and filling in informed consent for 5 minutes, the researcher will present an application "Remaja Sehat" and a questionnaire will be given afterward. The instrument used for data collection in this study was a

30-minute questionnaire, a post-test has been prepared to find out about five variables of the application of "Remaja Sehat" and "Remaja Sehat" applications.

### Data Analysis

Analysis of the data in this study used a computer that is first to provide code and grouping to facilitate data entry, the second will be scoring which is to give a score in each result, the data will be analyzed afterward. Univariate analysis is used to see the depiction and description of each variable and bivariate analysis used Logistic Regression.

## Research Result

### Characteristic of Responden

**Table 1: Characteristics based on age, residence and gender**

	Frequency	Percentage (%)
Age of Respondents		
16 Years Old	124	41.1
17 Years Old	161	53.3
18 Years Old	17	5.6
Residence of Respondents		
House	293	97
Boarding House	9	3
Gender		
Male	121	40.1
Female	181	59.9

The frequency distribution of respondents by age can be seen that most respondents at the age of 17 years with the number of students 161 students or 53.3%. Students aged 16 years were as much as 124 students or 41.1% and students aged 18 years were 17 students or 5.6%.

The frequency distribution of respondents by residence is known that most of the student resides in

a house with a total of 293 students or 97% while the students who live in a boarding house as much as 9 students or 3%.

The frequency distribution of respondents based on gender showed that most of the respondents are female with the number of student 121 students or 40.1% while the male respondents are as much as 181 students or 59.9%.

## Discussion

**Table 2: The effect of relative advantage, compatibility, complexity, trialability, and observability on implementation**

Dependent Variable (x)	Independent Variable (y)	Significant	$\alpha$	Explanation
Relative Advantage	Implementation	0.013	0.05	There is influence
Compatibility	Implementation	0.666	0.05	There is no influence
Complexity	Implementation	0.464	0.05	There is no influence
Trialability	Implementation	0.000	0.05	There is influence
Observability	Implementation	0.281	0.05	There is no influence

The result of the relative advantage with implementation showed that  $p = 0.013$  which means more than  $\alpha = 0.05$ . The result of compatibility with implementation showed that  $p = 0.666$  which means more than  $\alpha = 0.05$ . As for complexity with implementation showed that  $p = 0.464$  which means more than  $\alpha = 0.05$ . The result of trialability with implementation showed that  $p = 0.000$  which means less than  $\alpha = 0.05$ . While the result of observability with implementation showed that  $p = 0.281$  which means less than  $\alpha = 0.05$ .

This “Remaja Sehat” application is used as a medium of learning or education regarding adolescent reproductive health. Not only lecture learning method, but this application also follows the adolescents’ nowadays that can’t stay far away from their smartphones. According to Wahidin 2018, the media in education apart from only giving messages but has to attract students’ attention by means of creative, innovative and varied methods<sup>(3)</sup>.

An innovation of “Remaja Sehat” application can be measured how effective it is based on the decision and implementation to use and install the “Remaja Sehat” application. Decisions and implementation in the use of “Remaja Sehat” applications can be showed from the relative advantages, compatibility or the level of conformity with the needs or experiences of the students regarding adolescent reproductive health, complexity or the level of complexity of using “Remaja Sehat” applications both in terms of understanding information or games, trialability or can be tested and observability.

This research proved that there is an influence of relative advantages and trialability or can be tested but there is no influence of complexity, compatibility, and observability. This happens because students feel the “Remaja Sehat” application has the advantage of getting information easily by downloading it on a smartphone and can be used every day. In addition, students can use at any time not only in the learning process at school but also in any condition at home, or in other places students can still use this application. Based on the results of the questionnaire, students answered that this application was considered important in discussing adolescent reproductive health. A lot of benefits felt by students in using the “Remaja Sehat” application has made the students can implement to use this “Remaja Sehat” application.

According to Roger theory, trialability or can be tested is an innovation that can be tried or not by the recipient<sup>(4)</sup>. The more innovation can be tested, the faster it will be accepted by the users or students. This “Remaja Sehat” application has been tested beforehand so that students can entrust this application as a medium of education or education regarding adolescent reproductive health. Student’s trust in the trial of this application can affect the implementation of the use of “Remaja Sehat” applications.

Compatibility, complexity, and observability do not affect the implementation of the use of “Remaja Sehat” applications on the students. This is alleged because of the students who have been accustomed to using a cellphone in their daily lives. According to

Roger Theory, compatibility is a consistent level of existing values, past experience<sup>(4)</sup>. In this “Remaja Sehat” application students assess in the process of using this application and showed the consistent with the existing value of adolescent reproductive health and past experience. In accordance with the research showed that there is a suitability of the material to the goals to be achieved by users so that in the case of this study if there is conformity and can cause curiosity then it does not affect students in implementing the use of “Remaja Sehat” applications<sup>(5)</sup>.

After taking the decision to adopt and use the “Remaja Sehat” application and it is felt there is no difficulty and easy to understand then the students will be easier to implement to use this “Remaja Sehat” application. This is because the students find it way simpler or easier compared to today’s games that require more challenges to win it. According to Apriyani, the characteristics in the easiness of usage are the existence of trust in technology that is flexible, easily understood by users and easy to be used<sup>(6)</sup>. While the game in the “Remaja Sehat” application, if compared to other games, is way easier, since it in the form of a quiz. Individuals will not be determined by curiosity and interest, but there is a sense of obligation to use the information system in financial management. Students do not feel the difficulty of using this “Remaja Sehat” application. Although there are games that support adolescent reproductive health information so that students willing to continue to play while learning, students do not feel the difficulty in operating this application. The complexity or complexity does not affect the implementation of the use of “Remaja Sehat” applications. Students will continue to use this application because they thought that adolescent reproductive health is important to be learned. Adolescents are supposed to be the pioneer of adolescent health program (*from, by and for the adolescents*) thus they need to say to the stakeholders (decision maker and provider) that there are: adolescents’ problems, experience by themselves or others; need for adolescent health program; availability of adolescents to be actively involved in the implementation of ACHS program. The adolescents hope that there will be an adolescent health program which is in tune with the characteristics, needs and capacities of them<sup>(7)</sup>.

This study showed the results that there is no significant effect between observability on the implementation of the use of “Remaja Sehat” applications. This happens because the observability

of the innovation or application of “Remaja Sehat” has succeeded in influencing users. It is through friends and the surrounding that recommend to use and spread the benefits of using “Remaja Sehat” applications. This is supported by the research showed the results that there is a relationship of peer support to healthy behavior among students<sup>(8)</sup>.

## Conclusion

Based on the results of this study the more the students feel the suitability in their needs, the ease of applying, and observability of “Remaja Sehat” then it will not affect the implementation of the use of “Remaja Sehat” applications. On the other hand, the relative benefits that will lead to user gain in its implementation and have been tested that brought up students’ trust in using “Remaja Sehat” applications affect implementation. The more students feel the benefit the application brings and can be tested it will improve the implementation of the use of “Remaja Sehat” applications.

The students feel the relative advantages and trialability can be seen more in the use of “Remaja Sehat” applications rather than the complexity, compatibility, and observability. The more students feel the benefit the application brings and have been tested, the more they decide and implement or vice versa if the students feel unprofitable in use of the application or not tested and reduce the students’ trust then the students will rethink of implementing the use of “Remaja Sehat” applications.

## Recommendation

The next researcher is suggested to intervene using enough time to intervene so that the purpose of monitoring and can see the implementation well also the decisions in the use of “Remaja Sehat” application.

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