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Judul Artikel : ***The Impact of the Intranatal Edu Application on Skills for Assisting in Childbirth***

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Penulis : **Sulastini[1], Rosita Alvia[2], Wieda Widyatry Qarragita[1]**

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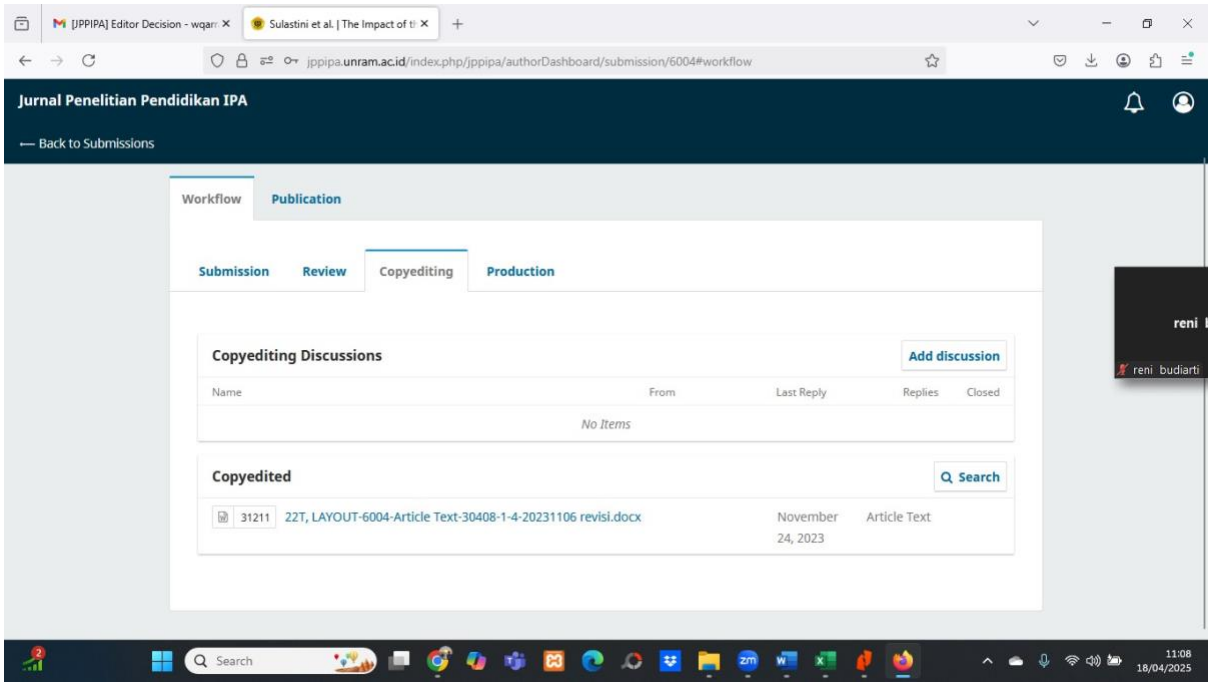
1. Bukti konfirmasi submit artikel dan artikel yang di submit



The Impact of the Intranatal Edu Application on Skills for Assisting in Childbirth

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Abstract: It is necessary to change teaching strategies and media because of the persistently poor pass rate of students' laboratory abilities in intranatal procedures. One such strategy is the use of engaging, interactive, and entertaining learning materials, such as Android applications. The goal of developing the app Intranatal Edu was to help students become more proficient. The purpose of this study is to evaluate the impact of the Intranatal Edu Application on the birth control knowledge of nursing students. Quantitative experimental research with a single group pre- and post-testing is the kind of research being done here. With a sample size of 60 respondents, the population of this study consisted of enrolled students in the third semester of the undergraduate nursing study program. Because the p-value of 0.005 is less than the significance threshold of 0.05, the Wilcoxon H0 test findings can be disregarded. It can be inferred that there is a difference in the birth support skills scores in Stage II pre- and post-test. According to this study, students' skills can be effectively improved by using the Edu Intranatal Application.

Keywords: Application; Childbirth;. Intranatal Edu; Skills;

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Introduction

Unsatisfactorily, our campus's information technology facilities have become a barrier to instruction, despite our gradual adaptation to technological advancements like the development of LMS. Naturally, as a health-related college, we must also improve our students' skills in addition to their knowledge, particularly in the Nursing study programme, which includes theoretical, practical, and field learning components in its curriculum. In order to help overcome such issues, it should be backed by engaging and interactive learning resources that are available to students, as in the case of maternity nursing courses with sufficiently high graduation rates. Because Android may actively employ learning media to learn information, it is thought to be a more effective way to present material to students as technology advances. With (Alvendri, Huda and Darni, 2023) the creation of educational materials should be guided by the goal of learning, particularly when it comes to acquiring knowledge and skills that are connected to the Standard Operational Procedures (SPO). Studies on the use of Android apps, like the (Irfan, 2023) on the Effectiveness of Patymcare to Improve Patient Safety Culture in Bidan, indicate that using the PatymCare application can improve patient safety cultures in Samarinda more effectively than using books. Additionally, the (Damayanti, 2023) examines how well mothers' knowledge and abilities in observing their newborns' growth and development are enhanced by the use of e-posyandu health (ePoK). The findings demonstrate that using ePoK applications can improve a mother's knowledge and ability to keep an eye on her child's growth and development. Nonetheless, a little amount of previously conducted study has to do with the educational resources that maternity and nursing students might utilise to acquire skills related to helping during birthing.

This plan is different from the Learning Management System (LMS), which is the frequently used Google Classroom during instruction. In the LMS, there are menus such as student presence, assignments, and discussions with the standard display of the developer, and access to it requires logging in with a username and password. In the Intranatal Edu Application, there is information about the intranatal, as well as a learning video related to the intranatal Period I–IV, with an engaging and interactive display meant to pique students' interest in reading, learning, and adding flexible learning media that is anticipated to improve the knowledge of students conducting research. Therefore, researchers are interested in investigating the efficacy of the Intranatal Edu application to improve the Karsa Husada.

Study source indicated that learning media is a crucial instrument employed by educators to facilitate effective learning. Media refers to any form of communication that is utilized to transmit messages from the presenter to the recipient, with the purpose of stimulating the intellect, emotions, focus, and curiosity of students in order to facilitate the process of learning (Hasan, 2021). Educational media refers to a tool or method employed to enhance the process of learning and aid pupils in comprehending concepts or subjects with more ease and efficacy (Amulistia, 2023). According to the above problem description, a concrete solution is required, and the only one with an Android-based learning media is to solve the issue. Android is a Linux-based touch-layer operating

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system for smartphones and tablets. However, as it developed, Android became into a platform that innovated incredibly quickly (Siddiq *et al.*, 2023). Additionally, this application includes a learning video that, based on certain investigations, has been shown to have an impact on students' abilities, particularly in the skill lab. Because the video is difficult for students to understand if they only watch it during a teacher demonstration in the lab, they can watch it multiple times until they comprehend the lesson's content (Choeron and Metrikayanto, 2022). As might be expected, the intranatal education application works well against students' abilities to support childbirth through actions.

Method

This sort of research is experimental quantitative research employing a quasi-experimental design with one group pre and post test, where measurements are taken twice, i.e. before and after the intervention is delivered (Nursalam, 2019).

Up to 144 active students in Semeseter III Prodi S1 Nursing make up the study's population. The researchers will use cluster sampling with the Slovin formula for sampling in this study. This means that samples are taken from the population depending on the boundaries of the criteria they have set. Up to 60 students will participate in this research as respondents. This study used the Observation Instrument of the Operational Standards of Assisted Parenting Procedures (APN), which has 60 steps based on institutional standards. Each step has a score assigned to it: 1 for not done, 2 for done but not perfect, and 3 for done perfectly. Nevertheless, the competence test in this study only included 32 stages related to Kala II. Regarding the Intranatal Application, Edu offers educational resources on intranatal concepts, delivery stages, and an embedded film that teaches users about the SOP for using birth aids.

Students who meet the inclusion criteria are selected for data sampling. After that, respondents are informed about the goals, methods, benefits, and potential risks of the research. They also fill out an informed consent form. Finally, students observe and record childbirth practices using procedure that is available at STIKes Karsa Husada Garut. Following observation of the respondents, a link to the next Intranatal Edu Application is sent to each respondent's device as a follow-up intervention. A team is dispatched by the researchers to ensure that the application is installed on the respondents' mobile phones and that they are able to utilize it. The day following the installation and opening of the application, the respondent's skills are evaluated. To determine whether or not the respondents' birth aid skill values have changed, the observation was conducted using the same tool as the SPO on the Period II Intranatal Edu application.

A frequency distribution table is analyzed to provide a descriptive image. An overview of the age, gender, and skill scores both before and after the intervention will be examined in this study. A correlated sample t test is the analysis method that is employed. This test involves parametric statistics, hence needing a normal data spread distribution. Based on this, before completing the data analysis, the normality test of the data is first performed with one sample Kolmogorov-Smirnov Test. If the value of Kolmogoro-S Mirnov-Z is greater than the critical value or p > 0,05, then the data distribution is normal. When the distribution of data is normal, then the correlated sample t test can be employed for data analysis. As to the test criteria employed are as follows (Shek DT lei, 2018): H0 rejected if p <= 0,05 H0 received if p > 0,05.

Result and Discussion

Table 1. Intranatal Skill Score of Kala II

	Skor Pretest (N=60)	Skor Postest (N=60)
Total Pre Test Score	2643.75	4255.21
Average Score	44.06	70.92
Minimum Score	36.46	61.46
Highest Score	53.13	79.17
Standard Deviation	3.68	4.38

Research on the The Impact of the Intranatal Edu Application on Skills for Assisting in Childbirth on September , 2023. The student's overall skill grade in the second grade of maternity assistance prior to receiving the Intranatal Edu application was 2643.75, with an average score of 44.06 and a range of scores between 36.46 and 53.13. The cumulative score of student abilities in the Second grade of paternity assistance, following the implementation of the Intranantal Edu application, was 4255.21. The average score was 70.92, with a minimum score of 61.46 and a maximum score of 79.17. The findings of this study align with those of (Setiawaty *et al.*, 2022) on the development of STEM learning based on Android to enhance students' logical thinking abilities. In that study, the average pretest score for students' thinking skills was 27.04, while their posttest score of 73.5 showed a considerable increase in thinking skills. Similarly, the average score on the pretest and posttest has increased, according to Buhari's research on the Effectiveness of the Application of Android Applications on Laboratory Skills Learning Outcomes (Buhari and Sari, 2022). Furthermore, Milton conducted a study which revealed a notable disparity in the average score before and after the implementation of the Oral Clinical Case Presentation skills application for Nursing Students (Milton *et al.*, 2023). Anderson's Bloom Taxonomy theory, as described in Cressa (2023), categorizes cognitive processes into six distinct levels: remembering, understanding, applying, analyzing, evaluating, and producing. To acquire knowledge about the Period II intranatal, the researcher restricts this study to the level applying.

The Kolmogorov-Smirnov Test using a single sample is used in this study to determine whether the Pre-test and Post-test data are normal. This test determines whether to proceed with additional analysis on the examination of data pairs or to apply the Independent Test of T-test samples. When the data are regularly distributed, t-test samples make sense; when the data are not, Wilcoxon tests make more sense. The pre-test data distribution is not normally distributed, as indicated by the p-value or Asymp. Sig. (2-tailed) in the Pre-test normality test table, which is 0,021 < 0,05, indicating that H0 is rejected. Nonetheless, a p-valued or ASYMP can be found in the Post-Test normality testing table. Because some of the data results in this study do not fit into a normal distribution, the T-test independent test is not appropriate for usage. Therefore, to ascertain whether there is a difference between the values on the Pre-test and the Post-test, advanced analysis employs Wilcoxon tests. The results of the rank table values are displayed in this test. This table lists the differences between data pairs, or in this example, the differences between the pretest and posttest data, ranked from least to greatest (or similarly, depending on the test).

The rankings of the comparison between the Pre-test and Post-test values on the output table ranks are summarized here. A sample with a post-test value less than the pre-test group values is said to have negative ranks; in this instance, there are 0 samples. Samples with positive ranks have post-test values that are greater than the values of the prior test groups. There are 60 samples in the sample in this instance since there are none whose post-test value is greater than that of the previous test group. When there are ties, it indicates that the group values from the pre- and post-tests are the same. The Wilcoxon test table will be displayed after we have knowledge of the rank table's outcome. The Wilcoxon test table's outputs for the pre- and post-test values are shown here.

Table 2. Wilcoxon tes

Test Statistics[a]
PostTest - PreTest

Z	-6.739[b]
Asymp. Sig. (2-tailed)	0.000

Based on the Wilcoxon test table, it can be inferred that there is a difference between the pre- and post-test since the p-value, or asymptotic significance (2-tailed), is 0,000 < 0,05, indicating that H0 is rejected. The average score for the broad description of students' labour assistance skills prior to the application was 44.06. The second stage, which had thirty-two phases, was where the talents were tested. However, following the application's use, the student's skill score rose to 70.92.

Learning media software has evolved to become more sophisticated and diversified with the times. the speed at which information technology is developing and the volume of digital information available. Smartphones running Android also facilitate easy access to that data. It is anticipated to move educational processes and materials in a dynamic, digital direction, enabling easy online and offline access to science without being limited by time, money, or location (Indahsari *et al.*, 2023), some research on Android applications can also increase learning motivation, such as Khoiorni's research on developing media applications in chemistry (Khoiorni, Priatmoko and Prasetya, 2023). An investigation on curriculum development revealed that educators should possess a proclivity for technology, a propensity for collaboration, and a penchant for creativity. Research has also discovered that schools and instructors must take into account open learning platforms when selecting teaching approaches (Lase, 2019) .

Nursing students are required to acquire the skill of assisting with childbirth as part of the maternity nursing course in semester III. This course covers childbirth material, which is divided into Periods I-IV. On this topic there are theoretical and practical achievements, of course it requires effective learning methods and learning media so that it is hoped that students can review it again after the lecture is finished. Stage II commences with the complete dilation of the cervix and concludes with the delivery of the child. Stage III spans from the expulsion of the fetus to the delivery of the placenta. Stage IV denotes the postpartum recovery phase, which is a critical stage for identifying potential difficulties. Postpartum hemorrhage can manifest as abnormal bleeding following childbirth (Fauziah, 2015).(Casmana, Cahyana and Paristiowati, 2020)

In his research on the Android application, (Qarragita *et al.*, 2023) claims that there is a correlation between enhanced understanding of the Operational Standard of Intranatal Procedures and that the built Android application can improve knowledge of birthing. According to (Ntobuo *et al.*, 2023) study on Android Implementation to Improve Students' Motivation and Learning Outcomes, the results stated that this android media can improve motivation and learning outcomes on temperature and calorie materials, Additionally, according to (Kusumawardhani and Khery, 2017), using audio-visual content based on Android can increase students' motivation to learn, the same as (Aida *et al.*, 2022) claimed that the application of learning media games on android is interesting for students, proven by the results of the tests carried out by obtaining the appropriate criteria. Additionally, studies on mobile learning reveal some significant outcomes for the incorporation of mobile technology into the classroom, including enhanced student perception, easier concentration for students, flexible access to m-service for learning resources, and improved student proficiency with mobile technology for e-learning (El-sofany *et al.*, 2020). Android-based smartphones not only operate as communication tools, but can be utilized as learning material (Ismanto et al., 2017). Users of mobile learning apps can feel content and at ease when engaging in constructive activities with the app (Casmana, Cahyana and Paristiowati, 2020). The study conducted by Son examined the influence of Android-based learning media on student learning outcomes. The findings indicate that the utilization of Android app-based learning media has a significant impact of 60.16% on students' learning outputs (Putra, Wijayati and Widhi, 2017).

The application additionally incorporates video demonstrations that adhere to the established protocols used in on-campus laboratories. Specifically, there are four movies provided for each phase of the delivery process. Learning films offer numerous advantages for students, encompassing the ability to stimulate their knowledge,

cultivate logical, analytical, creative, and effective thinking skills, enhance their creativity, and provide an enjoyable learning experience (Arrohman et al, 2021). Numerous empirical investigations examining the utilization of films as an instructional tool have consistently demonstrated their positive impact on educational achievements, encompassing. The utilization of video media in the learning process holds potential benefits in enhancing students' comprehension of lesson material and evaluating the efficacy of their educational journey. The research findings indicate a substantial disparity in learning outcomes between students who engage in learning activities incorporating video media and those who do not (Mujtahid, 2022). Similarly, in a study conducted by Laraeni on the utilization of video media in enhancing the proficiency of cadres in assessing the weight of toddlers, the findings indicated a significant impact of video media on the skills of cadres in this particular task (Laraeni *et al*, 2022). Similarly, a study was conducted to investigate the impact of videos on mothers' knowledge and proficiency in managing choking episodes in infants. The findings of this study indicated that the provision of educational content through video media had a significant influence on mothers' knowledge and skills in this domain (Meilani and Fitriana, 2023).

Conclusion

After the study was conducted with the Intranatal Edu application intervention, there was an increase in skill scores before and after using the application. The Wilcoxon test results yielded significant findings, indicating that the null hypothesis can be rejected, that there is a difference in students' childbirth assistance skills at pretest and posttest skills.

Author Contributions

The roles of the authors in this research are divided into executor and advisor in this research.

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Conflicts of Interest

The authors declare no conflict of interest.

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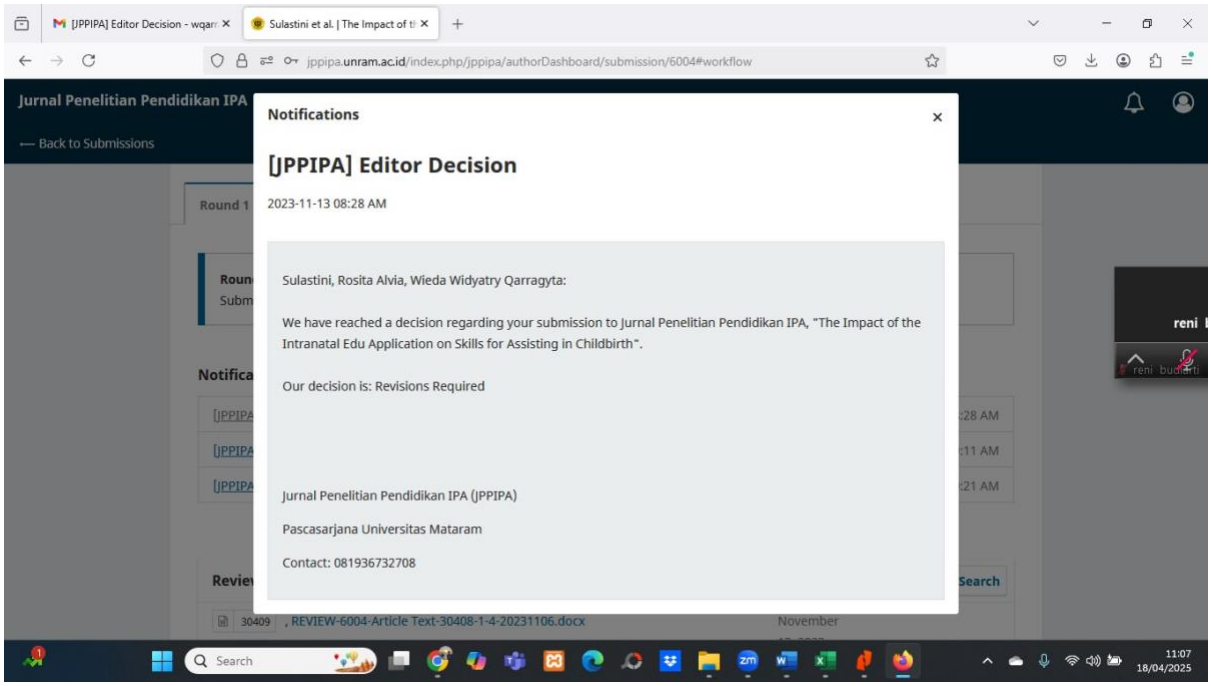
2. Bukti konfirmasi review dan hasil review pertama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Abstract: It is necessary to change teaching strategies and media because of the persistently poor pass rate of students' laboratory abilities in intranatal procedures. One such strategy is the use of engaging, interactive, and entertaining learning materials, such as Android applications. The goal of developing the app Intranatal Edu was to help students become more proficient. The purpose of this study is to evaluate the impact of the Intranatal Edu Application on the birth control knowledge of nursing students. Quantitative experimental research with a single group pre- and post-testing is the kind of research being done here. With a sample size of 60 respondents, the population of this study consisted of enrolled students in the third semester of the undergraduate nursing study program. Because the p-value of 0.005 is less than the significance threshold of 0.05, the Wilcoxon H0 test findings can be disregarded. It can be inferred that there is a difference in the birth support skills scores in Stage II pre-and post-test. According to this study, students' skills can be effectively improved by using the Edu Intranatal Application.

Keywords: Application; Childbirth;. Intranatal Edu; Skills;

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Introduction

Unsatisfactorily, our campus's information technology facilities have become a barrier to instruction, despite our gradual adaptation to technological advancements like the development of LMS. Naturally, as a health-related college, we must also improve our students' skills in addition to their knowledge, particularly in the Nursing study programme, which includes theoretical, practical, and field learning components in its curriculum. In order to help overcome such issues, it should be backed by engaging and interactive learning resources that are available to students, as in the case of maternity nursing courses with sufficiently high graduation rates. Because Android may actively employ learning media to learn information, it is thought to be a more effective way to present material to students as technology advances. With Alvendri (2023) the creation of educational materials should be guided by the goal of learning, particularly when it comes to acquiring knowledge and skills that are connected to the Standard Operational Procedures (SPO). Studies on the use of Android apps, like the Irfan (2023) on the Effectiveness of Patymcare to Improve Patient Safety Culture in Bidan, indicate that using the PatymCare application can improve patient safety cultures in Samarinda more effectively than using books. Additionally, the Damayanti study (2023) examines how well mothers' knowledge and abilities in observing their newborns' growth and development are enhanced by the use of e-posyandu health (ePoK). The findings demonstrate that using ePoK applications can improve a mother's knowledge and ability to keep an eye on her child's growth and development. Nonetheless, a little amount of previously conducted study has to do with the educational resources that maternity and nursing students might utilise to acquire skills related to helping during birthing.

This plan is different from the Learning Management System (LMS), which is the frequently used Google Classroom during instruction. In the LMS, there are menus such as student presence, assignments, and discussions with the standard display of the developer, and access to it requires logging in with a username and password. In the Intranatal Edu Application, there is information about the intranatal, as well as a learning video related to the intranatal Period I–IV, with an engaging and interactive display meant to pique students' interest in reading, learning, and adding flexible learning media that is anticipated to improve the knowledge of students conducting research. Therefore, researchers are interested in investigating the efficacy of the Intranatal Edu application to improve the Karsa Husada.

According to the above problem description, a concrete solution is required, and the only one with an Android-based learning media is to solve the issue. Android is a Linux-based touch-layer operating system for smartphones and tablets. However, as it developed, Android became into a platform that innovated incredibly quickly (Mustafa, 2023). Additionally, this application includes a learning video that, based on certain investigations, has been shown to have an impact on students' abilities, particularly in the skill lab. Because the video is difficult for students to understand if they only watch it during a teacher demonstration in the lab, they can watch it multiple times until they comprehend the lesson's content (Choeron, 2022). As might be expected, the intranatal education application works well against students' abilities to support childbirth through actions.

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Method

This sort of research is experimental quantitative research employing a quasi-experimental design with one group pre and post test, where measurements are taken twice, i.e. before and after the intervention is delivered (Nursalam, 2019).

Up to 144 active students in Semeseter III Prodi S1 Nursing make up the study's population. The researchers will use cluster sampling with the Slovin formula for sampling in this study. This means that samples are taken from the population depending on the boundaries of the criteria they have set. Up to 60 students will participate in this research as respondents.

This study used the Observation Instrument of the Operational Standards of Assisted Parenting Procedures (APN), which has 60 steps based on institutional standards. Each step has a score assigned to it: 1 for not done, 2 for done but not perfect, and 3 for done perfectly. Nevertheless, the competence test in this study only included 32 stages related to Kala II. Regarding the Intranatal Application, Edu offers educational resources on intranatal concepts, delivery stages, and an embedded film that teaches users about the SOP for using birth aids.

Students who meet the inclusion criteria are selected for data sampling. After that, respondents are informed about the goals, methods, benefits, and potential risks of the research. They also fill out an informed consent form. Finally, students observe and record childbirth practices using procedure that is available at STIKes Karsa Husada Garut. Following observation of the respondents, a link to the next Intranatal Edu Application is sent to each respondent's device as a follow-up intervention. A team is dispatched by the researchers to ensure that the application is installed on the respondents' mobile phones and that they are able to utilize it. The day following the installation and opening of the application, the respondent's skills are evaluated. To determine whether or not the respondents' birth aid skill values have changed, the observation was conducted using the same tool as the SPO on the Period II Intranatal Edu application.

A frequency distribution table is analyzed to provide a descriptive image. An overview of the age, gender, and skill scores both before and after the intervention will be examined in this study. A correlated sample t test is the analysis method that is employed. This test involves parametric statistics, hence needing a normal data spread distribution. Based on this, before completing the data analysis, the normality test of the data is first performed with one sample Kolmogorov-Smirnov Test. If the value of Kolmogoro-S Mirnov-Z is greater than the critical value or p > 0,05, then the data distribution is normal. When the distribution of data is normal, then the correlated sample t test can be employed for data analysis. As to the test criteria employed are as follows (Shek DT lei, 2018): H0 rejected if p <= 0,05 H0 received if p > 0,05.

Result and Discussion

Table 1. Intranatal Skill Score of Kala II

	Skor Pretest (N=60)	Skor Postest (N=60)
Total Pre Test Score	2643.75	4255.21
Average Score	44.06	70.92
Minimum Score	36.46	61.46
Highest Score	53.13	79.17
Standard Deviation	3.68	4.38

Research on the The Impact of the Intranatal Edu Application on Skills for Assisting in Childbirth on September , 2023. The student's overall skill grade in the second grade of maternity assistance prior to receiving the Intranatal Edu application was 2643.75, with an average score of 44.06 and a range of scores between 36.46 and 53.13. The cumulative score of student abilities in the Second grade of paternity assistance, following the implementation of the Intranantal Edu application, was 4255.21. The average score was 70.92, with a minimum score of 61.46 and a maximum score of 79.17. The findings of this study align with those of Setiawaty's research (2022) on the development of STEM learning based on Android to enhance students' logical thinking abilities. In that study, the average pretest score for students' thinking skills was 27.04, while their posttest score of 73.5 showed a considerable increase in thinking skills. Similarly, the average score on the pretest and posttest has increased, according to Buhari's research (2022) on the Effectiveness of the Application of Android Applications on Laboratory Skills Learning Outcomes. Furthermore, Cynthia (2023) conducted a study which revealed a notable disparity in the average score before and after the implementation of the Oral Clinical Case Presentation skills application for Nursing Students. Anderson's Bloom Taxonomy theory, as described in Cressa & Mukhlis (2023), categorizes cognitive processes into six distinct levels: remembering, understanding, applying, analyzing, evaluating, and producing. To acquire knowledge about the Period II intranatal, the researcher restricts this study to the level applying.

The Kolmogorov-Smirnov Test using a single sample is used in this study to determine whether the Pre-test and Post-test data are normal. This test determines whether to proceed with additional analysis on the examination of data pairs or to apply the Independent Test of T-test samples. When the data are regularly distributed, t-test samples make sense; when the data are not, Wilcoxon tests make more sense. The pre-test data distribution is not normally distributed, as indicated by the p-value or Asymp. Sig. (2-tailed) in the Pre-test normality test table, which is 0,021 < 0,05, indicating that H0 is rejected. Nonetheless, a p-valued or ASYMP can be found in the Post-Test normality testing table. Because some of the data results in this study do not fit into a normal distribution, the T-test independent test is not appropriate for usage. Therefore, to ascertain whether there is a difference between the values on the Pre-test and the Post-test, advanced analysis employs Wilcoxon tests. The results of the rank table values are displayed in this test. This table lists the differences between data pairs, or in this example, the differences between the pretest and posttest data, ranked from least to greatest (or similarly, depending on the test).

The rankings of the comparison between the Pre-test and Post-test values on the output table ranks are summarized here. A sample with a post-test value less than the pre-test group values is said to have negative ranks; in this instance, there are 0 samples. Samples with positive ranks have post-test values that are greater than the values of the prior test groups. There are 60 samples in the sample in this instance since there are none whose post-test value is greater than that of the previous test group. When there are ties, it indicates that the group values from the pre- and post-tests are the same. The Wilcoxon test table will be displayed after we have knowledge of the rank table's outcome. The Wilcoxon test table's outputs for the pre- and post-test values are shown in Table 2..

Table 2. Wilcoxon tes

Test Statistics[a]	
	PostTest - PreTest
Z	-6.739[b]
Asymp. Sig. (2-tailed)	0.000

Based on the Wilcoxon test table, it can be inferred that there is a difference between the pre- and post-test since the p-value, or asymptotic significance (2-tailed), is 0,000 < 0,05, indicating that H0 is rejected. The average score for the broad description of students' labour assistance skills prior to the application was 44.06. The second stage, which had thirty-two phases, was where the talents were tested. However, following the application's use, the student's skill score rose to 70.92.

Nursing students are required to acquire the skill of assisting with childbirth as part of the maternity nursing course in semester III. This course covers childbirth material, which is divided into Periods I-IV. On this topic there are theoretical and practical achievements, of course it requires effective learning methods and learning media so that it is hoped that students can review it again after the lecture is finished. Stage II commences with the complete dilation of the cervix and concludes with the delivery of the child. Stage III spans from the expulsion of the fetus to the delivery of the placenta. Stage IV denotes the postpartum recovery phase, which is a critical stage for identifying potential difficulties. Postpartum hemorrhage can manifest as abnormal bleeding following childbirth (Fauziah, 2015).

In his research on the Android application, Qarragita (2023) claims that there is a correlation between enhanced understanding of the Operational Standard of Intranatal Procedures and that the built Android application can improve knowledge of birthing. According to Ntobuo (2023) study on Android Implementation to Improve Students' Motivation and Learning Outcomes, the results stated that this android media can improve motivation and learning outcomes on temperature and calorie materials, Additionally, according to Kusumawardhani (2019), using audio-visual content based on Android can increase students' motivation to learn, the same as Aida (2022) claimed that the application of learning media games on android is interesting for students, proven by the results of the tests carried out by obtaining the appropriate criteria.

Android-based smartphones not only operate as communication tools, but can be utilized as learning material (Ismanto et al., 2017). Users of mobile learning apps can feel content and at ease when engaging in constructive activities with the app (Sarkadi, 2020).

Conclusion

After the study was conducted with the Intranatal Edu application intervention, there was an increase in skill scores before and after using the application. The Wilcoxon test results yielded significant findings, indicating that the null hypothesis can be rejected, that there is a difference in students' childbirth assistance skills at pretest and posttest skills.

Author Contributions

The roles of the authors in this research are divided into executor and advisor in this research.

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Conflicts of Interest

The authors declare no conflict of interest.

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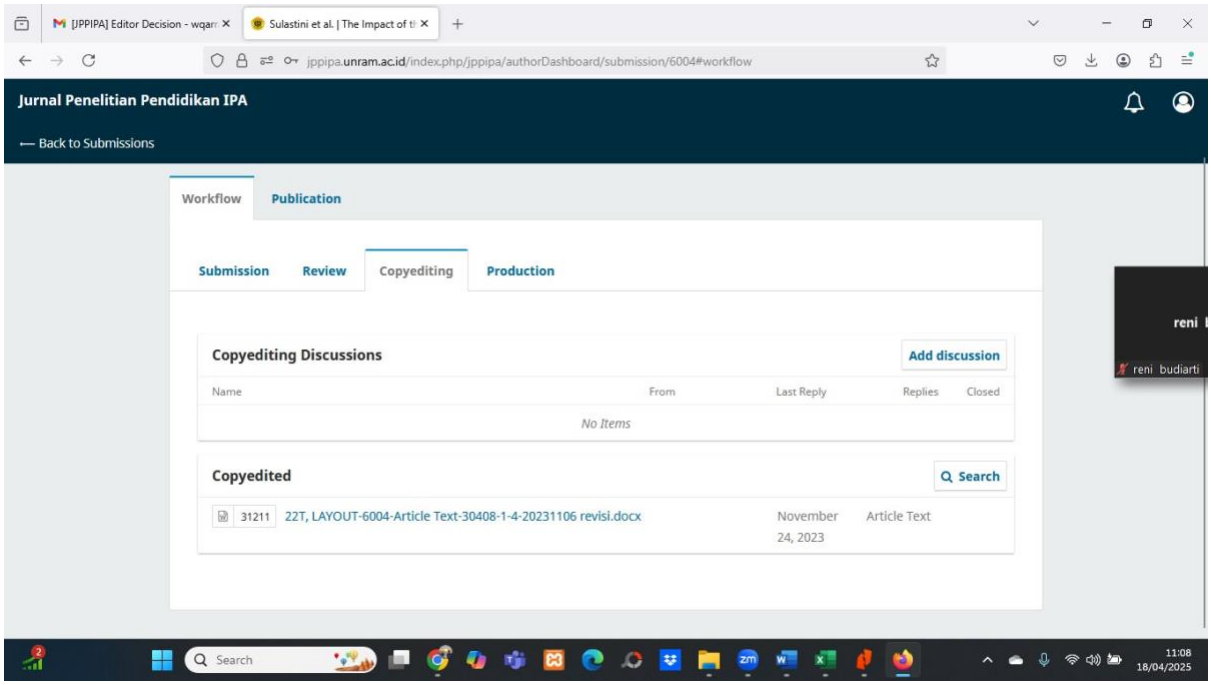
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The Impact of the Intranatal Edu Application on Skills for Assisting in Childbirth

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Study source indicated that learning media is a crucial instrument employed by educators to facilitate effective learning. Media refers to any form of communication that is utilized to transmit messages from the presenter to the recipient, with the purpose of stimulating the intellect, emotions, focus, and curiosity of students in order to facilitate the process of learning (Hasan, 2021). Educational media refers to a tool or method employed to enhance the process of learning and aid pupils in comprehending concepts or subjects with more ease and efficacy (Amulistia, 2023). According to the above problem description, a concrete solution is required, and the only one with an Android-based learning media is to solve the issue. Android is a Linux-based touch-layer operating system for smartphones and tablets. However, as it developed, Android became into a platform that innovated incredibly quickly (Siddiq *et al.*, 2023). Additionally, this application includes a learning video that, based on certain investigations, has been shown to have an impact on students' abilities, particularly in the skill lab. Because the video is difficult for students to understand if they only watch it during a teacher demonstration in the lab, they can watch it multiple times until they comprehend the lesson's content (Choeron and Metrikayanto, 2022). As might be expected, the intranatal education application works well against students' abilities to support childbirth through actions.

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Standard Deviation	3.68	4.38

Research on the The Impact of the Intranatal Edu Application on Skills for Assisting in Childbirth on September , 2023. The student's overall skill grade in the second grade of maternity assistance prior to receiving the Intranatal Edu application was 2643.75, with an average score of 44.06 and a range of scores between 36.46 and 53.13. The cumulative score of student abilities in the Second grade of paternity assistance, following the implementation of the Intranantal Edu application, was 4255.21. The average score was 70.92, with a minimum score of 61.46 and a maximum score of 79.17. The findings of this study align with those of (Setiawaty *et al.*, 2022) on the development of STEM learning based on Android to enhance students' logical thinking abilities. In that study, the average pretest score for students' thinking skills was 27.04, while their posttest score of 73.5 showed a considerable increase in thinking skills. Similarly, the average score on the pretest and posttest has increased, according to Buhari's research on the Effectiveness of the Application of Android Applications on Laboratory Skills Learning Outcomes (Buhari and Sari, 2022). Furthermore, Milton conducted a study which revealed a notable disparity in the average score before and after the implementation of the Oral Clinical Case Presentation skills application for Nursing Students (Milton

et al., 2023). Anderson's Bloom Taxonomy theory, as described in Cressa (2023), categorizes cognitive processes into six distinct levels: remembering, understanding, applying, analyzing, evaluating, and producing. To acquire knowledge about the Period II intranatal, the researcher restricts this study to the level applying.

The Kolmogorov-Smirnov Test using a single sample is used in this study to determine whether the Pre-test and Post-test data are normal. This test determines whether to proceed with additional analysis on the examination of data pairs or to apply the Independent Test of T-test samples. When the data are regularly distributed, t-test samples make sense; when the data are not, Wilcoxon tests make more sense. The pre-test data distribution is not normally distributed, as indicated by the p-value or Asymp. Sig. (2-tailed) in the Pre-test normality test table, which is 0,021 < 0,05, indicating that H0 is rejected. Nonetheless, a p-valued or ASYMP can be found in the Post-Test normality testing table. Because some of the data results in this study do not fit into a normal distribution, the T-test independent test is not appropriate for usage. Therefore, to ascertain whether there is a difference between the values on the Pre-test and the Post-test, advanced analysis employs Wilcoxon tests. The results of the rank table values are displayed in this test. This table lists the differences between data pairs, or in this example, the differences between the pretest and posttest data, ranked from least to greatest (or similarly, depending on the test).

The rankings of the comparison between the Pre-test and Post-test values on the output table ranks are summarized here. A sample with a post-test value less than the pre-test group values is said to have negative ranks; in this instance, there are 0 samples. Samples with positive ranks have post-test values that are greater than the values of the prior test groups. There are 60 samples in the sample in this instance since there are none whose post-test value is greater than that of the previous test group. When there are ties, it indicates that the group values from the pre- and post-tests are the same. The Wilcoxon test table will be displayed after we have knowledge of the rank table's outcome. The Wilcoxon test table's outputs for the pre- and post-test values are shown here.

Table 2. Wilcoxon tes

Test Statistics[a]	
	PostTest - PreTest
Z	-6.739[b]
Asymp. Sig. (2-tailed)	0.000

Based on the Wilcoxon test table, it can be inferred that there is a difference between the pre- and post-test since the p-value, or asymptotic significance (2-tailed), is 0,000 < 0,05, indicating that H0 is rejected. The average score for the broad description of students' labour assistance skills prior to the application was 44.06. The second stage, which had thirty-two phases, was where the talents were tested. However, following the application's use, the student's skill score rose to 70.92.

Learning media software has evolved to become more sophisticated and diversified with the times. the speed at which information technology is developing and the volume of digital information available. Smartphones running Android also facilitate easy access to that data. It is anticipated to move educational processes and materials in a dynamic, digital direction, enabling easy online and offline access to science without being limited by time, money, or location (Indahsari *et al.*, 2023), some research on Android applications can also increase learning motivation, such as Khoiorni's research on developing media applications in chemistry (Khoiorni, Priatmoko and Prasetya, 2023). An investigation on curriculum development revealed that educators should possess a proclivity for technology, a

propensity for collaboration, and a penchant for creativity. Research has also discovered that schools and instructors must take into account open learning platforms when selecting teaching approaches (Lase, 2019).

Nursing students are required to acquire the skill of assisting with childbirth as part of the maternity nursing course in semester III. This course covers childbirth material, which is divided into Periods I-IV. On this topic there are theoretical and practical achievements, of course it requires effective learning methods and learning media so that it is hoped that students can review it again after the lecture is finished. Stage II commences with the complete dilation of the cervix and concludes with the delivery of the child. Stage III spans from the expulsion of the fetus to the delivery of the placenta. Stage IV denotes the postpartum recovery phase, which is a critical stage for identifying potential difficulties. Postpartum hemorrhage can manifest as abnormal bleeding following childbirth (Fauziah, 2015; Casmana et al., 2020).

In his research on the Android application, (Qarragita *et al*., 2023) claims that there is a correlation between enhanced understanding of the Operational Standard of Intranatal Procedures and that the built Android application can improve knowledge of birthing. According to (Ntobuo *et al*., 2023) study on Android Implementation to Improve Students' Motivation and Learning Outcomes, the results stated that this android media can improve motivation and learning outcomes on temperature and calorie materials, Additionally, according to (Kusumawardhani and Khery, 2017), using audio-visual content based on Android can increase students' motivation to learn, the same as (Aida *et al*., 2022) claimed that the application of learning media games on android is interesting for students, proven by the results of the tests carried out by obtaining the appropriate criteria. Additionally, studies on mobile learning reveal some significant outcomes for the incorporation of mobile technology into the classroom, including enhanced student perception, easier concentration for students, flexible access to m-service for learning resources, and improved student proficiency with mobile technology for e-learning (El-sofany *et al*., 2020). Android-based smartphones not only operate as communication tools, but can be utilized as learning material (Ismanto et al., 2017). Users of mobile learning apps can feel content and at ease when engaging in constructive activities with the app (Casmana et al., 2020). The study conducted by Son examined the influence of Android-based learning media on student learning outcomes. The findings indicate that the utilization of Android app-based learning media has a significant impact of 60.16% on students' learning outputs (Putra et al., 2017).

The application additionally incorporates video demonstrations that adhere to the established protocols used in on-campus laboratories. Specifically, there are four movies provided for each phase of the delivery process. Learning films offer numerous advantages for students, encompassing the ability to stimulate their knowledge, cultivate logical, analytical, creative, and effective thinking skills, enhance their creativity, and provide an enjoyable learning experience (Arrohman et al, 2021). Numerous empirical investigations examining the utilization of films as an instructional tool have consistently demonstrated their positive impact on educational achievements, encompassing. The utilization of video media in the learning process holds potential benefits in enhancing students' comprehension of lesson material and evaluating the efficacy of their educational journey. The research findings indicate a substantial disparity in learning outcomes between students who engage in learning activities incorporating video media and those who do not (Mujtahid, 2022). Similarly, in a study conducted by Laraeni on the utilization of video media in enhancing the proficiency of cadres in assessing the weight of toddlers, the findings indicated a significant impact of video media on the skills of cadres in this particular task (Laraeni *et al*, 2022). Similarly, a study was conducted to investigate the impact of videos on mothers' knowledge and proficiency in managing choking episodes in infants. The findings of this study indicated that the provision of educational content through video media had a significant influence on mothers' knowledge and skills in this domain (Meilani and Fitriana, 2023).

Conclusion

After the study was conducted with the Intranatal Edu application intervention, there was an increase in skill scores before and after using the application. The Wilcoxon test results yielded significant findings, indicating that the null hypothesis can be rejected, that there is a difference in students' childbirth assistance skills at pretest and posttest skills.

Author Contributions

The roles of the authors in this research are divided into executor and advisor in this research.

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Conflicts of Interest

The authors declare no conflict of interest.

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4. Bukti konfirmasi artikel accepted

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Title	:	The Impact of the Intranatal Edu Application on Skills for Assisting in Childbirth
Decision	:	ACCEPTED
Date	:	November 11, 2023

The paper with the title above will be published in **Volume IX Issue 11, November 2023**

Thank you for your attention and cooperation.

Mataram, November 11, 2023
Editor in Chief

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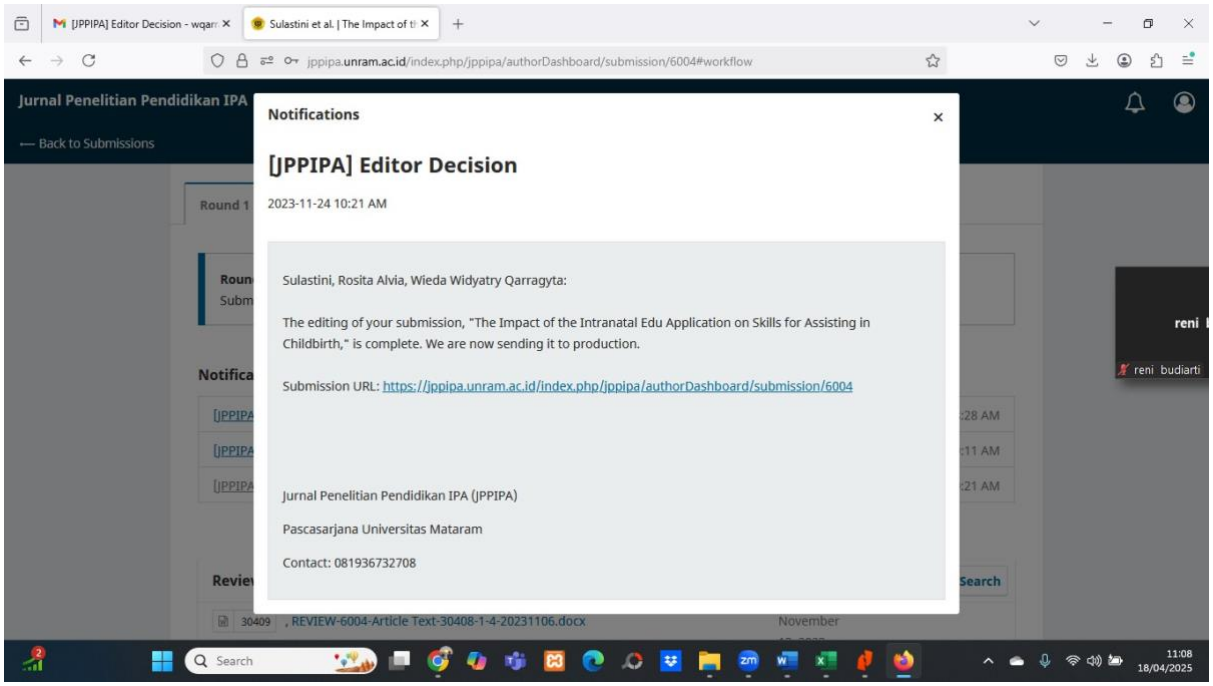

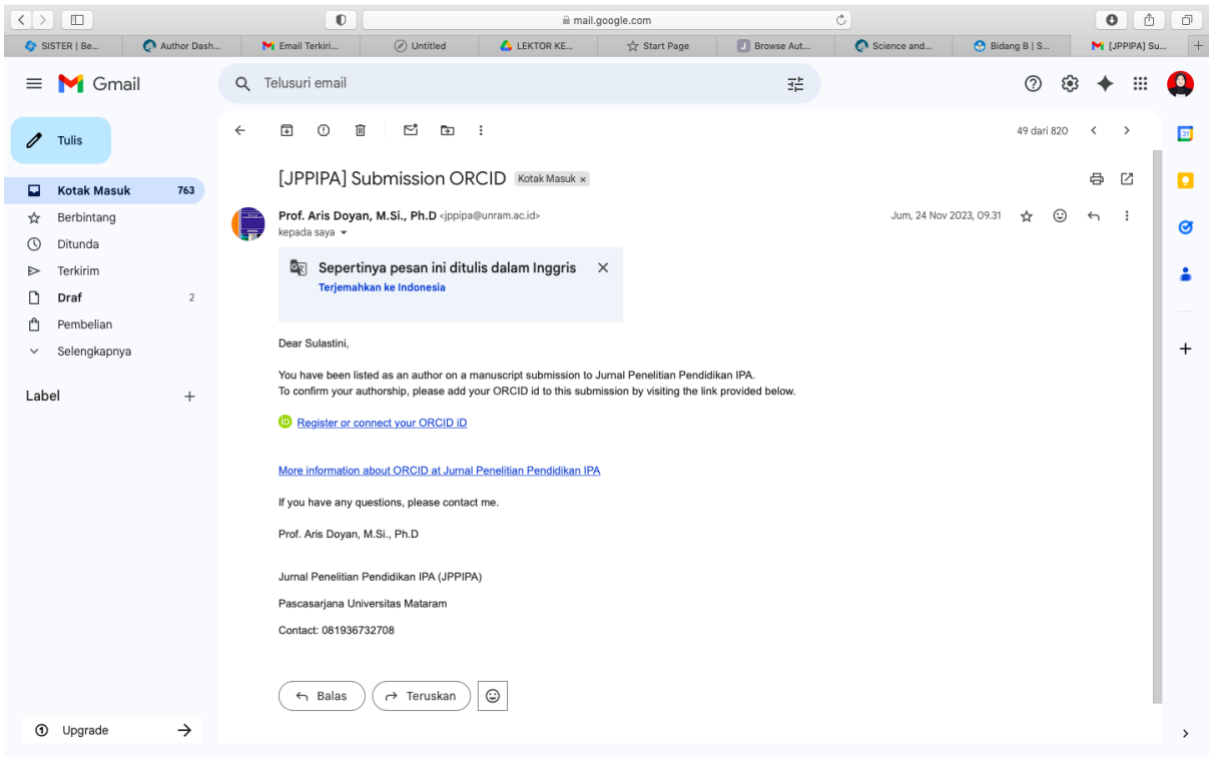
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