



Research Article

Effectiveness of SKATA Application on Women's Intention in Family Planning Services

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ABSTRACT

Family Planning services during the pandemic are important to modify services and consultations from face-to-face to online services using the Skata Application. Hopefully, Family planning services will run to increase the amount of family planning services to reduce the number of births and impact of baby booms. The aim of this study was to see the effectiveness of the Skata Application on the intention of women in the use of family planning in Indramayu. This study uses an instrument developed by the researchers themselves, namely from the idea Planned Behavior instrument by Icak Ajzen in 2019. The research method is a quasi-experimental posttest control group design, the population is women in Indramayu which has been selected by simple random sampling technique totaling to 83 women who were divided into 2 experimental groups (n=42) and control groups (n=41). The results showed of the Mann Whitney statistical test obtained a p-value of $0.00 \leq 0.05$ which indicated that H_0 was rejected. Thus there's a difference within the intention of women in the use of Family Planning between the experimental group and the control group. So that nurses and the people can use the Skata Application as an education's alternative and consultation on family planing and contraceptive methods in women of childbearing age.

INTRODUCTION

Implementation of family programs planning during the Covid-19 pandemic experienced a

number of obstacles However still must walk in accordance planning (BKKBNa, 2020). Counseling is carried out usually through look

at advance become hampered Because existence restrictions go out House so that number family program achievement planning no fulfilled.

Application Skata answer challenge innovation for reach public wide through online (Heriyanto, 2016), improving the reach of family planning efforts makes it possible to share family planning information with the public without limitations of distance and time (Nawir, 2017).

The family planning service program planned during the pandemic encountered several obstacles. First, the number of family planning acceptors stagnated, indicating that contraceptive use and family planning needs were not being met adequately at the district and city levels. This was due, among other things, to disparities in the implementation of the family planning program, which resulted in some community groups being denied their rights (Yudistira Imandiar, 2020). Second, varying levels of commitment between districts and cities, even leading to frequent stockouts, impacting the availability of health and family planning services. Furthermore, social, cultural, and economic factors also impact access to family planning services (BKKBN, 2020). Third, the difficulty of accessing family planning services during the pandemic, which is limited by Large-Scale Social Restrictions, making people afraid to leave their homes, especially to go to health services (Manrique De Lara & De Jesús Medina Arellano, 2020) and prohibitions on leaving the house (Sharma et al., 2020). However, by staying at home, the intensity of meeting with partners will be more frequent and have more free time, thus triggering the need for marital relations (Diamond et al., 2020). Fourth, family planning services have so far relied on face-to-face socialization, counseling, and the provision of contraceptive services, so that during the Covid-19 pandemic, face-to-face services were ineffective (Anna, 2020). From these problems, it is important to change services from face-to-face to online so that fertile couples can continue to carry out and receive

information on family planning and contraceptive methods.

Application Skata is also a application appropriate for PUS at the time This see from user smartphone that already evenly good in society city and village (Hartanti, 2019). Data on smartphone users in Indonesia itself reaching 167 million people in meaning 89% of the total population in Indonesia (Ministry of Communication and Information, 2021). Application Skata Already introduced in 4 Provinces from 2016 through PLKB and made material education about planning family and methods contraception (Hartanti, 2019), however with Not yet evenly his use application Skata throughout Indonesia then during the pandemic This BKKBN is trying FOR introduce application This to all over public as effort make the KB program a success (BKKBN, 2021b). Application Skata Alone not yet implemented in the Regency Indramayu so that in matter This need done study related effectiveness his moreover formerly.

According to (Icak Ajzen, 2005) There is variable external influences intention in a way No direct. Variable external the can in the form of age, type gender, ethnicity, religion, education, personality, information media and also intervention to individual in the research This researcher take related to one of the from underlying factors namely information media Because in line with development of the times that the more come here man many use online information media. According to this theory, intention is the closest determinant that describes behavior. This intention shows how hard an individual tries to display a behavior (John & Leigh, 2018).

Starting from the Theory of Planned Behavior (TPB) which states that intention is a direct determinant of behavior, it can be concluded that individual behavior can be seen from how big their intention is. Similarly, in this study, if a woman of childbearing age has the intention to follow family planning, then the woman will visit a family planning service. Other studies explain that attitudes have a

strong relationship with behavior, while intention is the main predictor of behavior (Riebl, Estabrooks, Dunsmore, Frisard, 2015). As an effort to improve family planning services during the pandemic, it is important to modify services and consultations from face-to-face to online services with the Skata Application with the hope that family planning services will continue to run so that they can increase the number of family planning services in limiting the number of births and reducing the impact of baby booms. In additions Not yet existence study about use application Skata with thus researcher do study about Effectiveness Application Skata to Women Intention in Service Family Planning.

METHOD

This Study use design study quantitative that is method quasi-experimental. This study uses an instrument developed by the researchers themselves, namely from the idea Planned Behavior instrument by Icak Ajzen in 2019. The population is women in Indramayu which has been selected by simple random sampling technique totaling to 83 women who were divided into 2 experimental groups (n=42) and control groups (n=41). The goal is is for know whether application Skata own influence to Women's Intentions for access service family planning. The type of research used is Post-test Only Control Group Design, group experiment and group control chosen in a way random. In the study This group experiment use application Skata while the control group used tool help family decision making planning that has been used in Health services.

RESULTS

Respondent data characteristics aiming for give description about object study based on the data and variables obtained from group subjects studied. Respondent data characteristics are needed to find out information about the respondent's background. This information can be used as

material to explain the research results obtained. The following is a descriptive respondent from the research results that have been processed.

Table 1 Characteristics of Respondent Data in the Intervention Group (n=42) and Control Group (n=41)

Characteristics Respondents	Group Intervention		Group Control	
	f	%	f	%
Age				
15-19 years	1	2.3	3	7.3
20-35 years	30	71.5	31	75.6
36-45 years	11	26.2	7	17.1
Religion				
Islam	42	100	39	95.1
Christian			2	4.9
Education				
Low	9	17.0	5	12.2
Intermediate	9	39.1	23	56.1
High	24	43.9	13	31.7
Work				
Employed	19	43.9	19	46.3
Unemployed	23	56.1	22	53.7

Based on Table 1 shows that almost all over Respondent religious Islam group intervention 100 while Christian in the group control as much as 4.9%. Most of be in range age 20-35 years or in the range age reproduction Healthy good in group intervention 71.5% and in the group control 75.6% with own history education high in group intervention 43.9% and medium as much as 56.1% in the group control. Employment status was equally large in the intervention group (56.1%) and the control group (53.7%).

Univariate Analysis

Table 2 Description of Women Intentions family planning in Indramayu Regency in the Intervention Group (n=42) and Control Group (n=41)

Category	Intervention		Control	
	f	%	f	%
Intention				
Weak			11	26.8
Strong	42	100	30	73.2
Total	42	100	41	100

From table 2 we can see concluded that of the 42 respondents who used application Skata there is in the intention strong by 100% and the intensity weak is in the use of ABPKB as much as 26.8%

Table 3 Description of Intention, Attitude Toward Behavior, Subjective Norm and Perceived Behavioral Control of WUS in the Regency Indramayu in Group Intervention (n=42) and Group Control (n=41)

Category	Group Intervention		Group Control	
	f	%	f	%
Intention Desire Expectation				
Weak			11	26.8
Strong	42	100	30	73.2
Attitude Toward Behavior				
Favourable	42	100	34	82.9
Unfavourable			7	17.1
Subjective Norm				
Good	38	90.5	30	73.2
Bad	4	9.5	11	26.8
Perceived Behavioral Control				
Easy	11	26.2	23	56.1
Not easy	31	73.8	18	43.9

Based on table 3 can showed that in the group intervention *intention, desire and expectation* show results strong by 100% also *attitude toward behavior* in user application Skata show *favorable 100%* The *subjective norm* item shows Good of 90.5% while in the *perceived behavioral control* item show No easy by 73.8%. in the group control show results the same with group intervention only on the *perceived behavioral control* item shows easy as much as 56.1%.

Table 4 Description of Intention Based on Respondent Characteristics of Skata Application Users (n=42) and ABPKB (n=41)

Category	Group Intervention				Group Control			
	Strong		Weak		Strong		Weak	
	f	%	f	%	f	%	f	%
Age								
15-19 years	1	2.4	-	-	1	4.1	2	4.9
20-35 years	30	95.2	-	-	19	46.3	12	29.2
36-49 years	11	26.2			4	9.7	3	7.3
Religion								
Islam	42	100	-	-	28	68.3	11	26.8
Christian	-	-	-	-	2	4.9		

Category	Group Intervention				Group Control			
	Strong		Weak		Strong		Weak	
	f	%	f	%	f	%	f	%
Education								
Low	9	21.4	-	-	1	24.3	4	9.7
Intermediate	9	21.4	-	-	15	36.6	8	19.5
Tall	24	57.2	-	-	8	19.5	5	12.2
Work								
Doesn't work	19	45.2	-	-	10	24.4	8	19.6
Work	23	54.8	-	-	14	34.1	9	21.9

Based on table 4 is obtained results that intention strong be in range age 20-35 years that is by 95.2%. Most respondents diverse Islam both in groups 100% intervention or group control 68.3% and intention the strongest be in education high in group intervention as much as 57.2% but in the group control be in education medium 36.6%. While intention based on employment status more high in working mothers group intervention by 54.2% and the group control by 34.1%.

Bivariate Analysis

Mann Whitney Test Results Effectiveness Application Skata to Intention in Group Intervention (n=42) and Group Control (n=41)

Category	N	p-value
Post Test Results	42	0.000
Group Intervention	41	
Group Control		

In the table on show that there is difference between group intervention with using application skata and group control with using the visible ABPKB from significant value because in the *Mann Whitney* test obtained results *p-value 0.000* or *p-value < alpha* which indicates that H_0 is rejected which means that Application Skata influential to WUS intention in family planning.

DISCUSSION

Intention is a form of a person's readiness to behave. While application SKATA is A designed application for make it easier public in choose method contraception and doing

future planning. Success A application education planning family and methods contraception can it is said effective if there is change or update in A behavior become more good. Likewise in matter This seen from strong A intention in family planning after given treatment use application Skata.

From the results study This can seen that Respondent group interventions that have strong intention by 100% and the group control by 73.2% besides it is also there intention weak in group control by 26.8%. Based on results study the the more strong intensity, the more big possibility individual for display a behavior. This is means that WUS who have strong intention For family planning own possibility big will display behavior Meanwhile , WUS who have weak intention For family planning own possibility small will display behavior In WUS who have intention weak , partial big have this thing in line with research that has been carried out by (Natasya et al., 2017) who stated that individual can utilise available information in a way rational and systematic For carry out intentions and behavior .

Intention strong in group intervention be in range age 20-35 years 95.2% as well with intention strong group control be in range age 20-35 years 46.3% which means that use application Skata influence intention family planning part big at the age of 20-35 years , in study (Lazuardi et al., 2021) that age in a way significant related with participation family planning after utilise application Skata whereas in unmet you need regular family planning occurs in women 35 years old and above (Listiyarningsih et al., 2016). Research results This show that with use application health must to consider need WUS information according to with age so as not to There is wrong information.

Intention strong group intervention be in education high 57.2% and in the group control intention tall be in education intermediate as much as 36.6% while intention weak be in education low and medium by 21.4 % This in line with study previously stated that utilization *m-Health* This be in the background

behind education high (Sariyati , et al., 2015). WUS who work more strong intention his (56.1%) compared to with the not work, thing This No in line with research conducted by Panutun (2009) which stated that *m-Health* utilization more big in women who don't Work or IRT. In addition , WUS who work more many want limit birth compared to with the not Work (Sari et al., 2020) . From the results study This means that good for WUS who work and No Work must introduced related with application Skata so that with this WUS can utilise family planning services for limit birth.

A other research explains that characteristics or demographics influence on intention somebody although seldom included in study correlational (Victor Yu et al., 2013). In special, type gender, age and level education has proven own relationship on intention somebody for look for maintenance health (Duncan et al, 2009).

Intention family planning program is also possible influenced by several factors that are merger from factors that influence intention that is *subjective norms p-value 0.000, attitude toward behavior p-value 0.000 and perceived behavioral control p-value 0.000*. The results are state that part large WUS that have strong intention like behavior said, perceiving that people are important in his environment agree if WUS displays behavior and perceive it himself capable for display behavior family planning. This is in line with research that has been done by (Putri, 2018) in his research states that that attitude (0.006), subjective norm (0.002) and control behavior (0.012) has an effect to intention undergoing family planning. Other studies state that perception attitudes and subjective norms of KB acceptors are influenced by experience personal and other people as well motivated by the closest people like husband (Boyoh et al., 2017; Septiyanti, 2009)

Other studies state that that when individual to form intention , individual estimate how much big control owned to behavior and predicting constraints perceived by

individuals hinder his behavior (Koch & Weber, 2017). Attitude to behavior will lead to consequences specific and assessment individual to the consequences that will occur happen (Jadhav et al., 2018). Confidence about consequence behavior formed based on knowledge individual about behavior that is obtained from past experience (Busu & Busu, 2021). So you can concluded that intention influenced by positive attitudes, supportive subjective norms and also perceptions control positive behavior with Thus WUS can planning future family planning programs.

The results of data analysis with using the *Mann Whitney* test obtained results significant with mark *p-value* $0.000 < 0.05$ which indicates that H_0 is rejected. This is can also be influenced by determinants within oneself Alone like *attitude toward behavior, subjective norms and perceived behavior control* or influence other *background factors* such as personal and social. This is in line with other research states that giving promotion health give significant influence to improvement intention in prevent relapse (Prastowo et al., 2018). Other studies also state that that promotion health with interesting media can increase intention (Ansari et al., 2020). So that can concluded that use application Skata can increase WUS intention to family planning Where officer health can utilise application Skata as an educational medium to public for do planning family.

This TPB model can applied in field useful nursing for understand Intention on WUS in KB. Opinion This in line with an idea put forward by Lewis (1982) who views that action model reasonable from Fishbein and Azen next developed by Ajzen into a behavioral model planned which is one of the models that can used for understand and predict behavior compliance patient or also behavior other.

Based on results study against WUS stated that during This most from WUS in look for know information and also consult about KB with officer health in a way look at face.

However with use application WUS word can consult online with officer health or for look for know about contraception and planning family that must prepared for increase degrees well-being and health family. This can increase WUS knowledge and enable WUS to carry out family planning.

Thus, from the description above, it can be explained that family planning education and contraceptive methods using the Skata application have an effect on generating family planning intentions in PUS in Indramayu Regency. This is shown based on post-test analysis data using the *Mann Whitney Test* with a *p-value* of $0.000 < 0.05$, so H_a is accepted and H_0 is rejected.

CONCLUSIONS AND RECOMMENDATION

1. The Skata application is an internet-based smartphone application that can be used for contraception education and family planning. In addition, in the Skata application we can see what stage of life we are in and we can also see several health articles. The advantages are complete, clear and easy-to-obtain information, the additional features are interesting to share with friends and reduce concerns about side effects because information about the side effects of using contraception is available.
2. The large number of women of childbearing age who use smartphones in Indramayu is one of the reasons why the Skata application can be used by women of childbearing age as information and education material to increase family planning intentions and the use of contraceptives.
3. women of childbearing age in the intervention group had a strong intention of 100% and weak intention in the control group of 26.8%. From the results of the *Mann Whitney test*, the *p-value* was $0.000 < 0.05$, which showed that H_0 was rejected, meaning that the Skata Application had an effect on women of

childbearing age's intention to use family planning.

4. The age of respondents who have strong intentions is in the age range of 20-35 years with higher education and working women of childbearing age so that the Skata application can be maximized in its introduction to women of childbearing age of other reproductive ages, women of childbearing age who are not working and those with secondary education or below

REFERENCES

- Anna, L. . (2020). Penggunaan Kontrasepsi Turun Drastis Selama pandemi. Kompas. <https://lifestyle.kompas.com/read/2020/06/12/203738420/penggunaan-kontrasepsi-turun-drastis-selama-pandemi?page=all>.
- Ansari, R., Suwarni, L., Selviana, S., Mawardi, M., & Rochmawati, R. (2020). Media Komik Sebagai Alternatif Media Promosi Kesehatan Seksualitas Remaja. *Jurnal Ilmiah Kesehatan*, 19(01), 10–14.
- BKKBN. (2020). Data Penggunaan Alat Kontrasepsi.
- BKKBN. (2021). KEPALA BKKBN: MEMBANGUN SISTEM DAN KEBIJAKAN YANG TEPAT KUNCI SUKSES PELAYANAN KONTRASEPSI. Website BKKBN. <https://www.bkkbn.go.id/detailpost/kepala-bkkbn-membangun-sistem-dan-kebijakan-yang-tepat-kunci-sukses-pelayanan-kontrasepsi>
- Boyoh, N. S., Yauri, I., & Sumenge, D. (2017). Eksplorasi Intensi Pasangan Usia Subur Untuk Menjadi Akseptor KB di Kecamatan Kema Kabupaten Minahasa Utara. 1(2), 329–336. <https://doi.org/10.31219/osf.io/gt4yu>
- Busu, C., & Busu, M. (2021). Research on the factors of competition in the green procurement processes: A case study for the conditions of romania using pls-sem methodology. *Mathematics*. <https://doi.org/10.3390/math9010016>
- Diamond, R. M., Brown, K. S., & Miranda, J. (2020). Impact of COVID-19 on the Perinatal Period Through a Biopsychosocial Systemic Framework. *Contemporary Family Therapy*, 42(3), 205–216. <https://doi.org/10.1007/s10591-020-09544-8>
- Hartanti, N. Y. (2019). Aplikasi SKATA Solusi Tepat Guna Bagi Pasangan Muda Indonesia. <http://suarapatinews.com/index.php/2019/12/07/aplikasi-skata-solusi-tepat-guna-bagi-pasangan-muda-indonesia/>
- Heriyanto, T. (2016). Skata, Aplikasi Untuk Perencanaan Keluarga. *Pantura News*. <http://www.panturanews.com/index.php/panturanews/baca/13374/13/04/2016/skata-aplikasi-untuk-perencanaan-keluarga>
- Icak Ajzen. (2005). Explaining the Discrepancy Between Intentions and Actions: The Case of Hypothetical Bias in Contingent Valuation, University of Massachusetts.
- Jadhav, V., Raman, S., Patwa, N., Moorthy, K., & Pathrose, J. (2018). Impact of Facebook on leisure travel behavior of Singapore residents. *International Journal of Tourism Cities*. <https://doi.org/10.1108/IJTC-06-2017-0032>
- John W., S., & Leigh T., W. (2018). Theory of Planned Behavior. In *Mastering Physician Engagement*. <https://doi.org/10.1201/9781315367279-3>
- Kemenkominfo. (2021). Data Penggunaan Smartphone.
- Koch, S., & Weber, A. (2017). Zur Intention eines akademischen Studiengangs zum Notfallsanitäter: Die Theorie des geplanten Verhaltens nach Icek Ajzen im empirischen Test. *Notfall Und Rettungsmedizin*. <https://doi.org/10.1007/s10049-016-0186-1>
- Lazuardi, L., Ilmu, P., Masyarakat, K., Kedokteran, F., Masyarakat, K., Mada, HealthCare Nursing Journal, Vol 8 No 1 | 243

- G., Ilmu, P., Masyarakat, K., Kedokteran, F., Masyarakat, K., & Mada, G. (2021). mHealth intervention to knowledge level and family planning participation of unmet need women in Sleman District : Randomized Controlled Trial (RCT). 6(2).
- Manrique De Lara, A., & De Jesús Medina Arellano, M. (2020). The COVID-19 Pandemic and Ethics in Mexico Through a Gender Lens. *Journal of Bioethical Inquiry*. <https://doi.org/10.1007/s11673-020-10029-4>
- Natasya, B. S., Yauri, I., & Sumenge, D. (2017). Eksplorasi Intensi Pasangan Usia Subur Untuk Menjadi Akseptor KB Di Kecamatan Kema Kabupaten Minahasa Utara. *PROSIDING Seminar Nasional Tahun 2017* ISBN: 2549-0931, 1(2), 329–336.
- Nawir. (2017). Skata Bantu Anda Rencanakan Masa Depanmu. Pemerintah Kabupaten Bulukumba. <https://bulukumbakab.go.id/rubrik/skat-a-bantu-anda-rencanakan-masa-depanmu>
- Prastowo, I. B., Widodo, A., & Kep, A. (2018). Promosi Kesehatan Untuk Mengetahui Perubahan Intensi, Efikasi Diri, Dan Norma Subjektif Untuk Mencegah Pemasangan Pada Anggota Keluarga Yang Mengalami Gangguan Jiwa Pasca Pasung Di Kabupaten Sukoharjo. Universitas Muhammadiyah Surakarta.
- Putri, A. P. (2018). Identifikasi Perilaku Pasangan Usia Subur Terhadap Keikutsertaan Program Keluarga Berencana Dengan Pendekatan Teori Perilaku Yang Terencanakan (Theory Of Planned Behaviour). *Interest: Jurnal Ilmu Kesehatan*, 7(1), 6–14.
- Riebl S.K., Estabrooks PA., Dunsmore J C., Frisard, et al. (2015). A Systematic Literatur review and Meta Analysis: The Theory of Planned Behavior's application to understand and predict nutrition related behavior in youth. *Eating Behaviors*, 160–178.
- Sari, U. M., Koroy, T. R., Fahrianta, R. Y., & Oktriyanto, O. (2020). PERAN TINGKAT INTENSI MEMILIKI ANAK SEBAGAI DETERMINAN KEBUTUHAN KELUARGA BERENCANA YANG BELUM TERPENUHI. *Jurnal Keluarga Berencana*, 5(2), 21–32.
- Septiyanti, N. H. (2009). PERSEPSI, SIKAP, DAN NORMA SUBJEKTIF TERHADAP KB KONTRASEPSI MANTAP (Penelitian Komparasi pada Suami Akseptor KB Kontap dan Suami Bukan Akseptor KB Kontap di Kecamatan Bulu Kabupaten Rembang).
- Sharma, K. A., Zangmo, R., Kumari, A., Roy, K. K., & Bharti, J. (2020). Family planning and abortion services in COVID 19 pandemic. *Taiwanese Journal of Obstetrics and Gynecology*, 59(6), 808–811. <https://doi.org/10.1016/j.tjog.2020.09.005>
- Yudistira Imandiar. (2020, June 6). BKKBN Gencarkan Sosialisasi Cegah Lonjakan Kehamilan di Masa Pandemi. *Detik News*. https://news.detik.com/berita/d-5067748/bkkbn-gencarkan-sosialisasi-cegah-lonjakan-kehamilan-di-masa-pandemi?_ga=2.191201578.168676478.1593127331-1979682487.1590992705
- Prolanis (Program Pengelolaan Penyakit Kronis) dengan Tingkat Efikasi Diri Pasien Diabetes Mellitus Tipe 2 di Puskesmas 1 Kembaran. *Muhammadiyah Journal of Geriatric*, 1(2), 33. <https://doi.org/10.24853/mujg.1.2.33-39>