

Effect Of A Mobile Application Intervention On Knowledge, Attitude, And Practice Related To Marital Satisfaction Among Youth

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ABSTRACT

The divorce rate in Indonesia shows a growing trend every year because of weak family resilience. Typically, government bodies conduct premarital counseling in several religious affairs offices, but it is challenging because of various constraints. With the development in information technology to increase efficiency in counseling, researchers are using mobile applications to increase family resilience through premarital counseling. Therefore, to deal with premarital counseling in Indonesia, we propose a new application approach to increase marital satisfaction. We conduct this study for 60 couples by randomly choosing them to construct a large dataset and produce the outcome. We collected the sample from couples who registered their marriage at the Religious Affairs Office in Sleman Regency, Yogyakarta, Indonesia. To undergo our experiment, we conducted a pre-test and post-test with an Enrich Marital Satisfaction questionnaire to measure the differences before and after intervention with a paired sample $p < 0.05$. Based on the experiment, we conclude that our approach can increase marital satisfaction. Thus, it can be a promising solution to deal with weak family resilience in the modern era in Indonesia.

Keywords: Mobile Application Marital Satisfaction Counselin

1. INTRODUCTION

Almost every civilization has human connections, including formal marriage arrangements between men and women. One of the most important aspects of a happy marriage is a marital pleasure. Because every human being has distinct requirements and expectations for their wedding, contentment is a subjective term. Still, there are a few indications that may be used to measure marital satisfaction in general. Long-distance marriage between husband and wife might affect marital pleasure. Furthermore, current difficulties like communication, sexual life, financial and spiritual fulfillment might be challenging to achieve.

Marriage divorce is a global societal issue with an ever-increasing occurrence rate. In Europe, the divorce rate had grown from 0.8 per 1000 people in 1965 to 2 per 1000 persons in 2012. In the United States, it rose from 2.7 in 2009 to 2.8 in 2012. In Asia, the trend is similar, with 2.5 in 2009 rising to 2.7 in 2011 [1]. According to data from the Indonesian Islamic Courts, the number of divorce cases in Indonesia peaked at 133,000 in 2003, then began to rise in 2004, and has continued to grow since then. Between 2004 and 2009, the number of cases increased at a rate of more than 12% each year, reaching a total of 258,000 cases in 2009[2].

In Indonesia, 36 out of 1,000 young women (15-19 years) gave birth and were at a greater risk of maternal mortality than older women, owing to their reproductive age. According to the review study, higher rates of child marriage are linked to lesser family planning, undesired births, a higher risk of difficulties during childbirth, restricted educational advancement, and the possibility for lower economic income [13]. This issue has been addressed through legislation to prevent children from the marriage. According to the Law, the wedding can take place if the lady is 16 years old and the male is 19 years old, although potentially anybody can marry under the court approves [14][15]

One of the most important aspects of a happy marriage is a marital pleasure. Although happiness is subjective, with particular requirements and expectations for their wedding, we may measure marital satisfaction by analyzing many signs. Commitment, same religious orientation, communication, gender, sexual life, economic, and spiritual factors impact marriage happiness [23]. One of these elements, dissatisfaction, causes a disgruntled husband or wife to experience both and eventually leads to divorce. One of these factors leads to an unhappy husband or wife and, ultimately, divorce. Marriage breakup is a worldwide societal issue with an ever-increasing occurrence rate. In Europe, the divorce rate had grown from 0.8 per 1000 people in 1965 to 2 per 1000 persons in 2012. In the United States, it rose from 2.7 in 2009 to 2.8 in 2012. In Asia, the trend is similar, with 2.5 in 2009 rising to 2.7 in 2011 [1]. According to statistics from the Indonesian Islamic Courts, the number of divorce cases in Indonesia in 2003 was 133,000, and then began to rise in 2004 and has continued to grow since then. Between 2004 and 2009, the number of cases increased by more than 12% per year, reaching a total of 258 issues in 2009[2].

According to current data, there are 70 million households, 20% of which are female heads of household (PEKKA), 43% of whom are not affluent, 9% of whom are impoverished, 10% of whom are elderly, and who have a high divorce rate of about 1,200 per day, or 50 divorces per hour. There are 70 million households, 20% of which are female heads of home (PEKKA), 43% are not affluent, 9% are impoverished, 10% are elderly, and the country has a high divorce rate of about 1,200 per day or 50 divorces per year. The divorce rate in Indonesia continues to rise; for example, over 5.89 percent of married couples divorced in 2015. Divorce rates increased to 6.4 percent in 2020, from 72.9 million households or around 4.7 million couples in 2010 [16]. As a result, a new method is needed to provide young people with more excellent knowledge and literacy before they marry.

The common issues of the marriage problem are economical, low intellectual and social skills, liberal divorce laws, sexual variables leading to incompatibility, role conflicts, drunkenness, abusive conduct, religious components, attitudes, and numerous other factors were examined in

some articles [3]. Early marriage, a lack of education, and poor socioeconomic conditions are the primary causes of marital difficulties in Indonesia [4]. According to data from the 2017 Indonesian health demographic survey, 7% of women aged 15-19 years became moms, with 5% being delivering and 2% being first pregnancy [21]. Early marriage is frequently the result of widespread sexual encounters among adolescents aged 13-14 years, putting them at danger of pregnancy at a young age [22]. Early marriage has been linked to difficulties after childbirth, an increased risk of maternal mortality, poor mental health, and reduced benefits [20]. Furthermore, emotional issues negatively influence children as a result of the father's diminished participation in the home, which can lower living standards [3]. The negative stigma attached to staying in unhappy marriages is a detrimental impact on Indonesiansociety's response to divorce [4].

Divorce rates were more excellent with less education in rural areas [4]. Based on his research, a study found that marrying earlier and later than intended (relative to on-time) resulted in lower mental health and more minor advantages than never matched [5]. Apart from that, divorce has several negative repercussions. Several people involved are experiencing emotional difficulties, and the children are suffering as a result., Reduced living level and diminution of the father's involvement in the family [3]—the impact of marital happiness on children's mental health. Children with intellectual impairments account for one out of every 60 parents unhappy in their marriage [8]. Work activities impact marital satisfaction daily—the lack of full-time employment is related to a greater chance of divorce [6]. Their socioeconomic level and marital happiness predicted domestic violence between intimate partners. It indicates that happy spouses are less likely to have domestic violence, while low-income households can instigate domestic violence against one another [7].

Early marriage before the age of 16 years is the leading cause of marital breakdown in Indonesia. The negative stigma attached to divorce in Indonesian society has caused women to stay in bad marriages [4]. Reports about the adverse effects of divorce are damaging to women's future health. As a result, the Government has tried different methods, such as prenuptial counseling, to enhance married life. Premarital therapy can help a person's capacity to manage their life, flexibility, and emotional management [9]. Premarital therapy is an educational, therapeutic, and preventative approach to marital unhappiness and breakdown that teaches couples how to establish a stable and happy marriage [10].

To improve marital happiness, the Governmentperformed premarital counseling sessions. This therapy aims to strengthencouples' understanding of marriage's purpose, population control, mental health promotion, illness prevention, and health awareness [9]. The program's efficacyis low, such as a declining degree of marital happiness due to the limited time and the quality of the materials [9]. According to a paper, premarital therapy should begin 4-6 months before marriage to optimize the benefit. This counseling should cover communication skills, spiritual direction, financial contentment, and problem-solving abilities [10].

Traditional premarital counseling remainsa problem when the rising divorce rate is caused by limited classes and unreliablecounseling content [9][11]. Conventionally, the agents manually added participants to the Messenger group. The officials conducted premarital counseling into unstructured groups,and the content is compiled into a pocketbook.However, the traditional

method remains a problem when submitting duplicate content due to unreliable participation because all previously stated material is packed into the manual book with anonymous group members. Moreover, they failed to optimize technology-based approaches to establish premarital counseling. To deal with the issues, we present a novel method for evaluating the efficacy of premarital counseling

To construct our hypothesis, we learn the history of premarital difficulties and examine the traditional problem of premarital counseling by analyzing the new approach. Therefore, this study investigates the mobile application intervention on youth's knowledge, attitude, and practice related to marital satisfaction. We adopt a technology strategy to improve family resilience to support the national spousal program in Indonesia.

2. MATERIALS & METHOD

A. Data

To conduct our study, we gathered many partners data in Yogyakarta, known as the city of education. Many people found their life partners through intercultural marriage in the town, which has a diverse population. However, incompatibility, which includes distinct traits, habits, cuisine, and communication, continues to be an issue. By developing online premarital counseling, this study proposes a strategy to dealing with intercultural marriage difficulties. To collect our samples, we send out a survey to the intended respondents via brief messages and wait for answers to meet the desired number of respondents. The sampling method employs a simple random model to choose 60 couples who registered their marriages at the Religious Affairs Office (KUA) based on the following criteria.

B. Methods

1. Inclusion criteria

- a. Couples who registered their marriage at KUA from January-March 2021
 - b. The current marriage age is between 1-3 months
 - c. Never been pregnant
 - d. Now, this is the first marriage for women and men
2. The exclusion criteria in this study are not willing to be a research respondent
 3. The drop out standards in this study are:
 - a. Respondents have not completed all the material on the mobile application
 - b. Respondents did not fill out the evaluation questionnaire

Observation, research documentation, and employing a mobile application to provide treatments are all data collecting methods. The mobile application is used to collect primary data. Counseling is offered to couples who register their marriage at KUA Sleman and is conducted immediately through the mobile application. The validity and reliability test of the Enrich Marital Satisfaction measure was performed in earlier research with a reliability value of 0.86[12].

We do a pre-test with an EMS questionnaire before the intervention. All couples watch videos via the mobile application for three days in a row about:

1. Marital and reproductive health.
2. Effective communication in family life.
3. Financial planning for a new pair.
4. Sexuality health was seen from the neuroscience aspect.

To analyze the mobile application intervention related to marital satisfaction among youth, we undertake a questionnaire to ensure that everyone understands the subject. In this experiment, we utilize the EMS questionnaire model to conduct a post-test to determine the couple's contentment with their marriage. We employ the methods to optimize the participants' role in filling the questionnaire to produce a significant result in the premarital analysis.

C. Statistical Analysis

The statistical comparison was made with the SPSS program version 17, and a significance level of $P < 0.05$ was considered significant. The two groups were described using descriptive statistics such as central tendency, dispersion, and frequency distribution. The repeated measures method was used to compare the marital satisfaction levels before and after the intervention. Independent t-tests were used to compare other quantitative variables. The Shapiro-Wilk test was performed to determine if the participants' distribution was normal. Before, after, and two months after the intervention, a paired sample t-test was used to compare marital satisfaction levels in each group. An independent t-test was used to compare the two groups before, after, and two months after the intervention. For nominal variables like education and employment, the Chi-square test was employed.

D. Ethical Consideration

The study was carried out with the approval of the Respati University of Yogyakarta's research ethics committee. Before starting the study, all of the participants gave informed permission and were told that all of their personal information would be kept private. The researchers made every effort to respect all of the participants' rights.

3. RESULTS & DISCUSSION

Data were collected from 60 individuals in this study. The data was split into two sections. The participants' demographic information constituted the initial element of the study. The second data set came from the TTLS and EMS Scale questionnaires, which were utilized to categorize scale scores (very high, high, low, and very low) and conduct correlational analysis. Participants' age, duration of the marriage, age at marriage, education level, employment position, income, number of children, child age, and living situation are included in the demographic data.

We gather data from respondents whose knowledge and attitudes are indirectly reflected in their interactions with their partners. The vast educational disparity between husband and wife in their married relationship leads to constant disagreements and quarrels. They are unsatisfied with

their relationships as a result of the difficulties. Table 1 divides the characteristics of respondents by age, education, and monthly income to perform our research.

Table 1: Frequency distribution

	Min	Max	Mean	Std. Deviation
Respondent's Age	14 years old	31 years old	20,67	3,117
Educational status	Junior High School	bachelor's degree	2,19	0,571
Monthly Income	Rp. -	Rp. 6.500.000	1,13	0,334
Sex	-	-	1,50	0,505
Employment	-	-	2,71	1,091
Rase	-	-	1,52	0,505

The socio-demographic characteristics of the responden in the field are shown in Table 1. A total of 48 married couples took part in the research, with a 100% response rate. This study gathered data from 48 participants who are lowest age of married couple is 14 years old and the maximum age is 31 years old, with average value is 20,67 (20 years old). The lowest Educational status of participant is Junior High School and the high Educational status is bachelor's degree with average value is 2,19 (High school diploma). The lowest monthly salary participant is Zero salary and the maximum salary is Rp. 6.500.000, with average value is 1,13 (have a monthly salary more minor than the area minimum wage). respondent's average job is part-time (2,71) and have the same culture with their couple's (1,52).

This study aims to see how successful a mobile app intervention is in improving marital satisfaction. This study aims to determine the impact of premarital counseling courses on knowledge, considering the importance of premarital health counseling services, the continuity of marriage, the importance of a healthy generation, the protection of health and family life quality, and the improvement of family resilience. We use a paired sample t-test to see if there is a difference in marital satisfaction before and after the intervention.

Table 2. Table of Different tests for pre-test and post-test score

Level of Pain	n	Mean	P
Pre-Test	30	68.77	>0.05
Post Test	30	80.44	

A prior study looked into how instructional media may impact students' perceptions and provide a variety of learning environments. Its goal is to maintain learning and transfer experiences to long-term memory and modify attitudes. Furthermore, a recent study found that premarital therapy improves human relationships by helping people understand themselves and their partners, clarifying expectations, fostering problem-solving, and comprehending dynamic features before marriage [17].

Table 2 demonstrates that marital satisfaction changed significantly before and after the intervention. The average level of satisfaction has increased both before and after the intervention. With Paired sample T-test, a P-value of 0.05 indicates a significant increase in happiness. We supply workshop videos, associated symbols, materials, and premarital examinations to successfully expand the premarital program utilizing the technology method with the suggested application. According to the trial results, the elements significantly increased their knowledge, attitude, and practice to enhance their insight before marriage. As a result, it may be a promising approach for dealing with premarital problems in the current day.

Our findings are similar to a prior study that used a mobile application to improve youth knowledge of marriage preparation, spouse choosing criteria, marriage proposal questions, and premarital programs using interactive educational material. Based on the findings, the method may increase learning effectiveness by delivering online premarital exams and workshop videos and reinforcing marriage judgment following premarital counseling via the application. The application of our approach has a substantial influence on marital satisfaction [18]. The findings suggest that educational media may successfully affect couples' senses and give broad and up-to-date knowledge. As a result, technology methods to premarital counseling can take advantage of learning stability and transmit expertise more quickly and effectively [19,24].

4. CONCLUSION

The Government provides premarital counseling through the manual model with various difficulties. Thus, it remains numerous restrictions using traditional approaches for many couples seeking premarital knowledge and insight. We suggest a new premarital strategy that promotes learning, life skills, and marriage pleasure to address the challenges. This study analyzes the mobile application intervention on youth's knowledge, attitude, and practice related to marital satisfaction. We used an Enrich Marital Satisfaction questionnaire to conduct pre-and post-tests, using a paired sample t-test $p < 0.05$ to compare marital satisfaction before and after the intervention. This method can help them improve their premarital counseling knowledge, attitude, and practice. According to the trial findings, using technology to address premarital counseling concerns can considerably improve average test results. By evaluating up to 60 couples who satisfied the inclusion and exclusion criteria, mobile applications have proved successful, low-cost, and appealing in promoting marital therapy for young couples. We conclude that using a mobile application can be a promising intervention solution to provide reliable real-time marriage therapy to improve marital satisfaction among youth.

5. ACKNOWLEDGEMENTS

This research is supported by the Ministry of Education and Culture, Research and Technology, Republic of Indonesia.

Ethical approval

Ethical approval was obtained from the Respati University of Yogyakarta. This study followed all relevant ethical standards.

Informed consent: All participants received an explanation about the study and provided informed consent, including signing a consent form. If a participant did not fill out the questionnaire, the authors deleted and excluded those data from the analysis.

Consent for publication: All authors agreed to publish the final version of this study.

REFERENCES

- [1] W. Budiharto, Meliana, and P. C. B. Rumondor, "Counselor: Marital counseling android-based application to promote marital satisfaction," *Int. J. Electr. Comput. Eng.*, vol. 7, no. 1, pp. 542–550, 2017.
- [2] Mark Cammack and Tim Heaton, "Explaining the Recent Upturn in Divorce in Indonesia: Developmental Idealism and the Effect of Political Change," *Asian Journal of Social Science*, pp. 776-796, 2011.
- [3] Lowenstein F. Ludwig. "Causes and Associated Features of Divorce as Seen by Recent Research", *Int Journal of Divorce & Remarriage*, vol 42, No.1, pp. 153-171, 2014.
- [4] WidyastariAnantaliaDyah, IsarabhakdiPimonpan, VapattanawongPatama&Völker Marc. "Marital Dissolution in Postmodern Java, Indonesia: Does Early Marriage Increase the Likelihood to Divorce?" *Int Journal of Divorce & Remarriage*, Vol 61, No. 8, pp. 556 – 573, 2020.
- [5] Carlson L Daniel."Deviations From Desired Age at Marriage: Mental Health Differences Across Marital Status", *Int Journal Marriage of and family* Vol.74 No.4, pp 743 – 758, 2012.
- [6] Killewald Alexandra. Money, Work, and Marital Stability: Assessing Change in the Gendered Determinants of Divorce. 2016 *Int American sociological review* vol 81, Issue 4, 2016.
- [7] M. Hajihasani and T. Sim, "Marital satisfaction among girls with early marriage in Iran: emotional intelligence and religious orientation," *Int. J. Adolesc. Youth*, vol. 24, no. 3, pp. 297–306, 2019, doi: 10.1080/02673843.2018.1528167.
- [8] Md. Aminul Islam, Md. Azibar Rahman, &Sharmin Akhtar "Psychosocial impact of parenting children with intellectual disabilities in Bangladesh," *International Journal of Public Health Science (IJPHS)*, Vol.11, No.1, 2020.
- [9] SahebjanTorkian, FiroozehMostafavi and AsiyehPirzadeh,"Effect of a mobile application intervention on knowledge, attitude and practice related to healthy marriage among youth in Iran," *Journal of Education and Health Promotion*, Vol.9, 2020.
- [10] Ozraet all, "Effect of Premarital Counseling on Marital Satisfaction," *Shiraz E Medical Journal*, 2017.
- [11] Brock, L., &Laifer, M. (2020). Family science in the context of the COVID-19 pandemic: Solutions and new directions. *Family Process*, 59, 1007– 1017.
- [12] Nomejko A, Zygmunt G. The Sexual Satisfaction Questionnaire - psychometric properties. *Polish Journal of Applied Psychology*. 2014;12:105-12
- [13] DewiNuryana, PramonViwattanakulvanid, &Nohan Arum Romadlona"Maternal health services utilization and its contributing factors among adolescent mothers, Indonesia," *International Journal of Public Health Science (IJPHS)*, Vol.11, No.1, 2020.

- [14] MiesGrijns And Hoko Horii, "Child Marriage in a Village in West Java (Indonesia): Compromises between Legal Obligations and Religious Concerns,"Asian Journal of Law and Society, pp. 453-466, 2018.
- [15] B. P. Statistics, "National Socio-Economic Surveys," Socio-Economic/Monitoring Surv., vol. 3, pp. 1–112,2013.
- [16] B. J. Fowers and D. H. Olson, "ENRICH Marital Satisfaction Scale: A Brief Research and Clinical Tool,"J. Fam. Psychol., vol. 7, no. 2, pp. 176–185, 1993, doi: 10.1037/0893-3200.7.2.176.
- [17] S. Torkian, F. Mostafavi, and A. Pirzadeh, "Effect of a Mobile Application intervention on Knowledge, Attitude and Practice Related to Healthy Marriage among Youth in Iran," pp. 1–17, 2020.
- [18] R. Oguntayo and O. T. Aroniyaso, "Influence of Socio-Economic Status and Marital Satisfaction on Domestic Violence among Couples Living in Nigeria,"Int. J. Appl. Psychol , no. November 2018, 2016, doi: DOI: 10.5923/j.ijap.20160606.03.
- [19] Z. Shahhosseini, Z. Hamzehgardeshi, and M. Souraki, "The effects of premarital relationship enrichment programs on marriage strength: A narrative review article,"J. Nurs. Midwifery Sci., vol. 1, no. 3, p. 62, 2014.
- [20] YessiHarnani, AgusAlamsyah, & Al Hidayati"Premarital Sex among Adolescent Street Children in Pekanbaru," International Journal of Public Health Science (IJPHS), pp. 22-26, Vol.7, No.1, 2018.
- [21] Murdiningsih, et all "The effect of adolescent reproductive health education on premarital sexual behavior,"International Journal of Public Health Science (IJPHS), pp.327-332, Vol.9, No.4, 2020.
- [22] Linda, et all "The Application of the IMB Model as Primary Prevention on Adolescent's Premarital Sexual Intention," International Journal of Public Health Science (IJPHS), pp.57-62, Vol.6, No.1, 2017.
- [23] Jane R. Rosen-Grandon, Jane E. Myers, and John A. Hattie, "The Relationship Between Marital Characteristics, Marital Interaction Processes, and Marital Satisfaction,"Journal Of Counsel Ing & Development, pp.58-68, Vol.82, 2004.
- [24] Mustamu, Alva Cherry; MARKUS, Serly A.. Parents Determination Factors Influencing Incomplete Basic Immunization for InfantsinSorong City, West Papua Province. Indian Journal of Public Health Research & Development, [S.I.], p. 1759-1764, nov. 2019. ISSN 0976-5506.

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