JHE 6 (1) (2021) 47-56

Journal of Health Education

http://journal.unnes.ac.id/sju/index.php/jhealthedu

Development of Handwashing Scrabble as Health Promotion Media For Elementary School Students

Rufaidah As Samara✉, Sapto Adi, Suci Puspita Ratih
Universitas Negeri Malang, Indonesia

Article Info

Article History:
Submitted 8 September 2020
Accepted 15 March 2021
Published 31 April 2021

Keywords:
Acute Respiratory Infections; Handwashing; scrabble

DOI
https://doi.org/10.15294/jhe.v6i1.40737

Abstract

Background: Acute Respiratory Infections (ARI/ISPA) are often suffered by the children. The prevalence of ARI in Malang continues to increase and is always the largest compared to other diseases. In 2018, ARI in Malang is 19.273 cases largest than in 2013. Wrong hand washing behavior are the main causes of ISPA. Not only ISPA, wrong hand washing behavior can also cause other health problems. Therefore, education is needed related to the prevention of ISPA, especially in children, by using effective media as educational aids, such as scrabble.
Method: The method uses modifications from the Sugiyono development method. Media validation was conducted by three experts and trials were conducted to two different target groups. The interventions given to the target are scrabble HANDWASHING and assessment about the media.
Result: Validation by public health experts gets 80% results, validation by media development experts gets 85% results, and validation by classroom teachers gets 96.92% results. While the calculation of trial scoring in small groups obtained results of 100% and trials in large groups obtained results of 98,31%.
Conclusion: Handwashing Scrabble are well worth using as a health promotion media for elementary school students.

How to Cited

Samara, R. A., Adi, S., and Ratih, S. P. (2021). Development of Handwashing Scrabble as Health Promotion Media For Elementary School Students. *JHE (Journal of Health Education)*, 6(1), 47-56

✉ Correspondence Address:
Email: fayssamr@gmail.com

p-ISSN 2527-4252
e-ISSN 2528-2905

INTRODUCTION

ARI or Acute Respiratory Infection is a disease that affects many children and often causes death in the age group of children (Olivya et al ., 2016) . Symptoms of ARI include fever, cough, runny nose, sore throat, and shortness of breath. Symptoms of ARI can come on quickly or slowly (Dary, et al ., 2018) . ARI consists of two, namely upper ARI and lower ARI. Upper ARI can attack from the nose to the alveoli, such as cold, cough, laryngitis, pharyngitis, and sinusitis. Meanwhile, lower ARI can attack the cavities around the nose, ears and pleura, such as bronchitis and pneumonia (Hayati, 2014 ; Warin-Angin, 2017) . The prevalence of ARI in Indonesia at 2018 decreased by 15.7% from 2013 (Balitbangkes Kemenkes RI, 2018). Even though nationally the prevalence of ARI has decreased, the prevalence of ARI in Malang always increasing and always first ranks disease with the most cases. In 2018, the prevalence of ARI increased from 59,184 cases in 2015 to 78,457 cases in 2018 (Dinkes Kota Malang, 2019).

According to Sofia (2017), ARI caused by environmental factors, individual factors, and behavioral factors to prevent and control ARI. Environmental factors such as air pollution due to cigarette smoke or smoke from household combustion increase the risk of ARI (Putra & Wulandari, 2019 ; Irianto , et al ., 2021). In addition, improper hand washing also affects the occurrence of ARI (Sofia, 2017). The results of the WHO research show that the behavior of washing hands properly and correctly can reduce the percentage of ARI incidence by 25% (Fajar & Misnaniarti, 2011). Other factors that influence the occurrence of ARI are unhealthy behavior of mothers, immunization status, nutritional status of children, and occupancy density (Sundari, et al ., 2014 ; Erlina , 2019 ; Astari, et al ., 2017 ; Khurniawan, 2015). In addition, immunization status also affects the occurrence of ARI (Sari & Sufriani, 2019). The results of research by Adnani , et al. (2 019) showed that smoking behavior was 2.73 times greater in increasing the risk of ARI. The results of other studies show that washing hands with soap is more effective than using only water (Burton , et al ., 2011). In 2018, the prevalence of smokers aged 10-18 years increased by 1.9% from 2013 (Balitbangkes Kemenkes RI, 2018). Smoking and washing hands improperly ranked 10th and 3rd health risk factors for elementary school students (Dirjen Kesmas Kemenkes RI, 2018).

The results of a preliminary study conducted on fifth grade students of SD Negeri Gading kasri in 2020 showed that 20% of students often experience fever and 40% of students often experience cold and coughs. Results also showed that 8% of students smoke, 38% of students did not wash their hands with soap, 23% of students did not wash their hands after playing, 19% of students did not wash their hands after defecating / urinate, 19% students did not wash their hands with running water, and 12% of students did not wash their hands before eating. Based on the problems above, the researcher intends to provide education related to ARI, especially health education and promotion related to Handwashing with Soap.

Health promotion is defined as an effort to make the community independent in order to maintain and improve their own health status. Media is needed for health promotion efforts. Information will be more easily accepted if the media used can involve many senses (Notoatmodjo, 2011). According to Suyatno, children tend to learn while doing and moving through the five senses and language (Nurhidayati & Hilal, 2018). The results showed that the average value of the hand washing practice using the snake and ladder game media was 56.89, while the average value of the hand washing practice using the pictorial story book media was 36.11 (Fitriastuti, 2015) . This shows that games are more effectively used as a learning medium. One of the learning media for school age children with games is scrabble.

The scrabble game is a game that has an original function in language learning (Cahyanti, 2018). However, nowadays scrabble games are also used in other learning activities, such as chemistry and mathematics. The results showed that chemical scrabble games could improve children's knowledge regarding the periodic system of elements (Mustika & Bayharti, 2019). Other research showed that the math scrabble game can improve students' fluency in solving math calculation problems (Kusumaningtyas & Yunianta, 2019). Modifications made to the

chemical scrabble game were modifications to the game instructions and the addition of game components in the form of question cards and answer keys, while the modifications made to the math scrabble were changes to the game board design.

Based on the explanation above, the researcher intends to provide education to fifth grade students of SD Negeri Gading Kasri, especially education related to hand washing, through health promotion using the hand washing scrabble game media. The media modification that was carried out was the addition of a game component in the form of a pocket book containing game instructions and materials related to the prevention of ARI and adding a scoring form.

METHOD

This research was a development research. Method development that is used is a modification of the method development Sugiyono which consists of 10 steps, namely the identification of potency and problems; situation analysis; design; design validation; design revision; small group trial, revision I; large group trials; revision II, and final production (Wijayanti & Christian Relmasira, 2019). The method of developing the handwashing scrabble game as in the following picture:

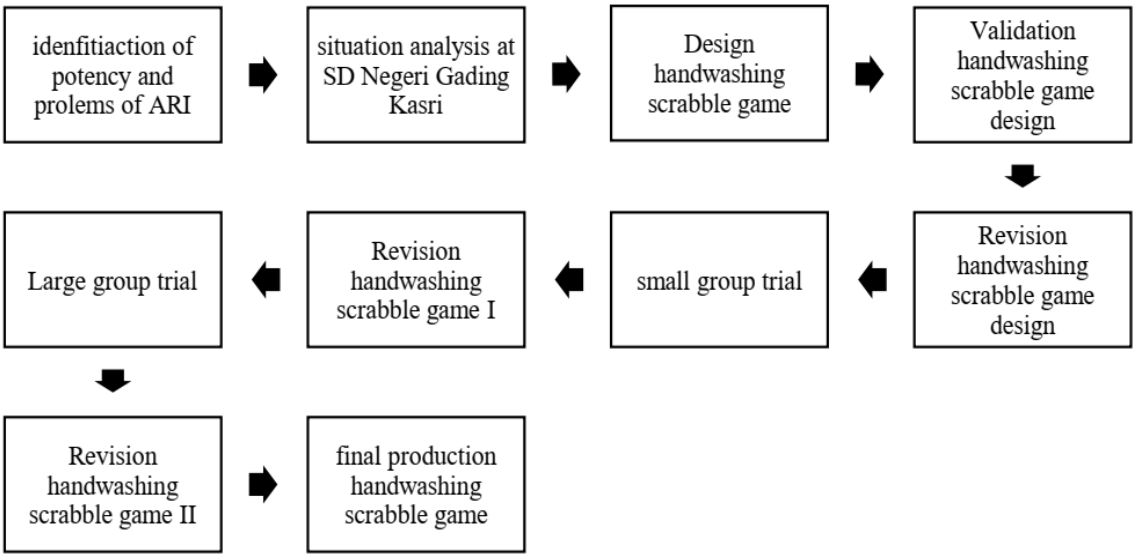

Figure 1. The method of developing the handwashing scrabble game
Source: Modification from Sugiyono Developing Method

The validation of the handwashing scrabble game design was carried out by three validators, namely public health experts, media development experts, and fifth grade teachers at SD Negeri Gading Kasri. While the small group trial conducted on 10 students of fifth grader at SDN Bareng 03 and a large group trial conducted on 27 students of fifth grader SD Negeri Gading Kasri. The trial was carried out on two different targets but with the same criteria with consideration of result bias if the trial was carried out in the same place. The criteria imposed exclusion was when the student refuses to be the subject of a trial or the student did not attend the trial.

The tools and materials needed in this study were the handwashing scrabble game, validation sheets for three validators, and assessment sheets for two groups of trial subjects. The handwashing scrabble game consists of six components, namely the game board, letter box, manual and card pocket book, question cards, and answer keys. The following is an overview of the handwashing scrabble board game:

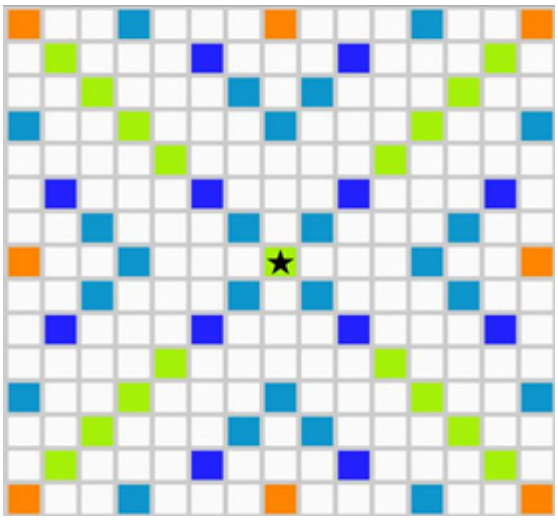

Figure 2. Board Handwashing Scrabble Game

Here is the rule in the game of handwashing scrabble: game played by 5 people with the provision of 4 players and 1 guide. Each player gets 1 pocket book and the guide gets 1 answer key and 1 scoring card. Before the game starts, the guide reads the rules of the game in a pocket book. Each player reads the material on the pocket book for 10 minutes. After 10 minutes, the pocket books are collected to the guide and the game can begin.

The game procedure is as follows: each player takes 1 letter box to determine the order of the players. Sequence of player in the corresponding right to the nearest letter sequence of the letters A. Further player first take one question card and then read it. Players are given 10 seconds to answer the questions. The answer to the question is in the answer key according to the code on the question card. Correct answers get 5 points and wrong answers get no points. The question card with the wrong answer is then isolated to be evaluated at the end of the game. If the answer is correct, then the player arranges the answer on the game board using the letter boxes provided. The order of answers should only be level or descending. The first player's answer sequence must hit an asterisk in the middle of the game board and the next player's answer sequence must hit one of the letters in the previous player's answer. The game continues until each player gets 5 questions. The player with the highest score is the winner. If there is a draw, then a scramble question is carried out according to the existing question card. After the game is over, an evaluation is carried out on the questions that cannot be answered by the players.

$$P\,(\%) = \frac{\Sigma F}{N \times I \times R} \times 100\%$$

The game model above then tested for validation on the three validators for an assessment. Data assessment results then processed clicking use the formula of Arikunto ber join this (Krisdianto, 2018) (Rahayu & Kris, 2018) :

P (%) : percentage of eligibility
ΣF : the total number of scores of the assessors
N : the highest score in the scoring sheet
I : the number of aspects of the assessment
R : number of assessors

$$RtV = \frac{\sum f}{n} \times 100\%$$

RtV : mean of total percentage of raters
Σf : total value of all assessors
n : number of evaluators

After the results of both the above formula is obtained, then eligibility categorized media in accordance with belonging to the selected media eligibility according Riduwan (Krisdianto, 2018):

Table 1. Media Eligibility Category

Persentage	Category
81% –100%	Very feasible
61% –80%	Feasible
41% –60%	Enough feasible
21% –40%	Not feasible
0% –20%	Not very feasible

Source: Krisdianto (2018)

Table 1 showed that the media is said to be feasible if the formula calculation yields results above 61%. If the result is below 61%, then the media needs improvement and requires re-validation to determine whether the media is appropriate or not yet used as a media for health promotion of Hand Washing with Soap.

If the game has been declared feasible by three validators, the game is then tried out on small group trial subjects and an assessment and improvement is carried out (if there is improvement). Even so with large group trial subjects. The final assessment of the test subject was used as a reference whether it was feasible or not the hand washing scrabble game was produced in a final manner.

RESULT AND DISCUSSION

Media validation was carried out by three validators, namely material validation by public health experts, media validation by media development experts, and media and material validation by grade five teachers of SD Negeri Gading Kasri. Following are the results of material validation by public health experts:

Table 2. Validation result of Public Health Experts

No.	Aspect	Score*
1.	The suitability of the material for the purpose of the game	4
2.	Conformity of material with theory	4
3.	Completeness of handwashing material	4
4.	The up-to-dateness of the handwashing material	4
5.	The language in the dictionary is easy to understand	4
6.	The language of the questions is easy to understand	4
7.	The words in the dictionary do not have a double meaning	4
8.	The question sentence does not have a double meaning	4

Result $= \frac{\Sigma F}{N \times I \times R} \times 100\%$

$= \frac{32}{5 \times 8 \times 1} \times 100\% = 80\%$

*Score range 1-5

Based on table 2, validation material by public health experts that consists of eight aspects of obtaining the result by 80% (category feasible). There are suggestions for improvements given in the form of changing the form of the dictionary to a pocket book, game instructions, correcting and adding material, as well as adding a copyright to the handwashing scrabble board game. The results of validation by media development experts are listed in the following table:

Table 3. Validation Result of Media Development Experts

No.	Aspect	Score*
1.	Handwashing scrabble game is easy to play	5
2.	Game instructions are clear	4
3.	Simple game	5
4.	Matches the type and size of letters in the dictionary	4
5.	Spacing between sentences in the dictionary	4
6.	The sentences in the dictionary are easy to read	5
7.	Image illustration according to handwashing material	4
8.	Layout settings in the dictionary	3
9.	The color used in the dictionary	3
10.	The color used in the game board	5
11.	Attractive dictionary design	4
12.	handwashing scrabble game is easy to play	5

Result $= \frac{\Sigma F}{N \times I \times R} \times 100\%$

$= \frac{51}{5 \times 12 \times 1} \times 100\% = 85\%$

*Score range 1-5

Based on Table 3, validation media by media development experts that consists of 12 aspects of obtaining results by 85% (categorized as very feasible). There are suggestions for improvement given in the form of changing the dictionary form into a booklet, improving the color of the dictionary, and adding a game component in the form of a scoring form. Besides conducted by two experts in the above, the validation is also done by the class teacher in order based on matching eligibility media for use in the target group. The results of the validation by the classroom teacher are listed in

the following table:

Table 4. Validation Result of Classroom Teacher

No.	Aspect	Score*
1.	The language in the dictionary is easy to understand	5
2.	Color combinations	4
3.	Layout in a dictionary	5
4.	Attractive board game design	5
5.	Dictionary and questions according to the handwashing material	5
6.	The material is in accordance with the objectives of the game	5
7.	Game instructions are clear	5
8.	Image illustration according to handwashing material	5
9.	The game is easy to play	5
10.	The game is easy to carry	5
11.	Games give encouragement to learning	5
12.	The media is suitable for grade V students	4
13.	Effective games for learning handwashing	5

Result

$$= \frac{\Sigma F}{N \times I \times R} \times 100\%$$

$$= \frac{63}{5 \times 13 \times 1} \times 100\% = 96{,}92\%$$

*Score range 1-5

Based on Table 4, validation by the class teacher that consists of 13 aspects of obtaining a yield of 96.92% (categorized as very feasible). There are suggestions for improvement given in the form of adding related material due to not doing handwashing. Based on the validation by three validator above, the average validation of media obtaining yield was 90.31%, or a game of handwashing scrabble included in the category of extremely fit for use as a medium of handwashing health promotion in primary school students, especially students of fifth grade.

After validated, the next step is the improvement in accordance with the advice given by the experts, namely changes in dictionary form into pocketbooks, repair instructions game, improvements and additions to the material, the addition of copyright on the board game handwashing scrabble, color correction in the guidebook and materials, as well as adding a game component in the form of a scoring form. After the improvements have been made, the next step is to do trials in small groups and continue with trials in large groups. The following are the results of the media assessment by small groups::

Table 5. Small Group Assessment Result

No.	Aspect	Yes	Not
1.	This game made me want to learn handwashing	100%	0%
2.	This game makes me want to do handwashing	100%	0%
3.	The language used is easy so I understand	100%	0%
4.	The sentences used in the dictionary are clear	100%	0%
5.	The questions used are clear and easy for me to understand	100%	0%
6.	The game is easy to carry everywhere	100%	0%
7.	The game is easy to play	100%	0%
8.	Game instructions are clear	100%	0%
9.	The game design attracted me to play it	100%	0%
10.	The writing on the dictionary is easy to read	100%	0%
11.	The writing on the game is easy to read	100%	0%
12.	The image on the game is interesting	100%	0%
13.	I like the colors in the game	100%	0%
14.	I like the game design	100%	0%
15.	After playing this game, I know when to wash my hands	100%	0%
16.	After playing this game, I know how to wash my hands properly	100%	0%

Result

$$= \frac{\Sigma F}{N \times I \times R} \times 100\%$$

$$= \frac{320}{2 \times 16 \times 10} \times 100\% = 100\%$$

Based on table 5, the media assessment from the small group trials obtained results of 100% or was included in the very feasible category with suggestions for improvement

in the form of additional rounds of play Meanwhile, the results of the large group assessment are as listed in the following table:

Table 6. Large Group Assessment Result

No.	Aspect	Yes	Not
1.	This game made me want to learn handwashing	93%	7%
2.	This game makes me want to do handwashing	96%	4%
3.	The language used is easy so I understand	96%	4%
4.	The sentences used in the dictionary are clear	81%	19%
5.	The questions used are clear and easy for me to understand	85%	15%
6.	The game is easy to carry everywhere	52%	48%
7.	The game is easy to play	93%	7%
8.	Game instructions are clear	85%	15%
9.	The game design attracted me to play it	89%	11%
10.	The writing on the dictionary is easy to read	89%	11%
11.	The writing on the game is easy to read	93%	7%
12.	The image on the game is interesting	85%	15%
13.	I like the colors in the game	74%	26%
14.	I like the game design	96%	4%
15.	After playing this game, I know when to wash my hands	96%	4%
16.	After playing this game, I know how to wash my hands properly	93%	7%

Result

$$= \frac{\Sigma F}{N \times I \times R} \times 100\%$$

$$= \frac{809}{2 \times 16 \times 27} \times 100\% = 93{,}63\%$$

Based on table 6, trying in large group obtain a yield of 93.63% or the category of very feasible used as a medium for health promotion handwashing. The suggestion of improvement from large groups is to add a handle and a key to the game board, so that the components on the board will not fall when the board is moved.

In addition to getting the results of the feasibility of the handwashing scrabble game, the results of trials in large groups also found that 96.5% of students claimed to have the urge to learn handwashing and 98% of students claimed to have been encouraged to do good and correct handwashing after playing the handwashing scrabble game. The results also showed that 96.5% of students knew the important time of handwashing and 98% of students knew the good and correct handwashing steps after playing the handwashing scrabble game. The trial average calculation yields a result of 98.62% or is included in the very feasible category.

According to Husdarta and Subroto, school-age children are starting to enjoy active activities (Hambali & Sutiswo, 2019). Yusuf in his book entitled Developmental Psychology of Children & Adolescents states that according to Piaget's theory, children aged 6-12 years can begin to be given skills or skills that can improve their thinking patterns (Sari , et al ., 2012). According to Rusli and Gondhoyoewono, one of the learning methods that can be given at this age is the game method The learning process will be more effective when it combines learning and playing (Sari , et al ., 2012). According to Suyatno, children tend to learn while doing and moving, through the five senses and language (Nurhidayati & Hilal, 2018).

Referring to the Edgar Dale cone, the information received based on the way it is received is 10% of what is read, 30% of what is seen, and 70% of what is spoken (Rosyida & Adi, 2018). According to Sadiman, et al., Game media encourages students to play an active role and interact with each other, resulting in discussion (Afandi, 2015). Game media not only provides knowledge to students, but games also provide direct experience to students. In addition, the nature of games that are entertaining and fun can reduce students' dislike of learning activities (Yumarlin, 2013). This is in line with Notoatmodjo's (2011) statement which states that information will be easier to understand if information is received through many senses. Charina's research results (2010) showed that games are very effective in learning for school-age children (Nurhidayati & Hilal, 2018).

Based on the validation and testing of the handwashing scrabble game that has been done, the average calculation of the validation yields a result of 90.31% (very feasible category)

and the average calculation of the trial yields a result of 98.62% (very feasible category). This is in accordance with the results of research by Kusumaningtyas and Yunianta (2019) which show that the scrabble game is suitable for learning mathematics with the results of material validation of 86% and results of media validation of 94% (Kusumaningtyas & Yunianta, 2019) . The results of research by Fernanda , et al. (2019) also show that the scrabble game is suitable for learning chemistry with the results of material validation of 89% and the results of media validation of 97% (Fernanda, et al ., 2019).

Based on the handwashing scrabble game trials that have been carried out, 96.5% of students admitted to getting encouragement to learn handwashing and 98% of students admitted to getting the urge to do good and correct handwashing after playing the handwashing scrabble. The results also showed that 96.5% of students knew the important time of handwashing and 98% of students knew the good and correct handwashing steps after playing the handwashing scrabble. The results of Rahayu's research (2014) show that the average score of students' mathematics after being given the scrabble game reaches 77.14, while the average score of students before being given the scrabble game only reaches 43.33 (Rahayu, 2014). The results of Mubasyira and Widiyarto (2017) also show that the average score of the skills of students who were given the scrabble game reached 82.10, while the average score of students who were not given the scrabble game only reached 29.40 (Mubasyira & Widiyarto, 2017). The results of the above research indicate that the scrabble game has a positive effect on students' understanding and skills.

Scrabble games serve to sharpen the brain and can improve children's memory. Children's brains are easy to sharpen when the child is developing. By sharpening the brain, intelligence and thinking power will increase (Mubasyira & Widiyarto, 2017). The handwashing scrabble game not only engages students to read and see, but also encourages students to think and discuss in order to solve problems in the game.

The advantage of the handwashing scrabble game in this study compared to previous studies lies in the game component. The game component in this study is equipped with a pocket book containing game instructions and materials, so that the game can be played by anyone. It is different from the games in the previous research which used material sources from the LKS books used by students, so the games cannot be played for those who do not have LKS books.

CONCLUSION

The results of the validation and testing of the game of handwashing scrabble showed that handwashing scrabble game is very fit for use as a media promotion of the health of Handwashing in elementary school students, especially in the fifth grade students. The resulting product specifications are in the form of game boards, letter dice, pocket books, question cards, answer keys, and scoring forms. This study has not tested the effectiveness of the handwashing scrabble game on knowledge or the effectiveness test of the handwashing scrabble game against other health promotion media, so it is hoped that the next researcher can test the effectiveness.

REFERENCES

Adnani, H., Subiyanto, A. A., Hanim, D., & Sulaeman, E. S. (2019). Risk Factor Mapping and Case Map of Environmentally Based Disease in Yogyakarta. *Medical Journal of Indonesia,* 28(2), 174–182. https://doi.org/10.13181/mji.v28i2.3093

Afandi, R. (2015). Pengembangan Media Pembelajaran Permainan Ular Tangga untuk Meningkatkan Motivasi Belajar Siswa dan Hasil Belajar IPS di Sekolah Dasar. *JINoP: Jurnal Inovasi Pembelajaran,* 1(1), 77–89. https://doi.org/10.22219/jinop.v1i1.2450

Astari, A. S., Nerawati, A. D., & Al-Jauhari, S. (2017). Hubungan Antara Faktor Risiko Terjadinya ISPA dengan Kejadian ISPA pada Balita di Kawasan Industri Kabupaten Gresik Tahun 2017. *Gema Kesehatan Lingkungan,* 15(3), 35–42. journal.poltekkesdepkes-sby.ac.id/index.php/KESLING/article/view/694/521

Balitbangkes Kemenkes RI. (2018). *Hasil Utama Riskesdas 2018.* https://www.depkes.go.id/resources/download/info-terkini/hasil-riskesdas-2018.pdf

Burton, M., Cobb, E., Donachie, P., Judah, G., Curtis, V., & Schmidt, W.-P. (2011). The

Effect of Handwashing with Water or Soap on Bacterial Contamination of Hands. *International Journal of Environmental Research and Public Health*, 8(1), 97–104. https://doi.org/10.3390/ijerph8010097

Cahyanti, I. (2018). *Pengembangan Media Scrabble dengan Metode SAS terhadap Pembelajaran Membaca Permulaan di Sekolah Dasar.* http://eprints.umm.ac.id/38587/3/BAB II.pdf

Dary, Puspita, D., & Luhukay, J. F. (2018). Peran Keluarga dalam Penanganan Anak dengan Penyakit ISPA Di RSUD Piru. *Jurnal Keperawatan Muhammadiyah,* 3(1), 35–44. https://doi.org/10.30651/jkm.v3i1.1469

Dinkes Kota Malang. (2019). *Profil Kesehatan Kota Malang Tahun 2018.* https://drive.google.com/file/d/11kaM8km1d9jGTdvGkep1IChpPfKlMA2G/view

Dirjen Kesmas Kemenkes RI. (2018). *Petunjuk Teknis Pelaksanaan Sekolah/Madrasah Sehat.* http://kesga.kemkes.go.id/images/pedoman/Juknis Model Sekolah Madrasah Sehat SD MI Nov 2018.pdf

Erlina, Y. (2019). Faktor-faktor yang Berhubungan dengan Kejadian Infeksi Saluran Pernafasan Akut (ISPA) pada Bayi di Puskesmas Tambelang Kabupaten Bekasi Tahun 2019. *Jurnal Ilmiah Kesehatan Institut Medika drg. Suherman,* 1(1), 1–17. http://jurnal.imds.ac.id/imds/index.php/kesehatan/article/view/45/43

Fajar, N. A., & Misnaniarti. (2011). Hubungan Pengetahuan dan Sikap terhadap Perilaku Cuci Tangan Pakai Sabun pada Masyarakat di Desa Senuro Timur. *Jurnal Pembangunan Manusia,* 5(1), 1–7. http://www.ejournal.sumselprov.go.id/pptk/article/view/205

Fernanda, F., Akhlus, S., & Ramdhani, E. P. (2019). *Pengembangan Media Scrabble untuk Pembelajaran Materi Sistem Periodik Unsur Kelas X [Universitas Maritim Raja Ali Haji].* http://repository.umrah.ac.id/id/eprint/2933

Fitriastuti, E. S. (2015). Pengaruh Permainan Ular Tangga dan Buku Cerita Bergambar sebagai Media Promosi Kesehatan terhadap Praktek Cuci Tangan Pakai Sabun. *Jurnal Promosi Kesehatan,* 10(1), 63–72. https://doi.org/10.14710/jpki.10.1.63-72

Hambali, S., & Sutiswo. (2019). Pengaruh Metode Bermain terhadap Hasil Belajar Passing Bawah Bola Voli di Sekolah Dasar. *Perspektif Ilmu Pendidikan,* 33(1), 27–32. https://doi.org/10.21009/pip.331.3

Hayati, S. (2014). Gambaran Faktor Penyebab Infeksi Saluran Pernafasan Akut (ISPA) pada Balita di Puskesmas Pasirkaliki Kota Bandung. *Jurnal Ilmu Keperawatan,* 11(1), 62–67. https://ejournal.bsi.ac.id/ejurnal/index.php/jk/article/view/137/103

Irianto, G., Lestari, A., & Marliana. (2021). Hubungan Kebiasaan Merokok Anggota Keluarga dengan Kejadian ISPA pada Balita Umur 1-5 Tahun. *Healthcare Nursing Journal,* 3(1), 65–70. https://doi.org/10.35568/healthcare.v3i1.1098

Khurniawan, A. (2015). Faktor Risiko Kejadian Penyakit ISPA pada Balita di Kecamatan Lemahwungkuk Kota Cirebon Tahun 2013. *Jurnal Kesehatan dan Keperawatan Akademi Keperawatan Muhammadiyah Cirebon,* 2(1). http://jurnal.stikes-adc.ac.id/index.php/jamc/article/view/8/6

Krisdianto, R. (2018). Penerapan Media 3D Sketchup pada Model Pembelajaran Langsung Mata Pelajaran Menggambar dengan Perangkat Lunak di SMK Negeri 1 Bendo Magetan. *Jurnal Kajian Pendidikan Teknik Bangunan,* 2(2). https://jurnalmahasiswa.unesa.ac.id/index.php/jurnal-kajian-ptb/article/view/24922/22829

Kusumaningtyas, I., & Yunianta, T. N. H. (2019). Pengembangan Media Scrabble untuk Meningkatkan Procedural Fluency Matematika Siswa SMP. *Journal Cendekia*, 3(2), 300–314. https://doi.org/10.31004/cendekia.v3i2.109

Mubasyira, M., & Widiyarto, S. (2017). Pengaruh Penggunaan Media Permainan Scrabble terhadap Keterampilan Menulis Teks Prosedur Siswa Kelas X SMA Tugu Ibu, Depok, Jawa Barat. *DEIKSIS,* 9(3), 323–335. https://journal.lppmunindra.ac.id/index.php/Deiksis/article/viewFile/961/1534

Mustika, & Bayharti. (2019). Pengembangan Permainan Scrabble Kimia sebagai Media Pembelajaran pada Materi Struktur Atom Kelas X SMA/MA. *EduKimia Journal,* 1(1), 77–86. http://edukimia.ppj.unp.ac.id/ojs/index.php/edukimia/article/download/35/13

Notoatmodjo, S. (2011). *Kesehatan Masyarakat: Ilmu & Seni. PT. Rineka Cipta*.

Nurhidayati, A., & Hilal, N. (2018). Pengaruh Pendidikan Kesehatan tentang PHBS dengan Media Permainan Ular Tangga dan Ceramah terhadap Pengetahuan Siswa SD Negeri Limpakuwus Kabupaten Banyumas Tahun 2017. *Keslingmas,* 37(3), 240–404. http://ejournal.poltekkes-smg.ac.id/ojs/index.php/keslingmas/article/viewFile/3897/1029

Olivya, S., Rumampuk, J. L., & Rondonuwu, P. (2016). Hubungan Tingkat Pengetahuan Orang Tua dengan Pencegahan Infeksi

Saluran Pernapasan Akut (ISPA) pada Anak Usia Balita di Wilayah Kerja Puskesmas Tuminting Kota Manado. *E-Jurnal Sariputra,* 3(2), 75–81. http://jurnal.unsrittomohon.ac.id/index.php?journal=ejurnal&page=article&op=download&path%5B%5D=207&path%5B%5D=196

Perangin-angin, S. br. (2017). Survey Sanitasi Perumahan di Desa Juhar Tarigan Kecamatan Juhar Tahun 2016. *Jurnal Mutiara Kesehatan Masyarakat,* 10(7), 58–67. e-journal.sari-mutiara.ac.id/index.php/JMKM/article/view/219

Putra, Y., & Wulandari, S. S. (2019). Faktor Penyebab Kejadian ISPA. *Jurnal Kesehatan*, 10(1), 37–40. https://doi.org/10.35730/jk.v10i1.378.g438

Rahayu, C. A. P., & Kristanto, A. (2018). Pengembangan Media Augmented Reality pada Mata Pelajaran Fisika Materi Alat Optik Kelas X Multimedia di SMK Negeri 12 Surabaya. *Jurnal Mahasiswa Teknologi Pendidikan,* 9(2), 1–5. https://jurnalmahasiswa.unesa.ac.id/index.php/jmtp/article/view/27750/25394

Rahayu, E. (2014). *Pengembangan Bahan Ajar Berbasis Pendidikan Matematika Realistik Indonesia (PMRI) dengan Media Scrabble pada Materi Hubungan antar Satuan Siswa Kelas V MI Miftahul Ulum Tlogosari-Tutur-Pasuruan [Universitas Islam Negeri Maulana Malik Ibrahim]*. http://etheses.uin-malang.ac.id/7443/1/10140030.pdf

Rosyida, F., & Adi, K. R. (2018). Pelatihan Pembuatan Media Pembelajaran dengan Program Autoplay untuk Guru SMPN 2 Balen Kecamatan Balen Kabupaten Bojonegoro. *Jurnal Praksis dan Dedikasi Sosial,* 1(1), 21–28. http://journal2.um.ac.id/index.php/jpds/article/download/3462/2236

Sari, E. K., Ulfiana, E., & Dian, P. (2012). Pengaruh Pendidikan Kesehatan Gosok Gigi dengan Metode Permainan Simulasi Ular Tangga terhadap Perubahan Pengetahuan, Sikap, dan Aplikasi Tindakan Gosok Gigi Anak Usia Sekolah di SD Wilayah Paron Ngawi. *Indonesian Journal of Community Health Nursing,* 1(1), 1–11. https://www.e-journal.unair.ac.id/IJCHN/article/view/11902/6824

Sari, Y. M. I., & Sufriani. (2019). Faktor Risiko Kejadian Infeksi Saluran Pernafasan Akut pada Balita. *JIM FKep: Jurnal Ilmiah Mahasiswa Fakultas Keperawatan,* IV(2), 16–23.

Sofia. (2017). Faktor Risiko Lingkungan dengan Kejadian ISPA pada Balita di Wilayah Kerja Puskesmas Ingin Jaya Kabupaten Aceh Besar. *AcTion: Aceh Nutrition Journal,* 2(1), 43–50. https://doi.org/10.4103/2141-9248.126610

Sundari, S., Pratiwi, & Khairudin. (2014). Perilaku Tidak Sehat Ibu yang Menjadi Faktor Resiko Terjadinya ISPA Pneumonia pada Balita. *Jurnal Pendidikan Sains,* 2(3), 141–147. http://journal.um.ac.id/index.php/jps/article/view/4507/980

Wijayanti, W., & Christian Relmasira, S. (2019). Pengembangan Media PowerPoint IPA untuk Siswa Kelas IV SD Negeri Samirono. *Jurnal Penelitian dan Pengembangan Pendidikan,* 3(2), 77–83. https://doi.org/10.23887/jppp.v3i2.17381

Yumarlin. (2013). Pengembangan Permainan Ular Tangga Untuk Kuis Mata Pelajaran Sains Sekolah Dasar. *Jurnal Teknik,* 3(1), 75–84. https://www.researchgate.net/publication/319416534