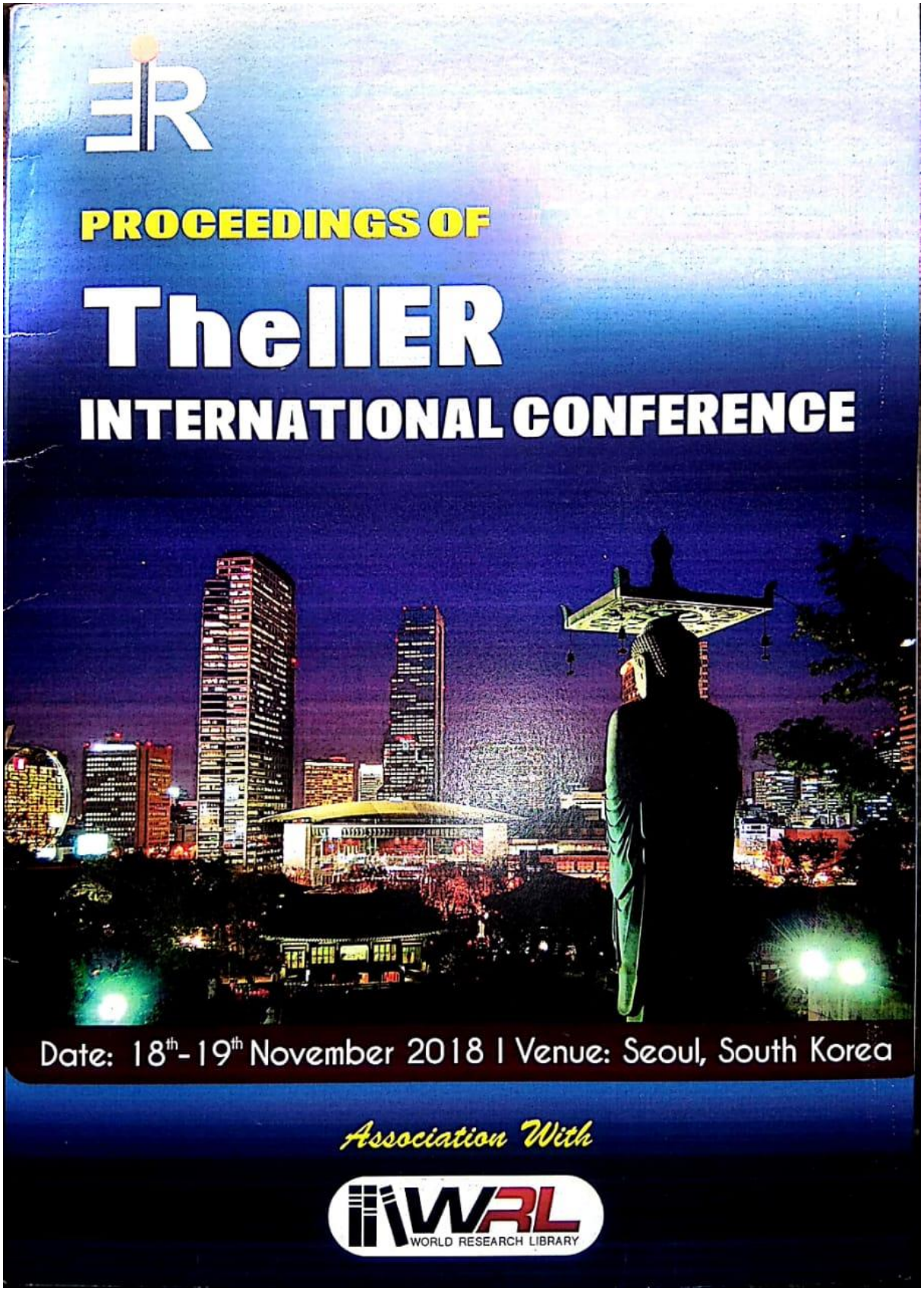
PROCEEDINGS OF
TheIIER
INTERNATIONAL CONFERENCE
Date: 18th-19th November 2018 I Venue: Seoul, South Korea
Association With
WRL
WORLD RESEARCH LIBRARY

# AN ANDROID APLICATION FOR E-COUNSELING SERVICE TO OVERCOME BULLYING IN SENIOR HIGH SCHOOL

[1]LINTANG ROBBANI, [2]MUHAMAD NUR CHOZIN, [3]ANDRI MUHYIDIN, [4]SITI AMINAH

[1,2,3,4]Universitas Negeri Yogyakarta
Email:[1]lintang.robbani2015@student.uny.ac.id, [2]muhamad.nur2015@student.uny.ac.id,
[3]andri.muhyidin2015@student.uny.ac.id, [4]sitiaminah@uny.ac.id

**Abstract:** Bullying brings negative effects both physically and mentally. The low intensity of communication between counseling teachers and students hinder the curative actions of bullying at school. The objective of this research is to develop an Android-based e-counseling bullying communication for Indonesian senior high school students. The research method was R&D (Research and Development) with the development model of Thiagarajan 4d (four-D). The development model consists of four stages, they are defining, designing, developing, and disseminating. The result of the research is the product of "Konselor-Ku"android application as the e-counseling communication media for students. The media has been validated by the materials and media experts with the scores of 82.6% (very feasible category) and 93% (very feasible category) respectively. The media are then tried out to a limited number of students and the result is very feasible (87%) to implement.

**Keywords**: Bullying, E-counseling, Konselor-Ku

## 1. INTRODUCTION

84 % of Indonesian students suffer from violence initiated by bullying at school (Bhatla et al, 2015). Bullying has an adverse impact on student's academic, provide psychological trauma, and also lead to suicide (Al Raqqad, 2017; Novalia, 2016; Cape, 2018; Malaka, 2017). On the other hand, the protection of students against bullying has been regulated by Indonesian law No. 35 Article 54 of 2014 which states that students in the educational environment must obtain protection from physical, psychological, sexual, and other crimes. Therefore, schools as educational institutions serve to anticipate and deal with bullying cases. Anticipation and handling of bullying cases in schools are one of the areas of guidance and counseling services that facilitate the development of students' personalities to achieve independence, hence, they achieve happiness and prosperity in their lives (Department of National Education, 2008).

However, the utilization of guidance and counseling services in Senior High School of Yogyakarta is only 10%, because students are ashamed to communicate with Guidance and Counseling Teacher and lack of counseling time (Romadhon, 2016). The results of the ICRW study (Bhatla, 2015) found that only 9% of bullying victim- students reported to their school because of the reluctance, worry, and fear. In addition, there is a negative stigma regarding the Guidance and Counseling teacher. For example, the students are afraid to get to the counselor room because they will be labeled as a troubled student, the Guidance and Counseling Teacher as a school police, and there is an assumption that the guidance and counseling teacher only handles that is troubled students (Dewi, 2017). The emergence of this stigma increasingly makes victims reluctant to overcome the problem.

Based on these problems, a communication media is needed as a curative step for bullying in Senior High School, one of them is through e-counseling, it is easily accessible and facilitates students with anxiety to communicate with guidance and counseling teacher (Putnam in Zamani, et al., 2010). E-counseling services can help students to conduct counseling on bullying cases that occur so that they can be overcome easily, comfortably, as well as maintain their privacy. E-counseling is quite effective considering the ease of access to information and interaction with counselors that makes it easy for students to convey the problems that they experience (Samsudin, 2011). Therefore, this study focuses on developing "*Konselor-Ku*" communication media based on e-counseling android as a curative action on bullying among Senior High School students.

## 2. RESEARCH METHOD

This research was the development research (Research and Development) with the Thiagarajan 4D (four-D) development model. The development model consisted of four stages, they were define, design, develop, and disseminate (Thiagarajan, 1974). The subjects of this study were students and Guidance and Counseling Teacher of State Senior High School 4 Yogyakarta. The technique of determining samples was by using random sampling with data collection using questionnaires and interviews. The questionnaire consisted of questionnaires of bullying actions, questionnaires for the implementation of counseling guidance services, and media needs questionnaires. The interviews were conducted with Guidance and Counseling Teacher related to guidance and counseling services in dealing with bullying and what media can be developed in counseling services.

The data analysis in this study used a combination of quantitative and qualitative descriptive percentage

techniques (Sugiyono, 2017). While the results of the validation were carried out by analyzing the media validation data by using the following Likert Scale conversion: 0% -20%: Very poor; 21% -40%: Less feasible; 41% -60%: Sufficient; 61% -80%: Feasible; 81% -100%: Very feasible (Riduwan, 2011).

## 3. RESULT AND DISCUSSION

### 3.1 Communication media development

The development of communication media begins with defining stages which are carried out by distributing questionnaires to students of State Senior High School 4 Yogyakarta and interviewing Guidance and Counseling Teacher.

Based on the results of the obtained data of bullying case questionnaire, it shows that 32% of students experienced bullying cases both as a bully and as a victim. Bullying actions are grouped into three types including physical, verbal, and psychological bullying.

**Table1 Data on the type of bullying**

| No | Indicator | Σ Score | % Score |
|---|---|---|---|
| 1 | Physical Bullying | 133 | 43,89 |
| 2 | Verbal Bullying | 126 | 41,59 |
| 3 | Psychological Bullying | 44 | 14,52 |
| | Total | 303 | 100 |

Meanwhile, the results of the interviews conducted on the Guidance and Counseling Teacher of State Senior High School 4 Yogyakarta show that there are various services offered including individual, group, and career guidance services. However, the utilization of guidance and counseling services by students is fairly low. As many as 56% of students state that they never use counseling services. The students state that there is no free time to go to the Guidance and Counseling Teacher room and the monotonous counseling service is the reason for them not to use counseling services.

On the other hand, based on media needs analysis obtained results, 78.1% of students state that the Android application can be used as a counseling media. In addition, 93.8% of students state that the Android application can be used as a reporting media for bullying.

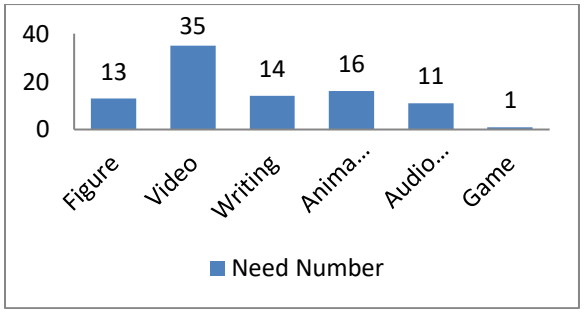


**Fig.1. Media Content Requirements for Android Applications**

The results of the media need questionnaire analysis show content with the type of video, animation, and text needed by the students in the counseling media to overcome bullying. At the stage of concept analysis, it can be developed the media services, it includes informative articles, report bullying, and an initial counseling assessment.

At the design stage, the writers conduct a selection of media that will be used. Based on the questionnaire, 61.7% of students state that guidance and counseling services can be done using the Android application so that students can flexibly use guidance and counseling services and facilitate communication. Furthermore, the format selection is conducted by designing media contents, approaches, and organizing application content. The content in the application includes informative articles, reporting , and initial counseling assessment. At this stage, a compilation of articles related to bullying is carried out, designing report designs and developing initial counseling assessment instruments.

Next, preparing the initial design in the form of application display design. The design is done by using Inkspace software based on student characteristics, such as maturity, ease of access, etc. The design is then consulted with an expert lecturer of Information Technology at Yogyakarta State University. After the initial design is arranged, the design of the communication media procedure "Konselor-Ku" is carried out. In work procedures of communication media, there are steps that can be done by users in order to reduce and overcome bullying in schools.

The development stage begins with prototype development. The development of prototypes in this application is using the mockingbot software. After the application has been developed, media validation tests and material validation are carried out. Media validation test is conducted by Mr. Nurkhamid, M.Pd. as a media expert and lecturer of Information Technology at Yogyakarta State University. While the material validation is conducted by Ms. Isti Yuni Purwanti, M. Pd as a lecturer in Guidance and Counseling of Yogyakarta State University.

Media validation on visual aspects and programming achieves an 80% score with a feasible

category and suggestion to improve the menu to make it in one language. The media is feasible for use with revisions according to suggestions and followed by expert material validation. Material validation consists of three aspects; they are informative articles, reporting, and initial assessment. Besides that, it is also accompanied by aspects of sustainability counseling. Based on material validation, the communication media obtained a score of 67.8% of the sufficient categories with several revisions. The expected revision of the material validator is the use of practical language and Indonesian images as illustrations.

After getting suggestion from the media and material expert validators, the media revisions are carried out in accordance with the suggestions. After revising the media, re-validation the final application is carried out. Material validation and media are conducted on July 12, 2018. The validation of the application material obtains a score of 82.6% with a very feasible category. While the media validation obtains a score of 93% with a very feasible category. The details of the material validation results can be seen in the following table.

**Table2 Final media validation**

| Validator | Aspects | | Mean |
|---|---|---|---|
| | Content | Sustainability | |
| Material expert | 80% | 85% | 82,6% |
| | | **Very feasible** | |
| **Validator** | **Aspects** | | **Mean** |
| | **Visual** | **Programming** | |
| Media expert | 94,5% | 91,4% | 93% |
| | | **Very feasible** | |

Limited trials are conducted by using Focus Group Discussion (FGD) techniques. The writers explain the purpose of application development, application work procedures, and application usage stages. After that, the students try to use the application on their own cell-phones. After trying to use the application, the students filled out a questionnaire that produces a score of 87% with a very feasible category.

The fourth phase of the research is dissemination. During the dissemination phase, the writers finalize the "Konselor-Ku" communication media. The "Konselor-Ku" communication media that has been through the development process is then uploaded on the "Konselor-Ku" page so that users (the students) can download and install application on the cell-phone. After that, the researchers conduct a socialization of the "Konselor-Ku" communication media in State Senior High School Yogyakarta 4 which is attended by 19 of students and Guidance and Counseling Teachers. In the socialization of the "Konselor-Ku" communication media, the researchers explain the development purpose, work procedures, and steps for using the communication media "Konselor-Ku". The students and teachers are given guidelines for using media to facilitate the operation of the "Konselor-Ku" communication media. After getting an explanation, the students try to use the application assisted by the research team.

After socialization, to strengthen the usefulness of communication media from users, the students are asked to respond to the communication media. The students' responses are obtained by interviewing five students and directed to three services developed in the communication media "Konselor-Ku". The students state that informative articles are quite good and have characteristics that build sympathy and care for bullying. The bullying report service, the students state that service is very useful but requires follow-up of the teacher to overcome bullying. Furthermore, in the initial assessment service, the students feel comfortable because they can choose a Guidance and Counseling Teacher who is trusted and the confidentiality can be maintained.

### 3.2 "Konselor-ku" as Bullying Curative Action

Bullying is a part of the act of aggression that is repeatedly carried out by someone who is stronger against someone who is weaker, both physically and psychologically (Windy, 2016). Research conducted by Bhatla et al (2015) through the International Center for Research on Women showed that 7 out of 10 students in Indonesia experienced violence in the form of bullying in schools. This amount shows that efforts to handle bullying have not been successful. This condition is exacerbated by the students who are reluctant to convey bullying actions they experienced. The same study showed that only 9% of victims of bullying reported to the teacher and the school.

In the world of education, guidance and counseling services have a role in overcoming the development of student personality (Department of National Education, 2008). Guidance and counseling services have a general purpose of helping students to achieve maturity and independence in their lives and carry out their developmental tasks which include personal, social, learning, and career fully and optimally (The Regulation of Minister of Education and Culture number 111 of 2014). One of the guidance and counseling service functions is the curative function, namely counseling service that helps students to overcome the problems they experienced. Guidance and counseling curative services are needed by victims of bullying because victims tend to have problems in adaptation, interpersonal relationships, and mental health (Copeland et al., 2013; Guerra, 2014; Klomek et al, 2007; Khamis, 2015 in Sung Y 2018).

However, the utilization of guidance and counseling services is still not optimal because it is caused by students' interests and perceptions. Based on the results of Amronah's research (2014), 21.9% of students have a moderate or sufficient perception of school counseling services. Students' perceptions of school counseling are caused by a less close

relationship between Guidance and Counseling Teacher and students (Mardiana, 2012). On the other hand, perception has an influence in shaping one's awareness of something (Toch & Maclean, 1962).

The development of "Konselor-Ku" communication media is one of the efforts to improve the quality of guidance and counseling services and change students' perceptions. In addition, e-counseling can also increase students' interest in conducting counseling services. In accordance with the results of the Brown's study(2012) showed that 28.9% of respondents stated they had used e-counseling and 64.4% suggested e-counseling as an alternative to overcome student development.

In the development of internet-based communication media, there are concerns about the emergence of internet addict. Users will lose control of the environment in using the internet. In addition , students will experience the habit of repeatedly checking e-mail, chatting online with others, or browsing the internet (Harry, 2013). In this communication media, students use "Konselor-Ku" communication media to read informative articles related to bullying. Other uses of "Konselor-Ku" communication media when bullying occurs by utilizing reporting services. Another service that can be used is an initial assessment of bullying actions. Based on those services, in the "Konselor-Ku" communication media, the students do not need to open the application any time. Communication media is used when needed. So that it can minimize the applications dependency.

"Konselor-Ku" communication media has a positive impact on handling bullying cases. The developed application can be an alternative for students in reporting bullying actions and facilitate students in conveying their problems related to bullying. In the Brown's study (2012) found the fact that the majority of respondents (77.3%) stated that through e-counseling services respondents were willing to share information needed. The results of the study answer the problems of students who are reluctant to conduct face-to-face counseling services because they feel worried and afraid in conveying the experienced problems.

Besides that, it is related to interaction with counselors, e-counseling media can improve relationships because it can be done any time (Bailey, Yager, & Jensen, 2002). In addition, e-counseling media in the form of chat can increase social penetration by 31.58% (Febrianta, 2015). According to Fenichel& Ark (in Bastemur, 2014) through written media, students can convey honestly and describe themselves easily (self-disclose) so that students can get easy access to convey problems of experienced bullying actions.

The difference from the previous e-counseling development included: 1) Design in the communication media "Konselor-Ku" is using an attractive appearance and based on the development of Senior High School students, 2) Communication media "Konselor-Ku" is developed by using an android application, with advantages that students can use the media through their own cell-phones, 3) "Konselor-Ku" communication media provides reporting services that can facilitate students reporting bullying through the photos, videos, and text menus, also 4) "Konselor-Ku" communication media provides an initial bullying assessment that makes it easy for students in conveying the experienced problems. In addition, assessment bullying services can also facilitate guidance and counseling teacher in conducting initial assessments before the counseling session begins.

Communication media "Konselor-Ku" can encourage the implementation of the anti-bullying campaign in students so that it is expected to reduce the case of bullying. The "Konselor-Ku" communication media also has the potential to change the students' mindset and views of guidance and counseling services that are previously less attractive and monotonous to be more interesting and innovative. Through the "Konselor-Ku" communication media, students can get services that are easily accessible, attractive and make it easier for students to conduct counseling processes. Regarding bullying, the "Konselor-Ku" communication media has the potential to reduce the number of bullying acts with informative article services, report and initial counseling assessment.

## 4. CONCLUSIONS

Based on the results of the research in the define stage, the results show that 32% of students state they experience bullying action, and 93.8% of students state that android can be used to report bullying. In the design phase, the prototype is developed and it is obtained a design validation score of 80% with a feasible category. The develop stage is conducted application development, validation, and testing. Product validation in terms of communication media material is scored of 82.6% in the very feasible category, while on the media side. it scored 93% in the very feasible category. In addition, the trials conducted obtained a score of 87% with a very feasible category. In the disseminated stage, product socialization is carried out on students and teachers.

## 5. ACKNOWLEDGMENTS

This research was carried out with the support of several parties, therefore the writers would like to thank: a) Yogyakarta State University, Faculty of Education Student Affairs; b) Principal of State Senior High School 4 Yogyakarta as the setting of the study, c) M. Abdul Malik, S. Pd as the State Senior High School 4 Yogyakarta Guidance and Counseling

Teacher, and d) Ministry of Research, Technology, and Higher Education who has provided research grant funds in the "*Student Creativity Program 2018* ".

## 6. REFERENCES


[1] Al RaqqadH.K.,et al,T"he Impact of School Bullying on Students Academic Achievement from Teachers Point of View", International Education Studies,vol 10, No.6, pp: 44-50, 2017.

[2] Amronah, "*Persepsi Siswa Terhadap Pelaksanaan Layanan Bimbinga nPribadi", Jurnal Psikopedagogia*, vol. 3,No.,2. pp: 108-115, 2014.

[3] Bhatla, N, et al,"Are School Safe and Equal Places For Girls and Boys in Asia". Bangkok : Global Girls Innovation Programme, 2015.

[4] Bailey, R., Yager, J., & Jenson, J.,"The psychiatrist as clinical computerologist in the treatment of adolescents: Old barks in new bytes", American Journal of Psychiatry, vol. 159, pp: 1298-1304, 2002.

[5] Bastemur, S, & E Bastemur, "Techn, ology based counseling: perspectives of Turkish counselors", Procedia - Social and Behavioral Sciences,vol. 176, pp: 431 – 438, 2014.

[6] Depdiknas. 2008. *Rambu-rambuPenyelenggaraanBimbingan dan KonselingdalamJalur Pendidikan Formal.*

[7] Dewi, T.W.G. 2017. "*FaktorRendahnyaMinatSiswa Pada LayananBimbingan Dan Konseling Di SMA Negeri 1 NatarKabupaten Lampung Selatan Tahun Pelajaran 2016/2017*". Skripsi. *FakultasKeguruan Dan Ilmu Pendidikan Universitas Lampung, Lampung.*

[8] Engkoeswara& A. Komariah. 2015. *Administrasi Pendidikan*. Bandung: Alfabeta.

[9] Febrianta, Ekky "*PengaruhIntensitasPenggunaanAplikasi Chatting Messenger terhadap Proses PenetrasiSosial*",e-Proceeding of Management, vol. 2, No. 2, pp: 1421-142, 2015.

[10] Harry, P. & S. M Issack,"Exploring the potential of online group counseling: A case-study for mauritian students presenting the Internet addiction disorder syndrome", European Scientific Journal. vol. 4, pp: 366-379, 2013.

[11] Malaka, T. 2018. *Awalnya Mengaku Biseks, Remaja SMA Ini Jadi Korban Bully Lalu Nekat Bunuh Diri*. http://bangka.tribunnews.comAccesed at 16 JulyAgustus 2018.

[12] Mardiana, AnnisaRizka, et al. 2012. "*StuditentangPersepsiSiswa pada LayananBimbingan Dan KonselingDi SMK Se-KecamatanSukomanunggal Surabaya*",JurnalGC UNESA. Vol. 3, No. 1, pp: 72-80, 2012.

[13] Novalia, Ricca. 2016. "*DampakBullying terhadapKondisiPsikososialAnak di PerkampunganSosialPingit. Skripsi. Universitas Islam Negeri SunanKalijaga*".

[14] Permendikbudno 111 of 2014 about*Bimbingan dan Konseling pada Pendidikan Dasar dan Pendidikan Menengah*

[15] Riduwan. 2011. *Skala PengukuranVariabel-VariabelPenelitian*. Bandung: Alfabeta.

[16] Romadhon, A.F,"*Faktor-faktor yang MempengaruhiMinat dan MotivasiMemangaatkanLayananBimbingan dan Konseling. E-Journal Bimbingan dan Konseling*",vol. 5, No. 12, pp: 647-659, 2016.

[17] Samsudin, "*Pengembangan Model Bimbingan Dan KonselingBerbasis Web Di SMA Negeri 3 Bandung",*Thesis. Universitas Pendidikan Indonesia. Bandung, 2011.

[18] Sugiyono. 2017. "*MetodePenelitian dan Pengembangan (Research and Development)*". Bandung: Alfabeta.

[19] Sung, Y. Et all.,"Double trouble: The developmental process of school bullyvictims. Children and Youth Services Review", Vol. 91, pp: 279-288, 2018.

[20] Tanjung, C.A. 2017. Diduga Korban Bully di Sekolah, Siswi SMA di Riau BunuhDiri.https://news.detik.com/. Diakses pada 16 Agustus 2018

[21] Thiagarajan. 1974. "Instructional Development for Training Teachers of Exceptional Children: A Sourcbook". Washington: National Center for improvement of Educational System.

[22] Toch, H & Malcolm S. M. Jr, "Perception, communication and educational research: A transactional view", Audiovisual communication review, Vol. 10, No. 5, pp: 55–77, 1962.

[23] Undang-undang No 35 Pasal 54 tahun 2014 tentangPerlindunganAnak.

[24] Windy Sartika Lestari,"*Analisis Faktor-Faktor Penyebab Bullying,Di Kalangan Peserta Didik"*. Sosio Didaktika: Social Science Education Journal, Vol. 3, No.2, pp:149-151, 2016.

[25] Zamani, Z.A., et all. "*Perceptions towards online counseling among counselors in Malaysia"*. Procedia Social and Behavioral Sciences,Vol. 5, pp: 585–589, 2010.