



## COUNSELEE SATISFACTION IN FACE-TO-FACE AND CYBER-COUNSELING APPROACH TO HELP CYBER-BULLYING VICTIMS IN THE ERA OF INDUSTRIAL REVOLUTION 4.0: COMPARATIVE ANALYSIS

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### Abstract:

The aim of this research is to investigate the difference in the level of satisfaction of the counselee (victims) of cyber-bullying after receiving counseling services through face-to-face and cyber-counseling approaches. The research method uses Quasi-Experimental Non-equivalent Control Group Pretest/Posttest Design. Quantitative data obtained using Client Satisfaction Instrument (CSI) and the Revised Cyber-bullying Inventory (RCBI). Data is then analyzed using an independent t-test to see the difference in the satisfaction level of the counselee (victims) of cyber-bullying. Respondents research totaling 64 people involved and conducted in two study groups, the control group using face-to-face counseling ( $n=32$ ) and group experiments using cyber-counseling ( $n=32$ ). The results of the study have found that counseling services have been given to the counselee (victims) of cyber-bullying with the cyber-counseling approach shows higher satisfaction compared to a face-to-face approach.

**Keywords:** satisfaction, cyber-counseling, cyber-bullying, comparative analysis

### 1. Introduction

The 4.0 industry can be interpreted as an industrial era where all the entities in it can communicate in real time anywhere and anytime with the use of Cyber Physical System (CPS) and the Internet of Things and Services (IoT and IoS) to achieve the goal of creating new value or optimizing existing values of every process in the industry. The term 4.0 industry has the goal of increasing the industry competitiveness of every country while facing a highly dynamic global market. The condition is caused by the rapid development of digital technology distribution in various fields. The 4.0 industry is predicted to have benefits such as improving speed-flexibility of production,

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improving service to customers and increasing revenue. The realization of such potential benefits will have a positive impact on the economy of a country (Prasetyo & Sutopo, 2018:18-19). The presence of benefits walks alongside the presence of challenges and opportunities. The challenge includes four aspects, for example:

- 1) Economic challenges (globalization continues, increasing needs of innovation, higher service orientation, needs cooperation);
- 2) Social challenges (demographic and social change, virtual work improvement, process complexity growth);
- 3) Technical challenges (technological developments and exponential data usage, growing collaborative work);
- 4) Environmental challenges (change of environment and scarcity of resources); and
- 5) Political challenges (standardization and security of data and information).

While the opportunities of the 4.0 industries are;

- 1) Ecosystem innovations;
- 2) Competitive industrial base;
- 3) Investments in technology; and
- 4) Integration of small medium enterprises (SMES) and entrepreneurship (Hecklau in Yahya, 2018:7-9).

Mapping the benefits, challenges, and opportunities of the 4.0 industry to prevent the impact of social challenges in shared life both interpersonal, intrapersonal, and intra-textual Communications, one of which is a cyber-bullying problem. The application of the 4.0 Industrial Revolution is followed by increasingly massive-structured deployments and application of cyber-bullying among learners. Cyber-bullying refers to any behavior demonstrated through electronic or digital media by individuals or groups that repeatedly communicate the news of feuds and attacks that intend to cause harm or discomfort over others (Tokunaga, 2010:278). Cyber-bullying has been a major concern for the world, especially among teenagers (Ang, 2015:36; Chan & Wong, 2015:99; Ptaszynski et al., 2016:16). The results of the study found 69% of children aged 13-22 years in the UK experienced cyber-bullying and 20% of cases occurred amazingly (Childline, 2014, quoted by El Asam & Samara, 2016:129). Cyber-bullying is also happening in Spain where it is estimated to include 32% of teenagers' population (Buelga, Cava, Musitu, & Torralba, 2015). In South Korea students who experience cyber-bullying reach 34% (Lee & Shin, 2017:353). While in Indonesia in 2017, according to a statement of Social Minister Khofifah Indar Parawansa that 84% of children aged 14-17 years have bullying and most cases are cyber-bullying (detiknews, Friday, July 12, 2017). As a result, as a result of research from the Norton Survey and Research Institute in 2018 found as much as 92% of parents worried about cyber-bullying that befalls their children (Mahbud, Tempo, September 11, 2018). On this basis, it can be concluded that cyber-bullying is more prevalent than traditional bullying and cyber-bullying cause negative consequences, especially cyber victims (Foody, Samara & Per Carlbring, 2015:236).

There are two main factors affecting cyber-bullying. First, the factors related to psychology, such as a word of heart encouragement and empathy (Erreygers, Pabian, Vandebosch & Baillien, 2016:61); angry characters (Wang, Yang, Yang, Wang & Lei, 2017:520); Narcissism, mental illness, and personality (van Geel, Goemans, Toprak & Vedder, 2017:232); aggression (Ang, 2015:35). Research conducted by Udris (2014) to 887 High school students showed that 'online disinhibition' significantly influential to cyber-bullying. Second, social factors. Research has been conducted to 563 students found that cyber-bullying relates to individual and social values (Allison & Bussey, 2017:8). Cyber-bullying can also lead to negative emotions, depression, loneliness, suicidal tendencies, declines in academic achievement, isolation, anxiety, and low self-esteem (Ho, Chen & Ng, 2017:74; Wright, 2017:189).

Looking at this kind of condition, the role of counselors is very important in conducting counseling on students (counselor) who have experienced the impact of cyber-bullying (victims). There are two counseling approaches that counselors can do to help students with cyber-bullying, a face-to-face counseling approach and a cyber-counseling approach. There are several articles that show results from research that has been done to know the effectiveness of cyber-counseling services against face-to-face counseling. Researchers found that cyber-counseling was better than face-to-face counseling (Barak & Bloch, 2006:61; Cook & Doyle, 2002:95; Reynolds, Stiles & Grohol, 2006:99). Research conducted by Zainudin & Yusop (2018:678) found that the client was more satisfied with the cyber-counseling approach than the face-to-face approach. There are also researchers who found that face-to-face counseling and cyber-counseling have the same effectiveness (Barak & Dolev-Cohen, 2006:120; Chester & Glass, 2006:146; Leibert, Archer, Munson & York, 2006:69). In line with that, the study meta-analysis is linked to a web-based intervention conducted by Barak et al. (2009) mentioning that online counseling is as effective as face-to-face counseling. Meanwhile, in Ifdil research conducted by Zamani in 2010 as many as 20 respondents selected as the subject and data collected using questionnaires to determine the utilization of e-counseling or cyber-counseling among counselors. The results showed that even on one side the respondent looked positively to online counseling, but on the other hand the counselor admitted that they preferred face-to-face counseling because they provided services to clients, however, this research also gives an important note that in the coming time will more and more people will continue to search the internet as a resource to overcome their mental health problems (Dina, Sofiana, Wahyuningtyas, & Bhakti 2016:139).

Based on the results of inconsistent research on the effectiveness of the use of face-to-face counseling and cyber-counseling approach in the implementation of counseling services, then this research will investigate the effectiveness of both the approach with focus on students (counselor) victims of cyber-bullying and at once sees the satisfaction of cyberbullying victims when receiving counseling with both approaches. The purpose of the study was to investigate the difference in the satisfaction level of the counselee (victims) of cyber-bullying after receiving face-to-face counseling and cyber-counseling services.

## 2. Method

This research uses a quasi-experimental research method conducted at SMAS PGRI Kupang, East Nusa Tenggara. Data were analyzed using the independent t-test to see the difference in the satisfaction of counselee (victims of cyber-bullying) on both approaches of counseling. The Data is collected using two scales: Client Satisfaction Instrument (CSI) and the Revised Cyber-bullying Inventory (RCBI). The Client Satisfaction Instrument (CSI) by Steven L. Mcmurtry, 1994) consists of 25 item instrument statements that are used to gauge the way a person perceives the service he has received. The Revised Cyber-bullying Inventory (RCBI by Erdur-Baker & Kavut, 2007). RCBI consists of 28 item instrument statements consisting of 2 sub-scales, namely the bully scale and the victim scale. The questions in the RCBI relate to the use of attacking emails, mobile phones, social networks, and general computer use.

The research was conducted in two phases. In the first phase, all students of class XI SMAS PGRI Kupang amounting to 89 students are selected through convenience sampling and filtered to find out who experienced victims of cyber-bullying using Revised Cyber-bullying Inventory (RCBI) and in-depth interviews with students and school counselors. Then, in the second phase, the result of the first phase was found 64 people had experienced cyber-bullying (victims). Based on this, respondents were chosen randomly into two groups: the control group inside the face-to-face counseling ( $n=32$ ) approach and the experiment group with the cyber-counseling ( $n=32$ ) approach. Counseling sessions are conducted through a complete and inherent counseling process with ethical counseling. Face-to-face counseling is carried out in the school counseling room, while the cyber-counseling approach is done through 'instant messenger'. All respondents completed a counseling session between 4 and 8 sessions, and after the respondent completed the counseling process, the respondent was given a CSI instrument.

## 3. Results

The experimental group using the cyber-counseling approach, there were 23 male respondents (72%) and 9 women (28%), while for the control group using face-to-face counseling, consisting of 13 male respondents (41%) and 19 women (59%). Age-based respondents for experimental groups of 13 respondents aged 15 years (47%) and 17 respondents were 16 years old (53%), while the control group consisted of 14 respondents who were 15 years old (44%) and 18 of the respondents were 16 years old (56%).

**Table 1:** Respondents profile

<b>Respondents category</b>		<b>Number of respondents</b>	<b>Percentage</b>
Gender (cyber-counseling)	Male	23	72%
	Female	9	28%
	Total	32	100%
Gender (face-to-face)		<b>Number of respondents</b>	<b>Percentage</b>
	Male	13	41%
	Female	19	59%
Age (cyber-counseling)	Total	32	100%
		<b>Number of respondents</b>	<b>Percentage</b>
	15 years old	15	47%
Age (face-to-face)	16 years old	17	53%
	Total	32	100%
		<b>Number of respondents</b>	<b>Percentage</b>
Age (face-to-face)	15 years old	14	44%
	16 years old	18	56%
	Total	32	100%

The Kolmogorov-Smirnov test results indicate that the data distribution for each variable is normal. The details, for the cyber-bullying variable  $0.990 > 0.05$ , counselee satisfaction in the experimental group  $0.612 > 0.05$ , and counselee satisfaction in the control group  $0.474 > 0.05$ . As for the homogeneity test results found results  $0.550 > 0.05$ , the meaning is significant and the distribution of data is homogenous. Based on the results of the Kolmogorov-Smirnov test and homogeneity, the data can be continued to the independent t-test analysis.

Measurement of the counselee satisfaction rate using *Client Satisfaction Instrument* (CSI), consisting of five levels, namely, very high (4.21-5.0), height (3.41-4.2), Medium (2.61-3.4), Low (1.81-2.6), and very low (1.00-1.8). The findings show that in a face-to-face approach, 23 (72%) Respondents showed very high satisfaction, 9 (28%) in the high category. Meanwhile, cyber-counseling approaches found 27 respondents (84%) are at very high levels and 5 (16%) at a high level.

**Table 2:** Counselee satisfaction among groups

<b>Level Satisfaction</b>	<b>Control (Face-to-Face) n=32</b>	<b>Experiment (cyber-counseling) n=32</b>
Very high	23 (72%)	27 (84%)
High	9 (28%)	5 (16%)
Medium	0	0
Low	0	0
Very Low	0	0

In this section, each item of the *Client Satisfaction Instrument* (CSI) is compared between the two groups. Table 3 shows that there is a high *mean* difference between the two

groups seen from these nine items when compared to other items. These items have the meaning that the counselee of the group cyber-counseling feels that the cyber-counseling services they receive are very significant in relation to being victims of cyber-bullying. These nine items also have the meaning that the counselee of the cyber-counseling group is more pleased in communication (interpersonal, intrapersonal & intra-textual) and expressed their issues to the counselor, and the counselee was pleased because there is a change in the counselee according to the assessment made by others.

**Table 3:** The mean difference of the nine items of counselee satisfaction

Item	Approach	Mean	sd
1. The service I received was the greatest help for me.	Cyber-counseling	4.7188	.45680
	Face-to-face	4.4063	.55992
2. The people here seem to really pay attention to me.	Cyber-counseling	4.8437	.36890
	Face-to-face	4.5937	.55992
3. People here do something their way, instead of helping me find the way.	Cyber-counseling	4.6875	.64446
	Face-to-face	4.5937	.71208
4. People here really know what they are doing.	Cyber-counseling	4.7188	.52267
	Face-to-face	4.4063	.66524
5. I get good help here which I really need.	Cyber-counseling	4.6250	.55358
	Face-to-face	4.2187	.60824
6. The people here accept me as is.	Cyber-counseling	4.8125	.39656
	Face-to-face	4.7813	.42001
7. I now feel much better than when I first came here.	Cyber-counseling	4.3750	.97551
	Face-to-face	4.0313	1.33161
8. People who know me say that this place has made a positive change to me.	Cyber-counseling	4.5000	.80322
	Face-to-face	4.1563	.67725
9. The help I gained here was better than I expected.	Cyber-counseling	4.1563	.88388
	Face-to-face	3.6250	1.43122

Measurement of counselee satisfaction differences in the two counseling approaches using the independent t-test. The results of the t-test analysis show that there is a significant difference between face-to-face and the cyber-counseling approach with t-value = 2,020, p<0.05. Counselee satisfaction in the cyber-counseling approach (89.3125) is higher than the face-to-face approach (86.5625). The invention clarifies that the counselee (victims) of cyber-bullying within the cyber-counseling approach shows higher satisfaction than face-to-face counseling.

**Table 4:** The mean difference of counselee satisfaction

Approach	n	Mean	Mean diff.	sd	Df	t	sig. p
Face-to-face	32	86.5625	2.75000	4.99314	60	2.020	.048
Cyber-counseling	32	89.3125		5.86371			

#### 4. Discussion

This study saw a comparison between the satisfaction of Counselee (victims) of cyber-bullying in two counseling approaches, the invention suggests there is a significant difference in the satisfaction of counselee (victims) of cyber-bullying with a face-to-face approach counseling and cyber-counseling. Through further analysis, the satisfaction of the counselee (victims) of cyber-bullying with a higher cyber-counseling approach than face-to-face counseling. The findings of this study were consistent with Cook & Doyle's (2002) indicating that the e-counseling service received higher satisfaction when compared to face-to-face counseling. The study was also parallel with the findings from Barak & Bloch, 2006; Reynolds, Stiles and Grohol, 2006; Yager, 2000, and Zainudin & Yusop, 2018). Research from Zeren (2015, in Bacioğlu & Kocabiyik, 2019:48) ensures that the counselee shows a feeling of contentment when receiving counseling online (cyber-counseling).

The results of this research show that the counseling services provided to the counselee (victims) of cyber-bullying with a cyber-counseling approach are more effective than with a face-to-face approach because the counselee is experiencing satisfaction, which evidenced by the counselee willingness to share sadness (Reynolds, et al., 2006:99), a positive attitude of counselee (Robinson & Serfaty, 2001:183), a therapeutic environment created by counselor (King et al., 2006:110), and providing services cyber-counseling to the counselee (victims) of cyber-bullying faster because it simultaneously utilizes electronic media to communicate via the internet, as stated by Skinner & Latchford (2006:159) that the easy access factor will enable the counselee immediately get answers and understandings compared to scheduling face-to-face counseling.

The counselee has satisfaction also because it is related to the internet as media. On the one hand, the characters from the internet such as nameless, speed, accessibility, excessive internet use or disease are also under the reach of cyber-bullying (Akar, 2017:446). The solution, on the other hand, the internet is used as a strategic medium to help the counselee (victims) of cyber-bullying because they are not worried about the reaction of the counselor when discussing the problem, and also the counselee can be immediately obtaining help through online media. This situation differs from a face-to-face counseling session that asks for the counselee to meet based on the schedule that has been predetermined or needed even occasionally through the schedule of pre-planned counseling sessions. Another factor that demonstrates the effectiveness of cyber-counseling versus face-to-face counseling, as examined by Sibel Dincyurek and Gulen Uygarer (2012, in Petrus & Sudyboi, 2017:7), in the results of their research in Turkey relating to the importance of guidance and counseling services in Turkey, the view of the academician that online counseling services will be useful to shy students who cannot come to school counseling services. In addition, an online counseling service can provide 24 hours a day. This will give students the opportunity to reach a wider range of students, and counselors can provide direct services to the student together.

The cyber counseling approach can help the impact of the counselee (victims) experiencing cyber bullying. The results of the research from Andersson & Cuijpers (2010:197) mention that a very positive aspect of online counseling is improving access to mental health services. The research done by McKenna & Bargh found that clients who have anxiety and social isolation are more likely to open a deep relationship with online counseling according to face-to-face counseling. In fact, through its cyber-counseling approach, the impact of cyber bullying experienced by counselees like depression and loneliness can be helped through chat and e-mail support (in Richards & Richardson, 2012:329).

Based on the results of this study, researchers provided some critical notes relating to the approach of cyber-counseling (helping profession) in relation to helping the counselee (victims) of cyber-bullying.

First, security. The question of "the extent to which online counseling is safe" can be explained by the fact that it is a web-based service. Each web-based service focuses on the importance of the consent being informed, especially on the privacy limits, privacy exceptions and threats to security (Behnke, 2008). Leibert, Archer, Munson & York (2006:70) presented that while clients enjoy the privacy of online communication, their satisfaction value suggests that online communication is not as reliable as face-to-face counseling. Cyber-attack risk can occur for all current technology services therefore it is very necessary to use the software, using a password to protect the confidentiality of the client, verifying the identity of the counselee via encryption, providing alternative means of communication with counselee when counselee is offline and or there is a technical issue as a preventative-protective method.

Second, it relates to the cyber counselor. Here there is a need for online counselors to have the skills to use the internet and computer tools, access to information via the internet, using computer programs that help to test, diagnose and choose the help that suitable for the counselee. (Sabella, Poynton & Isaacs, 2010 quoted in Zeren, 2018:64).

Third, dealing with ethics and standards in online counseling. In this aspect, the online counselor needs information relating to qualifications as an online counselor and job description. The most essential needs are related to legal regulations and ethical standards leading to cyber-counseling services. Since the beginning of the application of e-therapy, the counselor should provide information to the counselee in relation to its confidentiality and limitation and be able to prevent when confidentiality is under certain risk. Among them, the first standard set by the National Board for Certified Counselors for online counseling practices, which counselors provide services through secure website and e-mail encryption to ensure the confidentiality of the internet (Shaw & Shaw, 2006:42; Ross, 2011:55).

The American Psychological Counseling Association (ACA) handles online counseling services within the ethical codes booklet. Zeren & Bulut (2018) has examined issues such as counselor-counselee relationships, confidentiality and privacy, professional responsibilities, relationships with other experts, measurements and assessments, research and publication, the use of technology in counseling , social

media, and solutions to ethical dilemmas in the light of the principles governed by ACA, and also to gather organizational principles such as the Association for Counseling and Therapy Online (ACTO), the International Society for Mental Health Online (ISHMO). In conclusion, how and who performs online counseling services should be within the standard framework and ethical principles. In addition, online counseling services should be audited by legitimate institutions to ensure that counselors have fulfilled ethical standards and principles, and there is a legal sanction given if there is no fulfillment by counselors. Or in other words, it is important for supervisors to assess how online counselors (a) communicate with empathy, (b) understand the counselee narrative, (c) respond to challenges, and (d) evaluate their own effectiveness (Petrus & Sudyboi, 2017:12).

Further, according to Petrus & Sudyboi (2017:11), in Indonesia, it needs to be made a clear legal umbrella to protect any profession that allows counseling practices to be implemented with online. In particular, Asosiasi Bimbingan dan Konseling Indonesia (ABKIN) has to be responsive and able to renew itself as a profession that can be implemented with online. By making the code of Ethics in accordance with the characteristics of Indonesian society, counseling practice can be reached anytime and anywhere. It is very urgent, because many online practices that have been held are self-labeled as professional online counseling, whereas, both in the system and legally state and profession code of ethics from online counseling has not allowed practice online counseling can be implemented. It is very important to note because it is related to the continuity of profession existence which affects the community's trust. Therefore, the barriers in the implementation of cyber-counseling are related to the legal, ethical and implementing procedures.

## 5. Conclusion

The results of the study have shown that there is a significant difference *mean* in the cyber-counseling approach compared to face-to-face counseling, where the counselee (victims) of cyber-bullying with the cyber-counseling approach shows higher satisfaction compared to a face-to-face approach. The counselee that has received cyber-counseling has put their satisfaction in relation to the accepted services, supportive therapeutic environment, and professional and effective counselors.

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