The Positive Impact From Group Counselling With Cognitive Behaviour (GC-CB) To Stress About Cyberbullying Conditions

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Abstract: Technology has now served as a means of cyberbullying. Cyberbullying represents harassment done at any time and in any place. A victim of cyberbullying may undergo a sequence of emotional effects such as anxiety, stress, depression, or even suicidal intention. The present study aimed to confirm the effectiveness of cognitive behavior group counseling with cognitive restructuring and self- instruction technique in reducing university students' stress due to cyberbullying. To this end, factorial experimental design was implemented. The participants of the study were 20 private university students in Yogyakarta, Indonesia. The data were collected using Social Anxiety Scale. In analyzing the data, repeated measure ANAVA was applied. The result of the study indicated that cognitive behavior group counseling with cognitive restructuring and self-instruction technique was effective in reducing the stress of cyberbullying victims. The study also revealed that self-instruction was more effective in reducing stress, compared to cognitive structuring. Regarding gender, female students exhibited a more significant decrease in stress than male students did.

Keywords: cognitive behavior, cognitive restructuring, self-instruction, stress

1. INTRODUCTION

The Internet has been utilized by a range of community groups, including university students. Internet is used for a range of purposes, such as Social media i.e., Facebook, Twitter, Snapchat, email, text message, or even online gaming, Internet plays a significant role in individuals' daily activities. However, its use should be controlled, given that failure in properly controlling internet use may adversely affect one's self and other individuals, such as anxiety, as reported by [1]. Another issue related to social media that leads to other individuals' anxiety is cyberbullying [2].

Define cyberbullying as an aggressive behavior intentionally committed by an individual or a group through repeated electronic contact toward the vulnerable targets [3]. Cyberbullying refers to uncontrolled maladaptive leisure [4]. Cyberbullying behavior is categorized as online harassment, covering impersonation, ostracism, spreading rumors, identity theft, or creating a website to defame others. Furthermore, cyberbullying puts its victims using websites, instant message, blog, chat room, or email, among others [5] [6].

In general, cyberbullying emerges due to improperly controlled internet use. The internet, as of today's primary need, should be utilized in more positive ways such as finding references, healthy social media use, or entertainment purposes [7]. The Internet is useful for

students since it supports their learning process and serves as a means of self-expression. Considering the importance of internet use in daily life, it should be controlled to prevent individuals from maladaptive behaviors.

Found that 26% of adolescents in their study reported that they were bullies, while 42% of them stated that they were the victim of cyberbullying [8]. Cyberbullying is as abusive as offline bullying. In general, bullying behaviors that are often found in schools or college may spread to online media, which is categorized as cyberbullying.

State that cyberbullying provides bullies with anonymity, making them feel free to do anything without considering the consequences and reducing the guilty feeling of their acts [9]. Meanwhile, the victim of cyberbullying potentially deals with harassment at any time and in any place. Students mostly undergo cyberbullying, as [10] revealed in their study on the psychological effect of cyberbullying on university students.

Cyberbullying leads to different effects, including students' learning ability [11] and various emotional effects such as anxiety, distress, depression, or even suicidal intention [12]. More specifically, the effect of cyberbullying mostly reported by the victim is stress [13]

Consistent with the previous study, the majority of the victims of cyberbullying in the university the present study took place also reported stress as a result of this behavior. In this case, stress is defined as either physical or psychological reaction toward every demand leading to tension and stability, such as anxiety. Stress the students perceive is a reaction toward a stressful condition, which leads to anxiety, fear, and desperation, due to cyberbullying.

Furthermore, cyberbullying also occurs when there is a lack of social support, leading to miscommunication and bias. In general, Cyberbullying is often initially done offline, which eventually continues to online media. In defining the cyberbullying phenomenon, [14] bullying circle is applied.

The form of cyberbullying behavior mostly committed by university students is posting sexually explicit pictures on a website when their relationship breaks. Cyberbullying could also be in the form of making an online bulleting board inviting other peoples to contribute to hate speeches [15]. Technological advancement makes it difficult to detect cyberbullying [16]. Hence, it serves as adolescents' 'preferred' mode of violence to threaten and assault other's self-esteem [17].

The use of the internet and social media is inseparable from students' social and daily life. Accordingly, it is almost impossible for most adolescents to avoid internet, making them vulnerable to cyberbullying [18]. Issues on cyberbullying are crucial and should be minimized given that the filtering and intervening attempts are usually made to address only one type of intimidation. To address this issue, a more global and effective approach is necessary.

One of the alternative attempts for reducing stress due to cyberbullying is the cognitive behavioral approach. This approach is designed to address issues using cognitive restructuring of maladaptive behavior and is based on cognitive formulation, belief, and distorted behavioral strategy [19] [20]. Counselor could help individuals undergoing emotional disorders due to cyberbullying by restructuring their cognition, such as helping them conclude that due to impression management, social media may not represent one's real-life experience. Furthermore, the focus of cognitive behavior in the present study was perception, belief, and cognition [21]. Grounded on the theory of Cognitive behavior, the study is expected to help students to possess more realistic thought, act, and feelings to cope with stress.

Previous studies showed that cognitive behavioral approach is effective in reducing stress, as shown by [22] study on stress disorder. Another study was conducted, their four-year

follow-ups on trauma survivors showed that cognitive behavior was effective to overcome stress.

Previous studies consistently reported that cognitive behavioral group counseling is effective to reduce stress. This report is also strengthened by [23] meta-analysis showing that cognitive behavioral approach is effective to address various issues and is recommended to overcome general stress. The present study examined the stress caused by cyberbullying, which potentially lowers individuals' self-efficacy (i.e., one's belief in his or her own ability in controlling his or her self and the surrounding events).

In the present study we consider an individual's self-efficacy in overcoming stress. Participants' gender is also taken into consideration.

In addition, [24] found that more women suffer from cyberbullying, compared to men. From a theoreticald perspective, cognitive behavioral counseling is effective in minimizing stress. However, in practice, the study has not implemented cognitive restructuring and selfinstruction techniques to address stress due to cyberbullying. Besides, [25] and [26] also confirm the effectiveness of cognitive restructuring and self-instruction techniques in overcoming stress. Therefore, it is necessary to prove the effectiveness of Cognitive restructuring and self-instruction techniques.

The present study applied two techniques above during the counseling process. Furthermore, the cognitive restructuring technique is a technique that involves the implementation of cognitive learning principles. This technique is designed to attain better emotional responses by changing habitual assessment, thus reducing biases. Meanwhile, self-instruction technique gains advantages to transform negative views into positive views. Besides, this technique is also able to direct individuals to change their self-consequence in order to obtain effective consequences from the environment [27].

In the present study, cognitive behavioral approach with cognitive restructuring and selfinstruction techniques was selected because this approach believes that individuals' mindset is formulated through interrelated Stimulus-Cognition-Responses (SCR) process that creates some kind of brain network, where the cognitive process accounts for how human think, feel, and act.

1. Research Method

1.1. Participant

The present study involved twenty participants (10 female and 10 male students), they were assigned into two intervention groups of cognitive restructuring and self-instruction (each group consists of 5 male and 5 female students). They were students of a private university in Yogyakarta, Indonesia.

1.2. Instrument

The present study employed the Acculturative Stress Scale developed by [28]. It consisted of 33 items with a 4-points Likert scale, starting from 'strongly disagree' to 'strongly agree.' The Alpha Cronbach coefficient of the instrument was 0.96.

1.3. Procedure

We distributed a pre-test instrument to 500 students. Based on the assessment of pre-test results, twenty students indicating a high-stress level and met the criteria of the study were recruited. The recruited participants were involved in the intervention activities (i.e., cognitive behavioral group counseling) for eight sessions.

The intervention was conducted in the university's counseling center. Once the intervention was done, a post-test assessment was performed to view the decrease in

participants' stress. We also performed a follow-up assessment a month after post-test assessment to confirm the intervention effect persistence.

The data were analyzed using repeated measures ANAVA mixed design to examine the decreasing stress-level. It was done by examining and comparing the mean, within-subject effects, and between-subject effects in repeated measures. Cognitive behavioral group counseling activities are displayed in Table 1.

Session	Activity										
Session	·										
1	The counselor build rapport, provided information related to the activities										
(Orientation)	to be done, and asked them to fill an informed consent form.										
2	The counselor performed an A-B-C assessment of the participants'										
(Transition)	stressful experiences and identified the activating event, belief, and consequence.										
2	1										
3	The counselor described stress in relation to the situation, beliefs,										
(Main Activity)	emotions, and behaviors. The counselor helped the participants to assert the										
	relationship between core belief, intermediate belief, and automatic thought										
	and stress										
4	The counselor asked the participants to dispute their beliefs using Socratic										
(Main Activity)	method. After that, the counselor guided them to develop more adaptive										
	beliefs to replace distorted thoughts.										
5	Counselor applied internal dialog techniques to create self-reinforcement as										
(Main Activity)	an attempt to achieve the goal and provide the participants with an										
	opportunity to overcome maladaptive thoughts and beliefs leading to stress.										
6	The counselor invited the participants to discuss a range of possibilities for										
(Main Activity)	preventing the symptoms.										
7	The counselor ended the activities and asked for the participants'										
(Termination)	impression related to the activities done										

Table 1 Systematics of Cognitive behavioral group counseling

2. Finding

2.1. Data Description

The data of the study were analyzed using repeated measures ANAVA. Table 2 below displayed the descriptive characteristic of stress in pre-test (T1), post-test (T2), and follow-up assessment (T3) of the experimental groups.

Grou	Male Female											M _{techniq}	
р	T ₁ T ₂			T_3			T ₁ T ₂		T_2	T_3			ue
	Μ	SD	Μ	SD	Μ	SD	Μ	SD	Μ	SD	Μ	SD	
CR	116.0	2.0	82.8	3.3	48.0	1.2	121.6	3.1	75.8	2.0	41.4	2.5	44.70
	0	0	0	4	0	2	0	3	0	4	0	1	(SD =
													3.94)
SI	116.0	2.0	88.0	1.7	55.8	3.2	119.6	1.6	83.0	3.6	52.8	5.5	54.30
	0	0	0	3	0	7	0	7	0	7	0	4	(SD =
													4.57)
M _{time}	116.0	1.8	85.4	3.7	51.9	4.7	120.6	2.5	79.4	4.7	47.1	7.2	
	0	8	0	1	0	2	0	9	0	1	0	4	
M_{gend}	51.90 (SD = 4.72)						47.10 (SD = 7.24)						

Table 2. Descriptive characteristic of Stress

2.2. The Effect of Time, Technique, and Gender in each measure

The result of main effect test indicated that time significantly affected experimental groups' stress level (F (2.32) = 2867.67, p < 0.01, $\eta 2p = 0.99$). It indicated a decrease in stress level, as shown by T₁ (M = 118.30, SD = 3.23), T₂ (M = 82.40, SD = 5.15) and T₃ (M = 49.50, SD = 6.44). Main effect test result also indicated a significant effect of technique on stress level (F (2.32) = 17,736, p < 0.01, $\eta 2p = 0.52$). A difference in effectiveness was spotted, showing that self-instruction was more effective than cognitive restructuring (MD = 4.93, SE = 0.77, p < 0.01). Meanwhile, the main effect of gender on stress level was also reported to be significant (F (2.32) = 20.40, p < 0.01, $\eta 2p = 0.56$). Difference in stress level in terms of gender indicated that women's stress level is lower than men's (MD = 2.06, SE = 0.77, P < 0.01).

2.3. Interaction effect of Time vs. Technique and Time vs. Gender

The interaction effect of time and technique on decrease in stress level was found to be significant (F (1,16) = 40.98, p < 0.01, $\eta 2p = 0.71$). When comparing the mean difference value of pairwise comparison, it was found that self-instruction was more effective in reducing students stress level than cognitive restructuring was. The data analysis result showed that self-interaction group's change in stress level from pre-test assessment to posttest was (MD = 32.30, SE = 1.14, p < 0.01), *pre-test* to *follow-up* was (MD = 63.50, SE = 1.49, p < 0.01) and *post-test* to *follow-up* (MD = 31.20, SE = 1.66, p < 0.01). Meanwhile, Cognitive restructuring group's change in stress level from pre-test assessment was (MD = 39.50, SE = 1.04, p < 0.01), *pre-test* to *follow-up* was (MD = 74.10, SE = 0.91, p < 0.01) and *post-test* to *follow-up* was (MD = 34.60, SE = 1.29, p < 0.01).

The interaction effect of time and gender on stress level was also found to be significant (F (1,16) = 7.19, p < 0.01, $\eta 2p = 0.31$). Main difference value indicated that women exhibited more significant decrease in stress than men did. The analysis result showed that changes in male participants' stress level from pre-test to post-test assessment was (MD = 30.60, SE = 0.78, p < 0.01), *pre-test* to *follow-up* was (MD = 64.10, SE = 1.14, p < 0.01) and *post-test* to *follow-up* was(MD = 33.50, SE = 1.36, p < 0.01). Meanwhile, female participants' change in stress level from pre-test to post-test assessment was (MD = 41.20, SE = 1.34, p < 0.01), *pre-test* to *follow-up* assessment was (MD = 73.50, SE = 1.32, p < 0.01) and *post-test* to *follow-up* assessment was (MD = 32.30, SE = 1.60, p < 0.01).

3. DISCUSSION

The present study aimed to examine the effectiveness of cognitive behavioral group counseling with cognitive restructuring and self- instruction technique in reducing university students' stress due to cyberbullying. The present study was a response to Hoffman, Asnaani, Vonk, Sawyer, and Fang's call to view the effectiveness of cognitive behavior in addressing general stress. In the present study, the stress was caused by cyberbullying that may lead to individuals' low self-efficacy. Individuals' self-efficacy was taken into consideration to examine the students' stress. Participants' gender was also taken into consideration. There are more women suffering from cyberbullying than men, as Lee, Hong, Yoon, Peguero, and Seok reports. The use of a valid and reliable instrument and the implementation of factorial experimental design in the present study were aimed at satisfying the intrinsic validity requirement.

The present study showed that there was no significant difference in demographic characteristics (age and gender), indicating that the distribution of the participants into group

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was random and had maintained internal validity. In addition, the present study also confirmed that cognitive behavioral group counseling was effective in reducing university students' stress due to cyberbullying.

The finding of the present study was consistent with Harvey, Bryant, and Tarrier who found that cognitive behavior was effective in reducing stress. Furthermore, cognitive behavior counseling implemented in the present study used cognitive restructuring and selfinstruction techniques. As Erford and Cormier reported, cognitive restructuring and selfinstruction techniques are effective in overcoming stress. Moreover, the cognitive restructuring technique is a technique that involves the implementation of cognitive learning principles. This technique is designed to attain better emotional responses by changing habitual assessment, thus reducing biases. Meanwhile, the advantages of self-instruction lie in its ability to transform an individual's negative into positive views. Besides, this technique is also able to direct individuals to change their self-consequence in order to obtain effective consequences from the environment.

The present study confirmed the effectiveness of cognitive restructuring and selfinstruction in reducing university students' stress due to cyberbullying. It was also reported that self-instruction technique was more effective in reducing stress due to cyberbullying because it helps individuals to learn gradually in modifying their behaviors through positive verbal instruction given to their own cognition. Self-instruction, according to [29], is selfdirecting expressions that implement a thinking strategy that reduces negative thoughts, which in turn, serves as individual's guidance in following up on the problem-solving processes. It helps clients to realize to talk to themselves to realize their maladaptive behaviors and changes them. With regard to cognitive restructuring, it involves the implementation of cognitive learning principles. It is designed to obtain better emotional responses and less biased habitual judgment [30].

The result of the present study also asserts the difference in stress level in terms of gender, where female students reported a more significant decrease in stress than male students did. The present study revealed that female adolescents find it easier to cope with stress, compared to male students. This may possibly be accounted for by the fact that women face more problems due to increasing estrogen hormones.

4. CONCLUSION

The present study concluded that cognitive behavioral group counseling with selfinstruction and cognitive restructuring techniques was effective in reducing university students' stress and social anxiety. It was found that self-instruction technique was more effective in reducing students' stress than cognitive restructuring was. In terms of gender, female students exhibited more significant decrease in stress compared to female students.

4.1. Limitation and Future Direction

Despite the contribution the present study offers, a number of limitations were also noted. The first limitation lies in the use of self-efficacy perspective in examining students' stress. In addition, the present study only applied cognitive restructuring and self-instruction techniques. Accordingly, future researchers are recommended to apply other counseling approaches with different techniques.

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