

# Cognitive Defusion Techniques to Improve Self-Confidence of Students

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**Abstract**—The present study was aimed to identify the level of self-confidence, formulating a hypothetical draft cognitive defusion techniques to increase self-confidence, and developing cognitive defusion techniques to improve students' self-confidence. This study is a research and development research, which involves identification of students' self-confidence level, the formulation of hypothetical draft of cognitive defusion techniques to improve self-confidence, and the product feasibility test. The data was analyzed using quantitative descriptive analysis. The study was conducted in Muhammadiyah Vocational High Schools in Yogyakarta. The result of the study suggested that the cognitive defusion techniques is feasible to be implemented by counselor to support the counselor's program in enhancing students' self-confidence.

**Keywords**—*self-confidence; cognitive defusion; counseling technique*

## I. INTRODUCTION

Self-confidence is a pivotal aspect of students' development in school. Students need to carry out their activities in school with self-confidence. Students' activities that requires self-confidence are expressing statements during a discussion, asking questions to the teacher, and stating an opinion in front of the public. If students do not exhibit high self-confidence, it will affect their academic performance in school.

Some experts define self-confidence differently. Self-confidence refers to an individual's positive attitude that allows him/her develop a positive assessment, both to him/herself or the surroundings, or to the situation she/he is facing [1]. Self-confidence is one of the keys to success [2]. It provides an individual ability to overcome new challenges, to believe in him/herself in during a difficult condition, to go beyond the limit, to finish something has not been done, to maximize his/her full aptitude and ability, and to not to worry about failure [3]. These kinds of positive effects will improve students' academic performance in school.

Studies in Indonesia have shown that students are still experiencing issues with self-confidence. A study on self-confidence conducted in a school in Bandung, Indonesia concluded that 2.17% of students were categorized as possessing very high-self confidence, 22.46% possessing high

self-confidence, 57.97% possessing intermediate level of self-confidence, 13.77% of students were categorized as possessing low self-confidence, and 3.62% were categorized as possessing very low self-confidence [4]. A study on self-confidence in a school in Kudus Indonesia also showed that 0.70% of the students were in a low level of self-confidence, 78.47% were at the intermediate level, and 20.83% were in a high level of self-confidence [5].

Studies above have shown that students' low self-confidence is an issue that always exists in every school, including Vocational High School students in Yogyakarta. A study that involves senior high school students in Yogyakarta city showed that they face the issue of low self-confidence. Some examples of students' behavior showing lack of self-confidence are cheating, lack of motivation in learning, being afraid of speaking in front of the class, and low achievement motivation [6].

Students' low self-confidence does not emerge automatically, it is caused by some factors. An individual is lack of self-confidence because he/she possesses a negative mindset on his/her ability, potential, and experience [7]. Such a mindset is categorized as dysfunctional thinking, a denial on reality and illogical way to evaluate ourselves, other people, and the world [8–10]. This dysfunctional thinking is manifested in the form of dysfunctional assumptions, attitudes, and rules.

Low self-confidence negatively affects students. Its effect can be viewed from two perspectives, academic and non-academic effect. The academic effect of low self-confidence is reduced academic performance, achievement motivation, and academic performance. The non-academic effect of students' low self-confidence includes increased anxiety in interpersonal communication and during speaking in front of the public.

The academic effect of low self-confidence is reduced academic performance, achievement motivation, and academic performance. First, students' low level of self-confidence negative effect on academic performance has been proven by the study that concludes that self-confidence is significantly correlated with academic performance [11]. A high level of self-confidence will result in students' high academic

performance. Otherwise, a low level of self-confidence will lead to students' low academic performance. Second, students' low level of self-confidence effect on achievement motivation has been proven by a study stating that there is a significant positive relationship between self-confidence and achievement motivation in the natural sciences subject [12]. The higher the self-confidence, the higher the achievement motivation held by the students in the natural sciences subject. Third students' low level of self-confidence negative effect on achievement motivation has been proven by a study showing that self-confidence affects students' academic performance [13]. A high level of self-confidence will result in students' high academic achievement. Otherwise, a low level of self-confidence will lead to students' low academic achievement.

The non-academic effect of students' low self-confidence includes increased anxiety in interpersonal communication and during speaking in front of the public. First, a low level of confidence leads to students' anxiety in performing interpersonal communication [14-15]. Self-confidence contributes 52,6% on interpersonal communication anxiety, while the rest 47.4% is determined by other factors such as communication skills, situation, the experience of failure or success in interpersonal communication, and genetic predisposition [14]. Second, self-confidence is associated with public speaking anxiety [16]. The result of the study showed that an individual with a low level of self-confidence will affect his/her greater public speaking anxiety. In contrast, the more an individual is confident, the lower his/her public speaking anxiety.

Facts above show that low self-confidence emerges as a serious problem for Indonesian students, especially those of Muhammadiyah Vocational High School in Yogyakarta. This low self-confidence issue eventually obtains less attention from the responsible parties. The responsible parties for students' low self-confidence are parents, teachers, and counselors. Parents need to teach their children so that they do not exhibit low self-confidence. Teachers need to collaborate with counselors to overcome self-confidence problems shown by students. Counselors also need to respond to the teachers' attempts by implementing certain counseling approaches/techniques to enhance students' self-confidence.

Counselors are also responsible since they hold competence in implementing counseling interventions for students' self-confidence improvement. Counselors have made their attempts to handle the students' low self-confidence through individual counseling. However, it has not been enough to solve the problem significantly. Counselors have not had an intensive and specific program to overcome students' low self-confidence. Following the description above, it could be seen that students' low self-confidence has not obtained an intensive and serious solution from the responsible parties.

Problems with the level of self-confidence of students are also experienced by students at Muhammadiyah Vocational High School in Yogyakarta. The forms of low self-confidence problems include the low courage of students to think, socialize, and show maximum academic performance. The problem of low self-confidence among students of

Muhammadiyah Vocational High School in Yogyakarta should be overcome. One of the attempts to enhancing Vocational High School students' self-confidence is by performing the counseling sessions. Counseling is a helping relationship. It means that the relationship between the counselor and the counselee during the counseling process is a unique and professional help provision [17]. It is professional because the process is grounded on distinctive knowledge, it implements an intellectual technique in a special meeting with counselee so that the counselee can cope with his/her problems and conflicts more effectively.

One of the counseling approaches that can be implemented to improve Vocational High School students' self-confidence is Acceptance and Commitment Therapy (ACT). The ACT is a new brief counseling model that is very stable [18]. This is known as the new face of CBT [19, 21]. This counseling model emerged as a criticism of the old model of Cognitive Behavior Therapy (CBT) which tends to take a long time.

A certain technique is needed to carry out counseling with the ACT approach. One of the techniques that can be employed to enhance Vocational High School students' self-confidence is cognitive defusion which is often used in a context where the counselee is involved in personal problems such as deep negative thought [22]. Negative thinking in the form of voices within the individual's cognition that gives command or direction of problems is called command hallucinations [23]. Cognitive defusion is designed to reduce dysfunctional thinking by transforming the problem context instead of changing their sensitive form, frequency, and situation [22-23].

Based on the previous studies, there has been no specific study on examining the implementation of cognitive defusion to improve Vocational High School students' self-confidence. The previous studies were conducted to examine the implementation of cognitive defusion to solve problems caused by students' dysfunctional thinking. The study concluded that cognitive defusion could be employed to reduce negative self-statement [24]. Another study stated that cognitive defusion is capable of changing negative self-thinking [25]. In the same vein, another study concluded that cognitive defusion positively affects individuals with negative self-image [26].

Based on the description above, the counseling technique used to improve self-confidence is cognitive defusion. The present study was aimed at examining the feasibility of cognitive defusion techniques in improving Vocational High School students' self-confidence. The feasible product may provide a guideline for the school counselor to improve the students' self-confidence.

## II. METHOD

This study is adopting research and development research design. This study was conducted under the design proposed by Borg and Gall which is limited by three stages of development namely (1) problem identification; (2) the formulation of the hypothetical draft of the product; and (3) expert and practitioner's judgment to see the product feasibility [27]. For future study, there is an opportunity to

continue this study by identifying the effectiveness of cognitive defusion counseling in improving self-confidence.

There were two types of instruments in the study. The first instrument was the self-confidence scale consisting of seventy-five valid items. The result of its reliability showed a coefficient of 0.701, which is categorized as having a strong correlation. The second instrument was the assessment sheet filled by the expert and practitioner (school counselor) to assess the feasibility of the product. The assessment sheet consists of three aspects, product overview, the function of the product, and product accuracy.

Students' problem identification was made by distributing instruments (self-confidence scale) to the students of Muhammadiyah Vocational High School 3 Yogyakarta, especially those in class XI. The population of the study was 176 students. The present study employed a simple random sampling technique; the total sample of the study was ninety-six students. In order to judge the feasibility of the product, the judgment was done by an expert (a lecturer in the guidance and counseling program of Ahmad Dahlan University with expertise in the field of guidance and counseling innovation). Besides, the assessment was also done by the practitioner, namely the school counselor who is expert in providing counseling services to promote counselee's behavioral change.

The data of the study were analyzed using quantitative data analysis. This was done by describing the students' level of self-confidence, accordingly, the percentage of students' self-confidence would be found in the category of 'very high,' 'high', 'intermediate', 'low', 'very low'. Besides, Cohen's Kappa coefficient of inter-rater reliability (IRR) analysis described the level of feasibility of the product.

**III. RESULTS AND DISCUSSION**

The need level on cognitive defusion counseling techniques was measured using the self-confidence scale. The scale was used to measure the self-confidence of students of Muhammadiyah Vocational High School 3 Yogyakarta, especially the students of class XI, the population of the study was 176, and 96 students were selected as sample. The recapitulation of self-confidence was done by using descriptive statistic, it showed that 6.72% of students' self-confidence was categorized as very high, 23.04% of students' self-confidence was categorized as high, 33.6% of them was categorized as intermediate, 21.12% of them was low, and 7.68% of them was categorized as very low.

The problem with self-confidence experienced by the students becomes the basis of the development of a technique whose feasibility would be tested. Cognitive defusion techniques being developed covers five stages, treatment rationale, defusion training, negative thinking identification, defusion implementation on the target's mind, new commitment formulation.

The feasibility of the product was determined by the expert and practitioner's judgment. The following table shows the product feasibility by the expert and practitioner.

TABLE I. RESULT OF EXPERT AND PRACTITIONERS APPRAISAL OF PRODUCT

No	Aspect	Average Score
1	Product Overview	3.17
2	Product accuracy in developing self-regulated learning	3.17
3	Product usability for the counselor in developing students' self-regulated learning	3
Average		3,125

This judgment was done specifically by one expert (a lecturer and researcher in the Guidance and Counseling Department) and one practitioner (School counselor in Vocational High School). The average score of expert's and practitioner's judgment was 3.125. To identify the product feasibility, Cohen's Kappa Coefficient of inter-rater reliability (IRR) analysis was used toward the agreement between two raters.

Cohen's Kappa Coefficient Inter-rater reliability analysis showed inter-rater reliability was  $K=0.789$  and categorized as good. Asymp Std. Error shows standard error of measurement, the smaller the coefficient, the more reliable the result is. Therefore, it could be interpreted that the cognitive defusion techniques are categorized as feasible for the school counselor to implement to improve students' self-confidence.

The finding of the study showed that cognitive defusion techniques are feasible to be tried out and implemented on students to improve their self-confidence. The experiment also showed that cognitive defusion techniques could improve students' self-confidence. It shows that cognitive defusion techniques can be the counselor's reference for their program in improving student's self-confidence.

Cognitive defusion techniques as a counseling process has 5 components which are used as the main stages of counseling. The five stages are (1) treatment rationale; (2) defusion training; (3) negative thinking identification; (4) defusion implementation on target's mind; and (5) new commitment formulation. Each stage of counseling is carried out with one meeting, so the counseling process consists of 5 meetings with 35 minutes in each meeting.

The current finding is supported by the previous studies, however, there has not been a study that specifically examines cognitive defusion counseling in improving students' self-confidence. The previous studies involving cognitive defusion technique held the same characteristic with the current study, its similarity is that the use of cognitive defusion technique in reducing dysfunctional thought by assisting the subject of the study to understand that negative thought is merely a thought [24].

One of the studies concluded that cognitive defusion technique is capable of reducing negative thinking and difficult emotion [24]. Cognitive defusion technique that is implemented in reducing belief in negative thinking designed to reduce negative thinking function by changing the context instead of changing the form, frequency, or situational sensitivity. That study is in line with the present study where cognitive defusion emphasizes the repetition of negative self-

referential words in reducing discomfort and belief in negative thought.

Another study concludes that cognitive defusion can be employed to reduce negative self-statement [24]. The subject of the study was assigned in one of three experimental, namely, pro-defusion, anti-defusion, and neutral. The finding of the study suggested employing cognitive defusion strategy in overcoming negative psychological content. The similarity between that study and the current study is the implementation of cognitive defusion changes the context of self-statement in handling the behavior.

The study was conducted to examine the cognitive defusion technique in changing negative thinking. The result of the study concludes that the cognitive defusion technique can result in general long-term improvement outside the targeted negative mindset [27]. Even, cognitive defusion technique can be implemented to individuals with a negative mindset. The similarity between that study and the current study is that the study emphasized on repeating a single word version of a negative self-referential thought to reduce discomfort and belief in negative thinking.

Another study concludes that the cognitive defusion technique significantly affects psychological distress, dysphoria, and low self-esteem [28]. In that study, the procedure of cognitive defusion changes the way an individual interacts with negative thought without challenging or changing the context. This procedure may promote psychological flexibility, which is one of the key components of the ACT. In line with the present study, one of the main purposes of the implementation of cognitive defusion is to attain psychological flexibility. Psychological flexibility refers to an ability to be aware and concern with the experience, and behave by an individual's values of purpose [29].

Moreover, cognitive defusion can also assist students in overcoming high social anxiety [30]. Cognitive defusion that is implemented in overcoming social anxiety is designed so that the subject of the study identify the dysfunctional thought resulting in social anxiety. Cognitive defusion trains the subject of the study to understand that negative thought is only a thought and does not affect behavior. The similarity between that study and the present study is the cognitive defusion technique trains the subject to understand that negative thought is merely a voice and does not affect behavior.

It is potential for Cognitive defusion to be applied to individuals with negative thoughts on their appearance [24]. The similarity between that study and the present study is the focus on word repeating from the target's thought as the trigger of troubling behavior.

Based on the description above, it could be concluded that the previous studies, with various purposes, showed that the implementation of cognitive defusion is capable of providing significant results in solving troublesome behavior. This becomes an interesting object of study for experts and practitioners to implement cognitive defusion techniques. Therefore, the counselor's attempt to improving students' self-confidence can be easier.

#### IV. CONCLUSION

Self-confidence is an important component for students in doing self-actualization at school. The initial study of this study showed that self-confidence is still a problem that should be of concern to many parties so that students can improve it. The main finding of this study is cognitive defusion counseling is considered appropriate for school counselors to use in helping students improve their self-confidence. Cognitive defusion counseling itself consists of five stages, namely rational treatment, defusion training, identification of negative thoughts, implementation of defusion on the target mind, and formulation of new commitments. It was recommended in future studies to identify the effect of cognitive defusion counseling in increasing students' self-confidence.

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