

THE EFFECTIVENESS OF COGNITIVE RESTRUCTURING TECHNIQUES TO IMPROVE CAREER DECISION-MAKING SELF-EFFICACY

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Abstract

This present study aims at investigating the effectiveness of cognitive behavioral counseling through cognitive restructuring to improve students' career decision making self-efficacy. This study employs a single subject research with multiple baselines across subjects design. There are three students from twelfth graders in SMA Lab Undiksha involved in this study. In order to gather the data, the researcher utilizes career decision making self-efficacy scale and ideas sheet. Further, the data are analyzed visually which cover under condition analysis and between condition analysis. According to, this study shows that students are able to improve their career decision making self-efficacy on intervention phase. This reflects that cognitive behavioral counseling through cognitive restructuring effectively improves students' career decision making self-efficacy. Thus, this study implies both the theoretical and practical perspectives of the effort to improve students' career decision making self-efficacy.

Keywords: Cognitive Behavioral Counseling , Cognitive Restructuring , Career Decision-Making Self-Efficacy
SSD

INTRODUCTION

The role of education is crucial in improving the quality of human resources. Through education, individuals or students have the opportunity to develop various abilities, skills, expertise, and knowledge . The knowledge gained through education will be a bridge for individuals or students in preparing a career that is in accordance with their aspirations and the demands and values of life they adhere to (Rismawan & Gading, 2021). Preparing for the career world thoroughly in high school is an absolute must, because facing the career world is not an easy matter and must be adjusted based on interests and abilities (Rismawan et al., 2024). Career development consists of 5 stages, the first stage is called the growth stage (0-14 years), the second stage is called the exploration stage (15-24 years), the third stage is called the formation stage (25-44 years), the fourth stage is called the maintenance stage (45-64 years), and the last stage is called the release stage (65 years and above) (Careers New Zealand, 2012). Based on the stages of career development according to Super, individuals at the level of education High school students are in the exploration stage, namely at the age of 15-24 years .

Making the right career decision after high school is a crucial step in achieving career success in the workplace as desired (Frey et al., 2025). Decision-making is defined as selecting a decision or policy based on specific criteria (*Kamus Besar Bahasa Indonesia*, 2020). This process involves two or more alternatives, as if there were only one alternative, no decision would be made. A career, on the other hand, is a lifelong process involving position, standing, and status throughout an individual's life (Baruch et al., 2025; McMahon & Tatham, 2008). A career differs from a job. A job is a collection of tasks performed to establish a position, while a career is the development a person undergoes over the course of their life. (Patton & McMahon, 2006)Based on this understanding, it can be concluded that career decision-making is the process of determining several alternative choices related to position, standing, and

status during an individual's life. Facts related to obstacles in making career decisions at the high school level are presented in research conducted by Rismawan & Gading (2021) it was stated that as many as 47.7% of students High school level (SMA, MA, SMK) already has the choice of higher education and 52.3% did not yet have a choice of college. As many as 52.3 % of students returned the questionnaire because they did not yet have a choice of college, and the rest already have a choice. The research states that students experience difficulty , confusion, and fear when choosing and deciding on a major for further study.

Based on a preliminary study conducted at the research location, it was found that many students were unable to determine their career choices after graduating from high school. Based on the results of interviews conducted by researchers with Guidance and Counseling teachers at SMA Laboratorium Undiksha Singaraja, many cases were found regarding obstacles in career decision-making among grade XII students. Many students were still confused about continuing their studies at which university or going straight to work. Based on data from student visits to the BK room, out of 154 grade XII students, 54 students visited the BK room and 48 students visited the BK room with problems in being able to determine decisions about further studies after graduating from high school. Based on information obtained from the local guidance and counseling teacher, students who are not yet able to determine career decision after graduating from high school said the following things: (1) making decisions is not an easy matter, students are not yet sure of their abilities whether they are capable or not in making decisions; (2) feeling afraid of making mistakes in making career decisions ; (3) thinking that what they choose later does not match their talents and interests ; (4) feeling that making career decisions after graduating from high school is a big responsibility because it will determine their career for the rest of their life ; (5) not wanting to because their choice will damage their future career ; (6) not knowing enough information about universities or jobs that exist and that suit them; (7) prefer to follow the choices of their friends and their parents rather than make mistakes in making career decisions.

Previous research and preliminary studies have shown that many students experience challenges in career decision-making. The difficulties , confusion, and fear experienced by students in career decision-making indicate a lack of self-confidence in carrying out career decision-making tasks. This causes students to hand over the responsibility for career decision-making to others, or to delay and avoid the task of making decisions, resulting in suboptimal decision-making. If this problem is ignored , will also have an impact on students' inability to make career decisions at a later stage . The same thing was also expressed Chuang et al. (2020) that the problems experienced by students when choosing a career at present, if not resolved, will also cause problems in making career decisions in the future. Obstacles in making career decisions can be avoided if students have sufficient information regarding matters related to their career world (Gati & Kulcsár, 2021). Bandura (1994) He stated that in the decision-making process related to career choices, individuals must consider uncertainty about their abilities in the field of interest, the certainty and prospects of their future careers, and the self-identity they are seeking . To overcome uncertainty about their abilities, individuals must have confidence in their own abilities, or what is called self-efficacy.(Ann et al., 2021; Bandura, 1994)

Bandura (1994) explains that self-efficacy is basically the result of a cognitive process in the form of decisions, beliefs, or appreciation about the extent to which an individual estimates his or her ability to carry out certain tasks or actions required to achieve the desired results. Alvarez-Huerta et al. (2022) explains that *self-efficacy* is a person's belief in their ability or competence to perform a given task, achieve a goal, or overcome an obstacle . Looking at the facts of the problems experienced by students in making career decisions, it can be concluded that if high self-efficacy is embedded in the student, the student will be able to determine his career decision. Students will see themselves as capable in making career decisions after high school. Students will be more persistent in seeking existing information and convincing themselves in making their future career decisions. This is also explained by Shah & Bhattarai (2023) that decision making can be facilitated or hampered by the individual's self-efficacy . Betz & Hackett (2006) describes the components of career decision-making self-efficacy related to success in completing five tasks, namely (1) the ability to assess oneself, (2) the ability to collect job information, (3) the ability to select and determine goals, (4) the ability to solve problems, and (5) the ability to make realistic plans for the future. Based on the nature of self-efficacy and associated with the phenomenon of student conditions from the previous explanation, it can be concluded that the obstacles experienced by students in making career decisions are caused by low self-efficacy in students' career decision-making . This is supported by the condition of students who tend to view that making career decisions after graduating from high school is very difficult and feel unable to make career decisions, students are not sure and

do not believe in their knowledge about themselves, students feel afraid if they will be wrong in determining career decisions. In addition, to strengthen the data, researchers conducted a preliminary study using a career decision-making self-efficacy scale adapted from *the Career Decision-Making Self-Efficacy instrument* (Taylor & Betz, 1983). The scale was distributed to 144 students divided into four classes. Based on the analysis, 54 students were in the low and very low career decision-making self-efficacy categories.

Betz (2007) suggests that to improve self-efficacy in career decision-making, counselors can use interventions that can train clients to identify, evaluate, and change inappropriate thoughts and beliefs into more appropriate ones. In line with this opinion, one counseling approach that can be used to improve students' self-efficacy in career decision-making is cognitive-behavioral counseling. Previous research findings show that cognitive behavioral counseling can increase individual self-efficacy. Anggun Karismawati et al., (2023) In his research, he found a significant increase in self-efficacy after the subjects were victims of bullying, participating in a counseling program that focuses on cognitive behavioral counseling. Putri et al. (2025) In the literature review conducted, it was concluded that the use of CBT group counseling can improve adolescent *self-efficacy* through the supportive role of group members and through the mechanism of changing *self-defeating thoughts* into more dysfunctional thoughts. The study (Flores & Andriani, 2025) found that CBT effectively increases *the self-efficacy* of final semester students through awareness of self-enhancing that is not realized by students. *Self-enhancing* can make a positive contribution to improving student *self-efficacy*.

Experts who are members of *the National Association of Cognitive-Behavioral Therapists* (NACBT), explain that cognitive behavioral counseling is a psychotherapeutic approach that emphasizes the important role of self in thinking, how we feel, and what we do. (Schmidtendorf et al., 2025). Cognitive behavioral counseling is counseling that helps clients practice or learn to identify, evaluate, and change their thoughts and beliefs that are not functioning well. Cognitive-behavioral counseling is a counseling approach designed to address clients' current problems by restructuring cognitive and behavioral issues. Negative thoughts and uncomfortable feelings can lead individuals to more serious psychological problems, such as anxiety disorders and even depression (Zebua et al., 2026; Zisquit et al., 2025).

counseling holds the view that clients' problems are caused by cognitive distortions. The goal of counseling is to attempt to change these distortions. Cognitive-behavioral counseling teaches clients to think more realistically and appropriately, thereby eliminating or reducing existing symptoms of deviance. This counseling is active, directive, time-bound, and structured. Clients are helped to recognize and discard self-defeating cognitions, with the goal of changing the client's way of thinking. (Chapoutot et al., 2026; Chiappini et al., 2020; Schmidtendorf et al., 2025). One of the appropriate techniques used in order to improve students' career decision-making self-efficacy is the cognitive restructuring technique *because* by applying cognitive behavioral counseling with cognitive restructuring techniques, clients are trained to have new perceptions in facing the problems they face (Khairat et al., 2022; O'Toole et al., 2024; Wang & Wei, 2023).

Cormier (2016) states that cognitive restructuring techniques are rooted in eliminating cognitive distortions or false conclusions, thoughts, irrational beliefs, and developing new cognitions with better or healthier response patterns. Cognitive restructuring is the process of learning to deny cognitive distortions or fundamental "thinking errors," with the aim of replacing one's irrational thoughts with accurate and dominant counterfactual beliefs. Through the help of this cognitive restructuring, students with low career decision-making self-efficacy can have a new view of themselves in facing problems and challenges, so they have good emotional regulation, self-control, and optimism in making career decisions after graduating from high school. Cognitive restructuring techniques are one of the cognitive behavioral counseling techniques that are effective for clients at different levels of education, work, and backgrounds (Murphy et al., 2023; Rismawan et al., 2024).

METHOD

This study used an experimental research design with a single subject design. This design was chosen because the subjects are more individual. Single subject design is a practical method for evaluating academic progress, developing social behavior, reducing behavioral problems, and improving the skills of teachers (parents) who carry out interventions (Alberto & Troutman, 1995). The analysis in this design will be done separately, not on the average (group mean). Advantages of *Single Subject Designs* itself is *feedback* about the effects of treatment immediately

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obtained (whether it works or not), and treatment changes can be made immediately if necessary without waiting for the end of the experiment, and can be done quickly from day to day or from time to time (one session to session). In addition, the single subject design also compares the effects/results of interventions/treatments from different conditions on the same individual (Alberto & Troutman, 2006:155). study used a *multiple baseline across subjects design*. This single-subject *multiple baseline across subjects design* was used because the study provided *treatment* to several subjects with the same goal of change and *setting*. The *single-subject multiple baseline across subjects design* can be seen in the following figure:

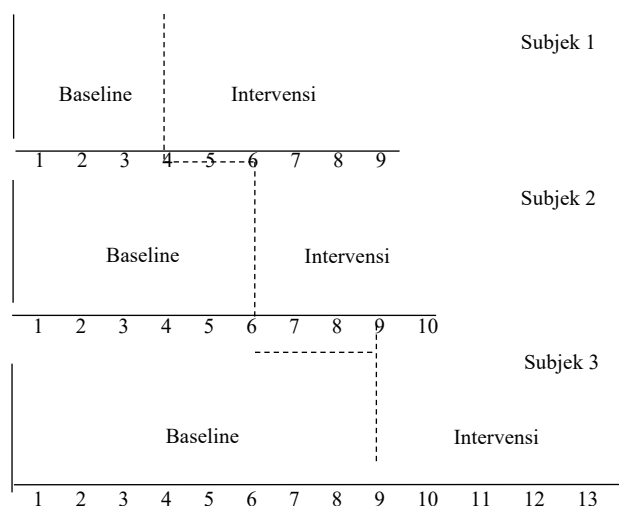


Figure 1. *Single Subject Multiple Baseline Cross Subject Design* (Takeuchi et. al, 2005)

The population in this study was 144 12th-grade students at SMA Lab Undiksha Singaraja. Subjects were selected using a *purposive sampling method*. Three subjects were students with low and very low levels of career decision-making self-efficacy. There are two types of instruments used in this study, namely treatment instruments and measurement instruments. The treatment instrument was developed by the author in the form of a cognitive behavioral counseling guidebook with cognitive restructuring techniques to improve students' career decision-making self-efficacy. This guide contains the stages and procedures for cognitive behavioral counseling interventions with cognitive restructuring techniques. Book This serves as a guide for researchers in implementing cognitive behavioral counseling with cognitive restructuring techniques. Before being used in research, expert testing/validation testing was conducted by two people. lecturer at Malang State University in the field of Guidance and Counseling. Meanwhile, the measurement instrument used in this study was the career decision-making self-efficacy scale which was adapted and developed from the *Career Decision-Making Self-Efficacy instrument* (Taylor & Betz, 1983).

This scale was used by the author in the research subject recruitment activities, *baseline* phase measurements, and *posttest measurements* at the end of each intervention. The development of this career decision-making self-efficacy scale refers to the Likert scale model. Before being used in the research, the career decision-making self-efficacy scale was first tested. construct the items internally through *expert judgment*. Next, the researcher carry out the instrument validity test stage using item analysis and tests reliability with Cronbach's *Alpha* analyzed using the program *SPSS 16.0 for Windows*. The significance level used in this career decision-making self-efficacy scale is ≥ 0.3 , meaning the item is declared valid (Atmoko, 2013). The results of the *Cronbach's Alpha analysis* show that the validity value of the instrument items is above 0.3 for 42 items. with reliability of 0.953.

The data analysis used in this study is visual analysis, consisting of analysis within conditions and analysis between conditions. The method used in visual data analysis is the *split middle* method. The visual data analysis carried out is the result of interpreting data depicted in the graph of the development of students' career decision-making self-efficacy levels. In this study, there are four components of analysis within conditions, namely (1) condition length; (2) estimation of directional tendencies; (3) stability tendencies; and (4) level of change. Meanwhile, analysis between conditions includes (1) Determining changes in directional tendencies (*trends*); (2) Determining changes in variability tendencies; (3) determining changes in levels; and (4) Determining *overlap of baseline* and

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intervention phase data . The stability criteria are indicated by a figure of 75% - 100% stable: <75% varies. While the criteria for *overlapping data* are less than 10% stated that the intervention was very effective, 10%-25% stated that it was effective, 25%-50% stated that the intervention was questionable, and more than 50% stated that the intervention was ineffective.(Alberto & Troutman, 1995)

RESULTS

This study was conducted in two conditions: A-B (*Baseline* –Intervention). Each subject had a different *baseline duration but the same intervention duration*. *Subject 1 had a baseline duration of 4 sessions, Subject 2 had a baseline duration of 7 sessions, and Subject 3 had a baseline duration of 9 sessions*. The intervention duration for each subject was 5 sessions. Data analysis for each subject was conducted based on visual data, taking into account three factors: *trend* , *level* , and *stability*. Visual data analysis will describe the development of career decision-making self-efficacy before and after the intervention. Visual data analysis includes both within-condition and between-condition analyses. Furthermore, data for each subject is depicted graphically .

Subject 1

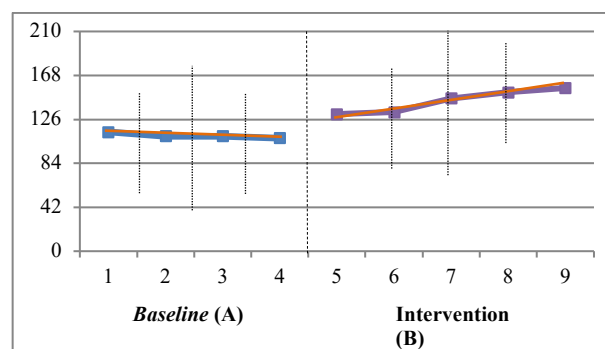




Figure 2. Graph of Subject 1's Career Decision-Making Self-Efficacy Level

Information :

-  : Trend Line
-  : Graph of career decision-making self-efficacy levels

The first analysis conducted was a conditional analysis. The conditions analyzed in this study consisted of two phases: the *baseline phase and the intervention phase*. The *baseline phase* consisted of four phases, while the *intervention phase* consisted of five phases. *The trend in the baseline phase shows a downward trend*. This indicates that the level of self-efficacy in students' career decision-making has decreased or worsened. In this *baseline situation, the intervention phase can begin immediately*. Meanwhile, *the trend in the intervention condition shows an upward trend*. This indicates an increase in self-efficacy in career decision-making in the intervention condition. The stability trend, in this case using a stability criterion of 15% (0.15). Based on the calculation results, stability in the *baseline and intervention conditions* shows a result of 100%. All data points are within the upper and lower limits of the *data point range* . This indicates that the data in *the baseline and intervention conditions* are stable. The *change in level in the baseline phase* decreased by 6 points. This indicates that the level of self-efficacy in career decision-making of Subject 1 from the first to the fourth session experienced a change in the direction of worsening by 6 points. Meanwhile, in the *intervention condition, the level change was 25 points*. This indicates that the level of self-efficacy in career decision-making of Subject 1 increased from the first to the fifth session by 25 points.

After conducting an analysis within conditions, an analysis between conditions is then carried out. Changes in the *trend in the inter-condition analysis* can be seen through each *trend in each condition*. The variable that changed from the *baseline phase to the intervention phase* was students' career decision-making self-efficacy. Based on Figure 2, *the trend in the baseline phase shows a downward trend*. Meanwhile, *the trend in the intervention phase shows an upward trend*. This indicates an increase in career decision-making self-efficacy after Subject 1 was given an intervention in the form of cognitive behavioral counseling with cognitive restructuring techniques. Changes in

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variability were carried out by looking at the stability trend in *the baseline* and intervention phases in the analysis within conditions. Figure 2 shows a change in the stability trend between the *baseline and intervention conditions*, from *stable to decreasing to stable to increasing*. This change in variability indicates that there was a change in Subject 1's career decision-making self-efficacy in the *baseline* phase, decreasing and increasing in the intervention phase. The change in baseline to intervention levels was 23 points. This result was obtained by calculating the difference between the data points in the final session of *the baseline phase* and the data points in the first session of the intervention phase. Because this change increased, while the target was career decision-making self-efficacy, it can be considered an improvement. *The overlap between the data from the baseline phase (A) and the intervention phase (B) was 0%*, which means that the provision of intervention has a significant influence on the target variable. In other words, cognitive behavioral counseling with cognitive restructuring techniques can increase Subject 1's career decision-making self-efficacy.

Subject 2

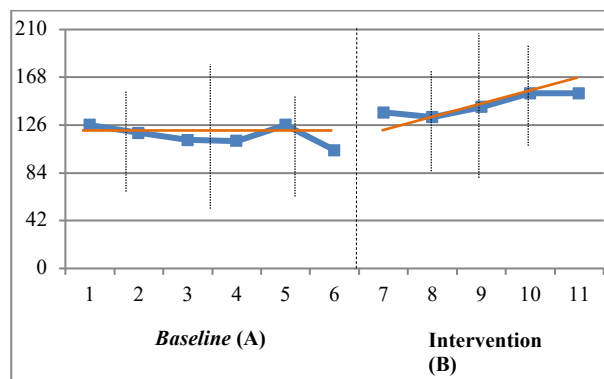




Figure 3. Graph of Subject 2's Career Decision-Making Self-Efficacy Level

Information :

-  : Trend Line
-  : Graph of career decision-making self-efficacy levels

The first analysis conducted was a conditional analysis. The conditions analyzed in Subject 2 consisted of two conditions, namely the *baseline phase* and the intervention phase. Based on Figure 3, the *baseline* condition consisted of 6 conditions, while the intervention phase consisted of 5 conditions. *The estimated trend in the baseline phase* showed a horizontal direction. This indicates that the level of self-efficacy in students' career decision-making was consistently at a low level. In a *baseline situation* like this, the intervention phase can be started immediately. Meanwhile, *the trend* in the intervention condition showed an increasing direction. This indicates an increase in self-efficacy in career decision-making in the intervention condition. Determination of stability tendencies used a stability criterion of 15% (0.15). Based on the calculation results, stability in the *baseline* and intervention conditions showed a result of 100%. All data points were within the upper and lower limits of the data points. This indicates that the data in *the baseline* and intervention conditions were stable. The change in level in *the baseline phase* showed a decrease of 22 points. This indicates that Subject 2's career decision-making self-efficacy level decreased by 22 points from the first to the fourth session. Meanwhile, the intervention condition showed a 17-point increase in *the level*. This indicates that Subject 2's career decision-making self-efficacy level increased by 17 points from the first to the fifth session. After the analysis within the conditions, the next step is the analysis between conditions. Changes in *the trend* can be seen through each direction in each condition. The variable that changed from the *baseline phase* to the intervention phase was the students' career decision-making self-efficacy. Based on Figure 3, *the trend in the baseline phase* showed a flat direction. Meanwhile, *the trend* in the intervention phase showed an increasing direction. This indicates an increase in career decision-making self-efficacy after Subject 2 was given an intervention in the form of cognitive behavioral counseling with cognitive restructuring techniques. Based on Figure 3, the change in the stability trend between the *baseline condition* and the intervention condition was stable from flat to stable increasing. This

change in variability indicates that there was a change in Subject 2's career decision-making self-efficacy in the baseline phase, which was flat to low and increased in the intervention phase. The level change in Subject 1 was 33 points. This result was obtained by calculating the difference in data points in the last session of the baseline phase and the data points in the first session of the intervention phase. Because this change increased, while the target was career decision-making self-efficacy, the meaning can be said to be improving. *Overlap* of data in the baseline phase (A) to the intervention phase (B) is 0% which means that the provision of intervention has a significant influence on the target variable. In other words, cognitive behavioral counseling with cognitive restructuring techniques can increase Subject 1's career decision-making self-efficacy.

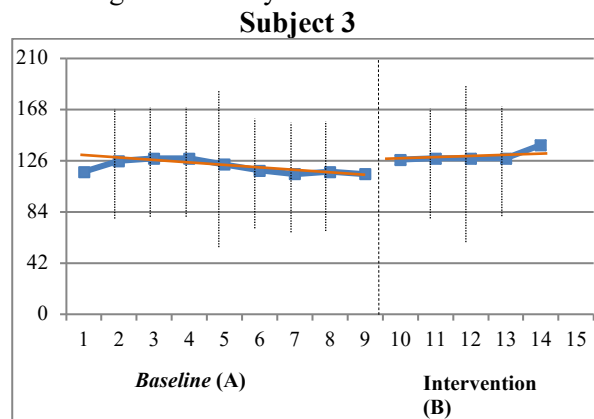


Figure 4. Graph of Subject 3's Career Decision-Making Self-Efficacy Level

Information :

- : Trend Line
- : Graph of career decision-making self-efficacy levels

The conditions analyzed in Subject 3 consisted of two conditions, namely the *baseline phase* and the *intervention phase*. The length of the *baseline condition* consisted of 9 conditions, while the *intervention phase* consisted of 5 conditions. *The estimated trend in the baseline phase* showed a downward direction. This indicates that the level of self-efficacy of student career decision-making in the *baseline phase* was deteriorating. In a *baseline situation* like this, the *intervention phase* can be started immediately. Meanwhile, *the trend in the intervention condition* showed an increasing direction. This indicates an increase in self-efficacy of career decision-making in the *intervention condition*. Stability in *the baseline* and *intervention conditions* showed a result of 100%. All data points were within the upper and lower limits of the *data point range*. This indicates that the data in *the baseline* and *intervention conditions* were stable. The stability trend used a stability criterion of 15% (0.15). The change in the level in the *baseline phase* showed a decrease of 3 points. This indicates that the level of self-efficacy of Subject 3's career decision-making from the first to the fourth session experienced a change in the direction of deterioration of 2 points. Meanwhile, the *intervention condition* showed a change *in the level* that increased by 12 points. This shows that Subject 3's level of career decision-making self-efficacy increased from the first session to the fifth session by 12 points. After the analysis within the conditions, the next step is an analysis between conditions.

The determination of the directional tendency (*trend*) can be seen through each direction (*trend*) in each condition. The variable that changed from the *baseline phase* to the *intervention phase* was the students' career decision-making self-efficacy. Based on Figure 4, *the trend in the baseline phase* showed a downward direction. Meanwhile, *the trend in the intervention phase* showed an increase. This indicates an increase in career decision-making self-efficacy after Subject 3 was given an intervention in the form of cognitive behavioral counseling with cognitive restructuring techniques. Determining changes in variability trends. Changes in stability trends between *the baseline condition and the intervention condition were stable decreasing to stable increasing*. This change in variability indicates that there was a change in Subject 3's career decision-making self-efficacy in the *baseline phase*. decreased to a low level and increased to a high level in the *intervention phase*. Subject 3's level changed by 12 points. This result was obtained by calculating the difference between the data points in the final session of *the baseline phase* and the data points in the first session of the *intervention phase*. Because this change increased, while the target was career decision-making self-efficacy, it can be said to have improved. *The overlap between the data from the baseline*

phase (A) and the intervention phase (*B*) was 0%. which means that the provision of intervention has a significant influence on the target variable. In other words, cognitive behavioral counseling with cognitive restructuring techniques can increase Subject 3's career decision-making self-efficacy. Based on the data analysis conducted on subject 1, subject 2, and subject 3, it can be concluded that the career decision-making self-efficacy of each subject *increased* significantly through intervention in the form of cognitive behavioral counseling with cognitive restructuring techniques. *The trend* in career decision-making self-efficacy of all subjects showed an increasing direction after being given intervention in the form of cognitive behavioral counseling with cognitive restructuring techniques. In addition, the stability of the data in the *baseline phase* showed a stable decrease in data and the intervention phase showed a stable increase in data.

The increase in the subject's career decision-making self-efficacy can also be seen through the percentage of *overlapping* data in the *baseline condition* with the intervention condition. The smaller the percentage of *overlapping* data, the more effective the intervention carried out on the changed variable. The percentage of *overlapping* data points on increasing career decision-making self-efficacy after providing intervention in the form of cognitive behavioral counseling with cognitive restructuring techniques in all subjects was 0%. The percentage of *overlap* of 0% <10% indicates that cognitive behavioral counseling with cognitive restructuring techniques is effective in increasing students' career decision-making self-efficacy. Based on the results of the data analysis and the conclusions above, in this study the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted. The alternative hypothesis (H_a) in this study is "Cognitive behavioral counseling with cognitive restructuring techniques is effective in increasing self-efficacy in career decision making."

DISCUSSION

The first finding in this study is that cognitive behavioral counseling with cognitive restructuring techniques is effective in improving students' career decision-making self-efficacy. This is based on the results of the inter-condition analysis which showed the percentage of *overlapping data* for the three subjects was 0%. This means that all subjects experienced an increase in career decision-making self-efficacy after being given an intervention in the form of cognitive behavioral counseling with cognitive restructuring techniques. In accordance with the first finding of this study, cognitive-behavioral counseling with cognitive restructuring techniques is effective in improving students' career decision-making self-efficacy. This is because cognitive-behavioral counseling with cognitive restructuring techniques is rooted in eliminating cognitive distortions or false conclusions, irrational beliefs, and developing new cognitions with better or healthier response patterns. Cognitive-behavioral counseling with cognitive restructuring techniques is very suitable for counselees with cognitive distortions and dysfunctional thoughts. Meanwhile, career decision-making self-efficacy is a person's belief in their capacity to make decisions related to career exploration and choice. Bandura (1997) suggests that cognitive processes play a crucial role in shaping an individual's self-confidence. Cognitive processes are thought processes that include the acquisition, organization, and use of information. Bandura (in Noghabae, 2016) explains that faulty thought processes lead to low confidence in an individual's success in completing a particular task, resulting in anxiety and avoidance of challenging situations.

The formation of perception through cognitive processes will produce certain beliefs, both positive and negative, regarding one's abilities. Correct cognitive processes will produce positive self-beliefs, conversely, incorrect cognitive processes will produce negative self-beliefs (Beidas et al., 2013; Gómez Penedo et al., 2021; Subramaniam & Bhatt, 2017). This also strengthens the second research finding, namely that low self-efficacy in career decision-making is caused by the subject's error in thinking. Based on observations during the counseling process in each session, students always think negatively in the form of *self-defeating* both themselves and their environment. These negative thoughts result in the perception that their abilities will not have a positive impact on themselves. This results in low self-efficacy in career decision-making, so students become pessimistic and reluctant to make efforts that support their career decision-making process. Therefore, cognitive-behavioral counseling with cognitive restructuring techniques is highly suitable for improving students' career decision-making self-efficacy. Through cognitive-behavioral counseling with cognitive restructuring techniques, students are guided to restructure their distorted cognition toward a better, more positive, and healthier direction. Students' dysfunctional thoughts are restructured through cognitive restructuring techniques, resulting in more functional thinking. To date, no prior research has been found specifically testing the effectiveness of cognitive-behavioral counseling with cognitive restructuring techniques in improving

students' career decision-making self-efficacy. However, various previous studies involving cognitive-behavioral counseling with cognitive restructuring techniques share a common characteristic: transforming cognitive distortions and dysfunction into more functional thinking and eliminating cognitive distortions. These altered thought patterns will initiate changes in emotions and behavior. As in this study, career decision-making self-efficacy is an individual's belief in their ability to carry out tasks related to career decision-making. This belief develops through their cognitive thinking process. Various previous studies have shown that cognitive processes can impact many aspects, including attitudes and behavior. This also applies to students' self-efficacy in career decision-making. Dysfunctional thinking, or cognitive distortions, negatively impact an individual's perspective on themselves. Cognitive distortions, or dysfunctional thinking, are excessive and irrational ways of thinking (Chandra et al., 2019; Hochard et al., 2021; Ijeoma Regina & Augustine Lezorgia, 2017; O'Toole et al., 2024; Rao & Kakar, 2019; Wang & Wei, 2023; Zweerde & Lancee, 2020). This hinders problem-solving in career decision-making (Bullock et al., 2011). Corey (2017) They explain that humans inherently have a tendency to think dysfunctionally, to have unrealistic self-confidence, to self-deprecate, and to avoid the potential for self-actualization. These tendencies can lead to ineffective individuals.

The intervention in the form of cognitive behavioral counseling with cognitive restructuring techniques was carried out in 5 sessions based on the dimensions of career decision-making self-efficacy. The first session discussed the ability to assess oneself, the second session discussed the ability to collect career information, the third session discussed the ability to select and determine career goals, the fourth session discussed the ability to make realistic plans for the future, the fifth session discussed the ability to solve problems. Each session consisted of 6 stages, namely (1) rational treatment, which included an explanation of the goals and procedures of treatment; (2) identification of the client's thoughts in problem situations, (3) recognition and practice of *coping thoughts*; (4) moving from *self-defeating* to *coping thoughts*; (5) recognition and practice of strengthening self-statements; (6) homework. Cognitive behavioral counseling with cognitive restructuring techniques directed the client to re-explore their dysfunctional thoughts and replace them with more functional thoughts. Based on observations in the counseling process, dysfunctional thoughts that trigger low self-efficacy in students' career decision-making are very diverse.

Based on the observation results, all research subjects were able to identify dysfunctional thoughts that caused their low career decision-making self-efficacy and transform them into more functional, realistic, and adaptive thoughts. Rao & Kakar (2019) Cognitive restructuring techniques aim to identify and evaluate a client's dysfunctional thoughts and modify them into more functional ones. Similarly, in this study, the subjects' dysfunctional thoughts were identified and evaluated. Afterward, the subjects were directed to replace these thoughts with more functional ones. Changing dysfunctional thoughts to functional ones resulted in new, more positive beliefs within the clients. Through the procedures in cognitive-behavioral counseling with cognitive restructuring techniques, the subjects' career decision-making self-efficacy increased.

Research Limitations

The instrument for measuring career decision-making self-efficacy in this study was a Likert-type scale. The career decision-making self-efficacy scale consisted of four sets: set A, set B, set C, and set D. The measurement of career decision-making self-efficacy was conducted repeatedly using the same instrument but with different sets. This method allows for subject stereotypes in answering each item in the measurement scale used. The purpose of this study was limited to increasing the subjects' career decision-making self-efficacy against the 5 dimensions of career decision-making self-efficacy. This improvement was in the form of increasing the subjects' confidence in their ability to assess themselves, their confidence in their ability to gather career information, their confidence in their ability to select and determine goals, their confidence in their ability to make realistic plans for the future, and their confidence in their ability to solve problems. However, it did not train the skills in the dimensions of career decision-making self-efficacy.

CONCLUSIONS AND SUGGESTIONS

Conclusion

The results of the study showed that cognitive-behavioral counseling with cognitive restructuring techniques was effective in increasing career decision-making self-efficacy. This was evidenced by the 0% *overlap score* across all subjects. Furthermore, all subjects' career decision-making self-efficacy levels in the baseline phase were in the

low range, while in the intervention phase, all subjects' career decision-making self-efficacy scores were in the high range. The subject's low career decision-making self-efficacy was caused by cognitive distortions or dysfunctional thoughts. This was demonstrated by the elimination of cognitive distortions and the shift from dysfunctional thoughts to more functional ones, which also increased the subject's career decision-making self-efficacy.

Suggestion

For further research it is recommended that Researchers should not assume the dual role of observer and counselor. The counselor providing the intervention should be the school counselor themselves, who have previously been trained in cognitive-behavioral counseling using cognitive restructuring techniques. The researcher, on the other hand, acts as an observer. This is necessary to reduce bias between the counselor and researcher. Future research, if using a research design that repeatedly measures career decision-making self-efficacy, will require the development of observation or interview guidelines for measuring career decision-making self-efficacy during *the baseline* and intervention phases. This is crucial to avoid stereotyping of the subjects' responses. The research design was developed as an *ABA reference or ABAB reference*. This design was used to obtain more accurate results from the intervention. This was necessary to measure the subjects' level of career decision-making self-efficacy when the intervention was removed. Cognitive behavioral counseling with cognitive restructuring techniques is a counseling that has been proven effective specifically to increase self-efficacy in career decision-making and in general to change, eliminate cognitive distortions and change dysfunctional thoughts into more functional ones. Therefore, it is highly recommended that this counseling be implemented or used as a method in overcoming student problems related to self-efficacy in career decision-making or problems related to cognitive distortions and dysfunctional thoughts.

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THE EFFECTIVENESS OF COGNITIVE RESTRUCTURING TECHNIQUES TO IMPROVE CAREER DECISION-MAKING SELF-EFFICACY

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