The Effectiveness of Career Planning Training on Career Decision Making Self Efficacy

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Abstract: In the teenage years, individuals usually begin to focus on making career plans by exploring various career options and seeking information about the careers they are interested in and starting to make career decisions. One of the causes of youth's insecure in determining career choices is that they feel they do not have adequate abilities to make career decisions. An individual's perception of his ability to perform a particular task is called self-efficacy. The application of self-efficacy into the career domain has given rise to the term career self-efficacy. One of the domains of career self-efficacy is career decision making self-efficacy. Career decision making self-efficacy refers to the level of confidence that an individual has to successfully complete the tasks needed to make career decisions. Career decision making self-efficacy includes expectations of specific events which include persistence in career decision making activities. This study aims to investigate the effect of career planning training on the level of career decision making self-efficacy (CDMSE). The subjects of this study were high school students of class level XII in Exist Tutoring. These subjects were chosen because they had entered the final period of education at the high school level. After graduating from high school, students will be faced with conditions where they have to make career decisions, whether they decide to continue their education to a higher level of education or go straight to work. This research was conducted using a pre-experimental research design with one group pre-test post-test. Hypothesis testing in this study was carried out using parametric statistical analysis of T test with the help of SPSS. Based on the results of the different test using Paired Sample T-Test obtained sig. of 0.000, the value is smaller than 0.05, it can be concluded that there is a significant difference in the results of the CDMSE scale test before the career planning training and after the career planning training. Furthermore, the mean on the pre-test is 33.35 while the mean on the post-test is 39.91. This value indicates that the average value of the CDMSE scale of the research subjects after the career planning training was higher than before the training, so it can be concluded that the career planning training was proven to significantly increase the CDMSE scale value of the trainees.

Keywords: career decision making self-efficacy; career planning training; pre-experimental research; one group pre-test post-test

1. INTRODUCTION

Career-related decision making is a complex process. Career decision making has become a psychological phenomenon with the increase in information technology and job competencies (Wattles in Ogutu et al., 2017). The process to align career decision making with educational requirements has become increasingly complex with the evolution of sophisticated technology, the world is becoming a global village where career education requires more attention than ever (Onoyase & Onoyase in Ogutu, 2017). Globally 75.8 million youth compared to other age groups are unemployed due to career mismatch (United Nations in Ogutu, 2017). Research conducted in America shows that 20%-60% of new students in higher education usually have not decided on their career choices (Adedunni & Oyesoji, 2013 in Ogutu, 2017).

In the teenage years, individuals usually begin to focus on making career plans by exploring various career options and seeking information about the careers they are interested in and begin to make career decisions (Bardick, Bernes, Magnusson, &Witko, 2006; Creed, Patton, & Prideaux, 2006 in Ardiyanti & Alsa, 2015). The main focus of the exploration stage is to explore various personal information and career fields as a basis for determining career choices. This includes choosing in continuous study that is in line with the career that the individual will pursue (Super in Ardiyanti &
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Alas, 2015). Although every teenager has many opportunities to prepare themselves better in making career decisions, some potential problems happen in some teenagers such as poverty, difficult home life, school problems, and negative community environment. These factors can interfere with what teenagers have learned about how to make positive career decisions (Roger, 2015). Based on counselling data from a team of psychological counsellors in Indonesia, namely the Detection Counsellor in September-October 2013 (in Ardiyanti and Alsa, 2015) revealed that 164 class XII students from various high schools in Yogyakarta experienced difficulties and indecision to choose the appropriate study program that suitable with them. Ardiyanti and Alsa (2015) also conducted a survey of 157 class XI students from three high schools in Yogyakarta. The survey shows that there are 43% of students who are not sure and are still confused about the choice of study program in higher education.

Based on the results of a study conducted by Ardiyanti and Alsa (2015) on students in grades XI and XII, it is known that there are four causes of student uncertainty in determining the choice of study program, namely: (1) students do not know their interest in a particular study program, (2) the study program that students are interested in is different from the wishes of their parents, (3) students do not know the career prospects of the study program they are interested in, and (4) students feel they do not have adequate abilities to make decisions related to careers so they feel unsure and not confident to enrol in a particular program of study. This study focuses on the discussion on the fourth point. An individual's perception of his ability to perform a particular task is called self-efficacy. Self-efficacy describes a person's confidence or individual's self-perception about his skills and abilities to regulate execution and regulate performance in certain areas. This concept reflects a person's deepest thoughts about the perceived beliefs that are important to perform a task effectively (Bandura, et al., 2001; Lent & Brown, 2008 dalam Ogutu, 2017).

Efficacy is an important factor in career decision making. Self-efficacy in making career decisions indicates that an individual can be successful in choosing a career and commitment to that career (Gushue, Scanlan, Pantzer, Clarke in Roger, 2015). Research conducted by Budiningsih (in Ardiyanti and Alsa, 2015) proves that a person's self-efficacy can predict the career decision-making process by 45.22%. Widyastuti and Pratiwi in 2013 (in Ardiyanti and Alsa, 2015) also found research results that were in line with Budiningsih, namely self-efficacy was more influential on the stability of career decision making than family social support, with a contribution value of 30.8%. Many previous studies have indicated that self-efficacy is positively related to career decision making (Jones, Paretti, Hein & Knott, 2010; Darmanegara et al., 2008; Pampaka, Kleanthou, Hutcheson, & Wake, 2011; Loo & Choy 2013; Purzer, 2011 in Ogutu, 2017). Students with high self-efficacy will be more focused in making career decisions because it affects the choices made by students and the actions they take (Hodges in Ogutu, 2017).

Effective personal function is not just about how individuals know what to do and have the motivation to do it. Individuals often fail to be able to perform optimally even though they already know well the actions they must take and have the skills needed to do them (Schwartz & Gottman in Zeldin & Pajares, 2000). Thoughts about self-understanding activate the cognitive, motivational, and affective processes that control the process of translating knowledge and skills into appropriate action. Belief in self-efficacy does not focus on how much skill a person has, but on the individual's belief that he is able to perform an action using the skills he has in various situations. Belief in self-efficacy acts as a key factor in the rule of human competence. Therefore, different individuals with the same skills, or the same individuals under different circumstances, may perform worse, equal, or excel, depending on changing beliefs about self-efficacy.

An interesting aspect of the concept of self-efficacy is that it applies to specific tasks, meaning that an individual can have high self-efficacy in one area, but low self-efficacy in other areas (Sharma & Nasa in Ogutu, 2017). Measurements of self-efficacy must be carried out specifically which are likely to differ between activity domains, at different levels of task demands in certain activity domains, and under different conditions. Self-efficacy is not a global disposition that has no context, but must be seen from various sides. High self-efficacy in one activity domain does not mean it will be followed by high self-efficacy in other activity domains (DiClemente, 1986; Hofstetter, Sallis, & Hovell, 1990). Therefore, in order to obtain a strong explanation and predictive ability, self-efficacy measures must be adjusted to the domain function and must represent the task demands in the multilevel domain.
The application of self-efficacy into the career domain has given rise to the term career self-efficacy. Betz and Hackett (in Oresnich, 1991) define career self-efficacy as a broad label that covers self-efficacy expectations of various behaviours related to career choice and job adjustment (such as career development). One of the domains of career self-efficacy is career decision making self-efficacy. Career decision making self-efficacy (CDMSE) refers to the level of confidence that an individual has to successfully complete the tasks needed to make career decisions (Taylor and Popma in Coon, 2009). CDMSE includes expectations of specific events which include persistence in career decision-making activities (Maples and Luzzo in Coon, 2009). Individuals who have low CDMSE tend to negatively affect career choice through negative cognitive assessments of their abilities. For example, individuals feel that making career decisions is difficult and they refuse to be involved in making career decisions because they feel that doing so is beyond their capacity, thus making them anxious and stressed. Taylor and Betz (in Coon, 2009) mention that anxiety related to career decision making increases when career decision making self-efficacy decreases. On the other hand, high CDMSE has a positive relationship with career decidedness (Maples & Luzzo in Coon, 2009). Individuals with high CDMSE have a tendency to be able to decisively decide their career choices (Taylor & Betz, 1983 in Coon, 2009), have high career certainty (Betz and Voyten in Coon, 2009), have higher commitment and motivation in making career decisions (Gianakos in Coon, 2009), persistent in facing difficulties (Bandura in Coon, 2009) compared to those who have low career decision making self-efficacy. Blustein (in Roy-Sullivan & Mahalik, 2000) found that CDMSE is a strong predictor for assessing career exploration behaviour in both the self-understanding domain and the work environment domain. Based on the results of previous studies above, it can be concluded that increasing self-efficacy regarding career decision making is one of the appropriate interventions to overcome problems in making career decisions experienced by someone.

Research has shown that CDMSE is a dynamic construct that can be enhanced through career development programs (Betz & Gail, 2006; Betz and Luzzo, 1996; Luzzo, Funk, & Strang, 1996; Luzzo & Taylor, 1994; Scott & Ciani, 2008 in Miles, 2015). Reese and Miller (in Miles, 2015) reported an increase in CDMSE through a career development program they designed using a cognitive information processing system. Other studies have focused on the use of assessment to improve CDMSE (Maples & Luzzo, 2005; Uffelman, Sublich, Diegelman, Wagner, & Bardash, 2004 in Miles, 2015). Sullivan and Mahalik (2000) have summarized three studies designed to increase career-related self-efficacy. Frayne & Latham (in Sullivan and Mahalik, 2000) in 1987 reported an increase in self-efficacy related to the world of work in research subjects who had attended self-regulation training. Another study conducted by Fukuyama et al in 1988 (in Sullivan and Mahalik, 2000), the results of career self-efficacy and career anxiety change as a result of career guidance programs via computer. However, none of the above interventions designed to combine information sources is predicted to increase self-efficacy.

The social learning theory proposed by Bandura (in Sullivan and Mahalik, 2000), self-efficacy is considered as a cognitive structure which is the result of accumulated learning experiences that direct beliefs or expectations that a person will successfully complete certain tasks or activities. Self-efficacy is obtained and modified based on four experiential information resources, namely: (a) performance accomplishments, (b) vicarious learning, (c) emotional arousal, and (d) verbal persuasion. Betz (in Sullivan and Mahalik, 2000) states that interventions aimed at increasing self-efficacy should use the four resources mentioned above in designing interventions to increase career-related self-efficacy. Research that evaluated an intervention design to increase self-efficacy in career decision making using the four resources proposed by Bandura (vicarious learning, emotional arousal, and verbal persuasion) was a study conducted by Luzzo et al. in 1996 (in Sullivan and Mahalik, 2000). Research conducted by Luzzo et al. using an 8-minute video recording succeeded in increasing self-efficacy in making career decisions for students who have an external locus of control, but the intervention has no significant effect on students who have an internal locus of control. Although the intervention was specifically designed to increase career-related self-efficacy, the intervention was very short (only 8 minutes) and the research subjects tended to be passive observers and not actively involved in the intervention. Therefore, the aim of this study is to investigate whether a career intervention that combines the four resources that influence self-efficacy can effectively increase self-efficacy in career decision making.
Previous studies have shown that CDMSE of students can be developed through career intervention programs by increasing their knowledge of careers, course options, curriculum demands, as well as teaching them the skills necessary to access job information, set career goals, plan their careers, and develop a career identity. Dillinger & Landrum, 2002; Landrum & Mulcock, 2007; Prehar & Ignezzi, 2012; Reese & Miller, 2006; Thomas & Mc Daniel, 2004 in Miles, 2015). Ardiyanti and Alsa (2015) have summarized several career planning interventions that have been shown to increase self-efficacy in career decision making, namely career planning training, career courses, career counselling, and group training.

This study use training as an intervention method to increase self-efficacy in making career decisions. Kirkpatrick (in Ardiyanti and Alsa, 2015) reveals that training is a learning method that aims to change cognitive, affective, and skills and expertise aspects. Therefore, the training method is considered an appropriate intervention method because self-efficacy is a cognitive determinant that affects a person's behaviour, more specifically in career decision-making behaviour. In addition, the training method is an intervention method that can combine the four resources to increase self-efficacy that has been mentioned by Bandura. Training module is structured using the theoretical basis of career planning proposed by Bowlsbey, Dikel and Sampson in (Spencer G. Niles, 2016). Bowlsbey, Dikel and Sampson in (Spencer G. Niles, 2016) charted a career planning process consisting of 7 stages, namely: (1) Become aware of need to make career decisions, (2) Learn about and/or re-evaluate vocational self-concept, (3) Identify occupational alternatives, (4) Obtain information about identified alternatives, (5) Make tentative choices from among available occupations, (6) Make educational choices dan (7) Implement a vocational choice.

The learning method used is the experiential learning method proposed by Kolb (2015). The learning process can occur when an individual performs an activity, pays attention, and critically analyses the ongoing activity, and then finds an understanding or conclusion that can be used as learning for the behaviour modification process in the future (Kolb in (Tarigan and Wimbarti, 2011). Bandura (in Tarigan and Wimbarti, 2011) mentions that experiential learning can help build self-efficacy. Therefore, career planning training in this study will be developed by following the principles of the experiential learning method.

In this study, career planning training will be given to class XII high school students. Based on their age, high school students are included in the category of teenagers. As a transitional stage between childhood and adulthood, teenagers experience a period of career crystallization that generally occurs between the ages of 14-18 years (Tinsley, Bowman, & York, 1989). In addition, growth in teenagers usually becomes more complex, because it is in line with cognitive development (Steinberg, 2005 in Damayanti and Salim, 2020). New high school graduates are faced with making decisions between entering the workforce or continuing their education, and they often feel indecisive and find it difficult to choose a career (Gati, Krausz, & Osipow, 1996; Hirschi, Giles, & Akos, 2011; Taher, 2013 in Damayanti and Salim, 2020). Even though they then continue their education, new high school graduates are usually hesitant in deciding which majors are suitable for the desired career.

2. LITERATURE REVIEW

2.1. Carrier Decision Making

Career decision making is not only about salary opportunities or incentives. Career decisions are integrated with long-term happiness and must be in accordance with the values, talents, skills, interests, opportunities and personal limitations of the individual (Brown and Crace in Roger, 2015). Germeijjs and Verschueren (in Roger, 2015) describe important decision-making tasks related to the career decision-making process, namely: orientation, career exploration, and commitment. Orientation makes individuals aware of the need to make career-related decisions and encourages participation in the career decision-making process. Career exploration is the process of assessing one's interests and surroundings and looking for activities that will provide opportunities for teenagers to learn more about an individual's career. While commitment is confidence in the decisions about careers that have been made. Career decision making is a flexible process (Germeijjs and Verschueren in Roger, 2015). The process does not have to follow specific steps. The combination of these three stages leads to implementation, namely actions that need to be taken after the decision is made, which is an important task that comes after the decision is made.
Career decision making is not a single decision, it begins in early childhood and continues throughout life. Career exploration and career planning are important components when helping youth make career choices. Career development must be an important concern at every stage of a child's development. At the elementary school level, children are taught about self-understanding to help develop healthy self-esteem. During junior high school, children are introduced to work related to school lessons (McIntosh in Roger, 2015). After the child advances to the high school level, the child is introduced to different careers/professions by inviting figures with various professions to school or by visiting students to offices. During high school, several schools provide programs about career life, students can usually participate in situation simulation programs about job selection, the world of college, and adulthood (McIntosh in Roger, 2015). Students who participate in this career path during their school years will be better prepared in making career decisions (Mortimer, Zimmer-Gembeck, Holmes, & Shanahan in Roger, 2015).

2.3. Initial Framework for Career Decision Making

Career awareness is important to help in choosing a career path. The initial framework of career awareness underscores four components, namely: the concept of career awareness, the influence of career awareness and career choice, skills, and decision making (Wise, Charner, Randour in Roger, 2015). The initial step in the framework of thinking is developing career awareness which serves as inventory data, morals, preferences, and self-concepts that help teenagers to make career choices. The influence of career awareness, as explained by Wise, Charner, and Randour (in Roger, 2015), includes family, school, mass media, and community groups. Individuals can use their own abilities to identify self-understanding about careers that are useful for determining career goals.

This initial framework of thinking is similar to that of social cognitive theory which has recently been increasingly used. The career awareness component of the initial frame of mind can be related to the self-efficacy of social cognitive factors. The effect of career awareness and career choice can be matched with outcome expectations in social cognitive theory. Components of skills and decision making in the initial framework of thinking can be related to goal representation in social cognitive theory.

2.4. Barriers to Career Decision Making

Currently, teens have many opportunities to be better prepared to make career decisions. However, for some teenagers, there is the potential barriers that can interfere with what adolescents have learned to make positive career choices. Referring to the standard theory of decision making, the best decision is the one that can help decision makers achieve their goals (Gati, Krausz Osipow in Roger, 2015). Career decision making has 3 main features, namely: (1) individuals who have to make decisions, (2) the number of alternatives to choose from, and (3) the number of attributes to choose from (Gati, Krausz & Osipow, 1996). Additional attributes that individuals should consider in making a career choice are the length of training and the type of interaction with people in that career. Uncertainty is also a factor related to individual characteristics and future career goals (Gati, Krausz & Osipow, 1996).

Many factors affect the decision-making skills of teenagers. Decisions about a teenager's future career are influenced by their own attitudes and beliefs that develop during socializing and at school as well as additional factors such as family members, members of their social group, adults they interact with at school, and mass media sources (Julien in Rogers, 2015).

The career decision-making process is difficult and involves planning because some teenagers are not aware of what decisions they have to make about their future, they are unsure of the career decision-making process, and many teenagers feel overwhelmed by the decisions they need to make (Julien in Roger, 2015). The critical stage in the career decision-making process is finding and compiling information (Julien in Roger, 2015). Teenagers need to get the opportunity to explore various possible jobs, their values, strengths and goals, the educational and career opportunities they have, their role models and the people who influence them (Julien in Roger, 2015).

When teenagers are trying to make career decisions, it can be seen as a problem-solving process. As with other types of problems, there is a process that must be followed to solve the problem. Julien (in Roger, 2015) considers information barriers such as lack of awareness of the information needed to
make decisions, availability of educational opportunities, need for introductory courses, financial assistance, personal support systems, need for skills in obtaining employment, and skills in finding work. Julien also notes that teenagers often do not know how to find specific information about a particular career and are very inhibited when the information they need is not available. Other obstacles in the process are the lack of good communication skills, low self-confidence in their ability to make career decisions, and search for inaccurate information (Julien in Roger, 2015). These obstacles make teens feel lost and uncertain about career choices and possibilities.

There are many definitions that attempt to explain the concept of career intervention. However, the definition of Spokane and Oliver, is one of the most widely used (Miles, 2015). Spokane and Oliver define career interventions as various actions or efforts intended to enhance an individual’s career development or to enable the individual to make better related decisions (Miles, 2015). Career interventions, therefore, can cover a wide range of activities including individual or group counselling, career training, and workshops.

Early approaches to career intervention were based on several dominant career development theories. The theory of congruence between the individual and the environment proposed by Holland's (1985) and Dawis and Lofquist (1984) assumes that the congruence between personality and the demands of the work environment will determine career success and satisfaction (Hackett & Lent in Lam, 2016). On the other hand, the theory of social development and learning focuses on the process of career development rather than the end result of career choice (Hackett in Lam, 2016). The focus of Super's theory of development is on how individuals are able to manage and negotiate the demands of career development throughout their lives. The social learning theory proposed by Mitchell and Krumboltz seeks to explain the mechanism by which interests, values, beliefs, and skills regarding careers are learned (Lam, 2016).

Recently, cognitive theory emphasizing the role of personal agents in shaping individual career decisions have made major contributions to the science of career development because of their potential to inform career interventions. Research shows that beliefs about self-efficacy have a strong direct influence on various aspects of career development (Bandura, 1986; Betz & Hackett, 1986 in Lam, 2016).

Betz and Hackett (Hackett & Betz in Lam, 2016) were the first to explore the function of self-efficacy in understanding women's career development. They hypothesized that beliefs about self-efficacy play a stronger role in career pursuit than actual interests, values, and abilities. The concept of Hackett and Betz has been tested empirically by Betz and Hackett (in Lam, 2016). Their findings reveal that self-efficacy is related to the nature and range of job alternatives perceived by both male and female undergraduates. More specifically, there are gender differences in self-efficacy related to the educational demands and job responsibilities of men's and women's traditional jobs. College students showed significantly higher levels of self-efficacy in traditional occupations such as secretaries and household economists, and significantly lower levels of self-efficacy in non-traditional occupations such as engineers and mathematicians. The results of this study strongly support the role of self-efficacy beliefs in influencing female career choices, and the benefits of self-efficacy theory in understanding women's career development (Hackett in Lam, 2016).

2.5. Career Decision Making Self Efficacy

Self-efficacy describes a person’s self-confidence or self-perception of skills and abilities to organize execute and regulate performance in a given domain. This concept reflects an individual’s innermost thoughts on perceived confidence essential to perform task effectively (Bandura, et al., 2001; Lent & Brown, 2008 in Ogutu, 2017). Self-efficacy can affect the setting of self-motivation, thought processes, feeling states, and actions, or it may involve changing environmental conditions, depending on what one wants to manage.

Person’s beliefs about self-efficacy are formed from 4 main resources, namely: enactive mastery experience, vicarious experiences, verbal persuasion, and physiological and affective states. Enactive mastery experiences are the most influential resource for self-efficacy because they provide the most authentic evidence of whether a person can muster whatever it takes to succeed. The experience of failure will damage or weaken self-efficacy, especially if the failure occurs before self-efficacy is strongly established. If someone has the experience of achieving success easily, they become
individuals who expect quick results, and will easily get discouraged when they fail. Strong self-efficacy requires experience overcoming obstacles with strong effort. Some of the difficulties and setbacks in human endeavour become meaningful lessons that success usually requires continuous effort. Adversity provides an opportunity to learn how to turn failure into success by honing the ability to exercise better control over events. Once an individual has confidence that they have what it takes to achieve success, they become persistent in the face of adversity and can bounce back from failure quickly.

Sullivan and Mahalik (2000) proved that a career intervention designed using the four sources of self-efficacy information succeeded in increasing and maintaining career self-efficacy within a period of 6 weeks. Therefore, this study used these four sources of self-efficacy information as the basis for designing research interventions.

The relationship strength of guiding active mastery to creating and strengthening self-efficacy has been compared with other influencing factors such as strategy modelling, cognitive simulation of successful performance, and tutorial instruction (Bandura et al., 1977; Biran & Wilson, 1981; Feltz, Landers, & Raeder, 1977; Gist, 1989; Gist, Schwoerer Rosen, 1989 in Bandura 1997). Enactive mastery produces stronger and more general self-efficacy than other influencing factors that rely solely on vicarious experiences, cognitive simulations, or verbal instructions.

Since the research conducted by Betz and Hackett in 1981, self-efficacy theory has been widely used to understand other aspects of career behaviour. Research on self-efficacy in the context of career development can be divided into two main areas, namely: the role of beliefs in self-efficacy in determining the content of career choice, and the role of self-efficacy in the career decision-making process. The content of the career choice refers to the domain of the field of study such as mathematics and science (Betz in Lam, 2016). Low self-efficacy in content areas will lead to avoidance or rejection in the field of study or career. Career process areas refer to behavioural domains that are important in selecting or implementing various career areas (Betz in Lam, 2016).

Previous research has almost all focused on the first area. For example, in research conducted by Hackett in 1985 (in Lam, 2016), it was found that self-efficacy beliefs predict levels and persistence in engineering and science majors. Students who have strong efficacy beliefs in their ability to succeed in math and science will consider and stick to a science and engineering major in college compared to those who have weak self-efficacy beliefs in math and science. This finding is supported by the results of other studies such as those conducted by Brown, Lent, and Larkin in 1989 and Lent, Brown, and Larkin in 1987.

Belief in self-efficacy was also found to be related to interest in a job. The stronger the belief in self-efficacy, the greater the student's interest in the given job (Betz & Hackett in Lam, 2016). Lent et al (in Lam, 2016) reveal that career interests tend not to develop in areas where self-efficacy beliefs are low, and if they do develop, the individual will not persist in those areas. They found that interest and self-efficacy predicted the range of career choices under consideration, but that self-efficacy was a stronger predictor of academic achievement and persistence.

The application of self-efficacy into the career domain has given rise to the term career self-efficacy. Betz and Hackett (in Oresnick, 1991) define career self-efficacy as a broad label that includes self-efficacy beliefs about various behaviours related to career choice and job adjustment (such as career development). One of the domains of career self-efficacy is career decision making self-efficacy (CDMSE). Taylor and Betz (in Chuang, et al., 2020) define CDMSE as an individual's belief that leads to his ability to successfully complete tasks in making career decisions. Career decision making self-efficacy refers to the level of confidence that an individual has to successfully complete the tasks needed to make career decisions (Taylor and Popma in Coon, 2009). CDMSE includes expectations of specific events that include persistence in career decision-making activities (Maples and Luzzo in Coon, 2009). CDMSE has received significant attention among all career behaviour domains because of its importance in career decision making and career intervention (Garcia et al., 2015; Guan et al., 2016; Lent, et al., 2017, Chuang et al., 2017). CDMSE not only explains self-confidence in making career-related decisions or to measure career maturity (Savickas & Porfeli in Chuang, et al. 2020), but also as a mediator to motivate people to achieve specific career goals.
Research has shown that CDMSE is a dynamic construct that can be enhanced through career development programs (Betz 2006; Betz and Luzzo, 1996; Luzzo, Funk, & Strange, 1996; Luzzo & Taylor, 1994; Scott & Ciani, 2008 in Miles, 2015). Reese and Miller (in Miles, 2015) reported an increase in CDMSE through a career development program that they designed using a cognitive information processing system. Other studies have focused on the use of assessment to improve CDMSE (Maples &Luzzo, 2005; Uffelman, Sublich, Diegelman, Wagner, & Bardash, 2004 in Miles, 2015).

The results of research related to social cognitive career theory (SCCT) have offered various design procedures for how CDMSE can be improved. Scott and Ciani (in Miles, 2015) identify five behaviours that make up the five subscales used by Taylor and Betz to define and operationalize the skills needed in career decision making. They are: (1) Self-efficacy in self-assessment includes making accurate assessments of career interests, abilities, skills, and values.(2) Self-efficacy in gathering career/job related information including the ability to describe job interests and seek additional information related to the chosen career field or related to the job market in general.(3) Self-efficacy in making goal setting focuses on the ability to identify career goals that complement individual values, interests, and skills.(4) Self-efficacy in planning for the future describes the tasks that prepare a person for the job market and the job application process in a particular field.(5) Self-efficacy in problem solving refers to a person's resilience when challenged with job barriers.

Quantitative evaluation, including pre-test and post-test measurements, therefore, should reflect the following distinguishable competencies: increased confidence in self-understanding related to factors such as career interests and personal skills; increased self-efficacy in career knowledge; increased self-efficacy in the skills needed to set goals where self-understanding is integrated with understanding careers; increased self-efficacy in career planning skills and self-efficacy in overcoming career barriers. Effective skills form evidence into effective behaviours that will be implemented in positive change.

2.6. Carrier Planning Training

In this study, the intervention in the form of career planning training was prepared using the theoretical basis of career planning proposed by Bowlsbey, Dikel and Sampson (in Niles and Bowlsbey, 2017). Bowlsbey, Dikel and Sampson (in Niles and Bowlsbey, 2017) charted a career planning process consisting of 7 stages, namely: become aware of need to make career decisions; learn about and/or re-evaluate vocational self-concept; identify occupational alternatives; obtain information about identified alternatives; make tentative choices from among available occupations; make educational choices; and implement a vocational choice.

Training is a systematic acquisition of skills, rules, concepts, or attitudes that result in an increase in skills (Goldstein & Ford, 2002). Bray (2009) explains that training is a process designed to facilitate the learning process of participants. The purpose of the training is so that participants who take part in the training can master the knowledge, skills, and behaviours that are trained in the training program, so that they can be applied to their daily activities. Leigh (2006) describes several processes that must be carried out in training. The process is identifying problems, establishing training objectives, designing and planning training, conducting training, and evaluating training. (Kirkpatrick, D., L. & Kirkpatrick, J., 2007) describes four levels of evaluation that need to be carried out in training. The four levels are: reaction evaluation, learning evaluation, behaviour evaluation, and result evaluation.

In designing a training, standard learning methods are needed as a guide so that learning objectives are achieved. Experiential learning is a learning method that is widely applied to training. The experiential learning method shifts the learning method from a teacher – centered approach and a knowledge transfer approach to an approach where students are active participants in the learning process (Leary and Sherlock, 2020).

Learning is defined as the process by which knowledge is created through the transformation of experience (Kolb, 2015). Knowledge is the result of the combination of grasping and transforming experience. Grasping experience refers to the process of retrieving information, and transforming experience is how individuals interpret and react to that information. The learning model in experiential learning theory describes two dialectically related modes of the process of grasping experience, namely concrete experience (CE) and abstract conceptualization (AC) and two.
dialectically related modes of the process of transforming experience, namely reflective observation (RO) and active experimentation (AE). Experiential learning is seen as a learning method that actively challenges people on an emotional level. Learning is created by solving creative tensions between the four learning modes. This process is described as an ideal learning cycle where students touch all the basics - experiencing (CE), reflecting (RO), thinking (AC), and acting (AE) - in an iterative process that is sensitive to the learning situation and what is being learned. Recent or concrete experiences are the basis for observation and reflection. These reflections are then assimilated and refined into abstract concepts that become sources for obtaining new implications or meanings for action. These implications can be actively tested and serve as a guide in creating new experiences.

The idea of a form of experiential learning has attracted the attention of adult educators. The concept combines spontaneity, feeling, and the withdrawal of deep individual meaning by allowing rational thought and reflection. It maintains human belief in the capacity of each individual to grow and learn, making it important for the concept of lifelong learning.

Research Framework
The framework of this study can be seen in the figure 1 below.

3. Research Methodology

A. Results and Discussions

Hypotheses:
Based on the conceptual framework described above, the hypotheses that can be proposed in this study are:
Ho: Career planning training is not effective in improving the career decision making self-efficacy of high school students.
Ha: Career planning training is effective in improving the career decision making self-efficacy of high school students.

Research Methodology
This research uses pre-experimental or quasi-experimental research methods. Quasi-experimental research helps researchers to examine relationships in situations where classical designs are difficult or inappropriate (Neuman, 2007). In this study, the researcher had minimal control over the independent variables compared to the classical design. This is the difference between quasi-experimental and true-experimental research.
The research was conducted using a pre-experimental research design with one group pre-test post-test. This study only used one group which was conducted pre-test, treatment and post-test (Neuman, 2007). The results of the two measurements at the beginning and end will be compared to see the results of the given intervention. By using this research design, the authors can see changes in the treatment of career planning training for high school students. This is in accordance with the research objective, namely to determine the effectiveness of career planning training to improve career decision making self-efficacy in high school students.

Table 1. One Group Pre-test Post-test Design

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Treatment</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>O1</td>
<td></td>
<td>X</td>
<td>O2</td>
</tr>
</tbody>
</table>

Description:
- O1: Initial Measurement (Pre-test) before the treatment is given
- X: The treatment was given to the experimental group
- O2: Ending measurement (Post-test) after the treatment is given

In this study, the treatment given to the subject was in the form of career planning training. Giving behaviour or so-called intervention will be given to subjects who fall into the research category. If there is a significant difference between the pre-test and post-test scores, it can be said that the training provided has an impact on the subject, in this case, high school students.

The dependent variable in this study is career decision making self-efficacy (CDMSE) in high school students. The CDMSE Scale is designed to measure an individual's degree of confidence that he or she can successfully complete the tasks required to make career decisions. The scale is designed based on the 5 career selection competencies proposed by Crites in the theory of career maturity and is measured in the Career Maturity Inventory (Crites in Taylor and Betz, 1996). Therefore, the CDMSE scale items measure the behaviour in question, namely: (a) accurate self-assessment, (b) gathering work-related information, (c) goal setting, (d) making future plans, and (e) problem solving. The original CDMSE scale consisted of 50 items, where each 10 items reflected each competency.

The independent variable in this study is the provision of intervention or treatment in the form of Career Planning Training. This training module is structured using the theoretical foundation of career planning proposed by Bowlsbey, Dikel and Sampson in (Niles and Bowlsbey, 2017) that consists of seven stages, namely: (1) having an awareness of the need to make career decisions, (2) learning about and or re-evaluating job self-concepts, (3) identifying job alternatives, (4) collecting information related to job alternatives that have been identified, (5) take several alternative choices from the alternative jobs that have been identified, (6) make choices or educational plans, and (7) implement choices or educational plans that have been made. The subjects of this study are high school students of class XII Exist Tutoring.

Hypothesis testing in this study was carried out using parametric statistical analysis of the T test with the help of SPSS. T test is used to test how far the influence of the independent variable which in this study is career planning training on the dependent variable, namely career decision making self-efficacy. T test is used to test the effectiveness of a treatment on the specified variable size. The T test used in this study is the paired sample T test, which is a test used to see the difference in the mean of two paired samples. Paired samples in the study were intended as samples with the same subject but underwent two different treatments, namely measurements before and after treatment.

4. RESULT

This study aims to determine the effectiveness of career planning training on improving the career decision making self-efficacy of high school students. The subjects of this study were high school students of class XII who were Exist Tutoring students. The selection of research subjects was done by distributing posters related to career planning training to students and parents of class XII Exist Tutoring students. Process of distributing the poster, the researcher was assisted by employees from the Exist Tutoring School, so that it was easier for researchers to gain trust, both students and parents. Students who are interested in taking part in the career planning training then register themselves as trainees, who in this study, then become research subjects. There were 24 students who registered for the career planning training held by the researcher, but on the day of its implementation, only 23
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students came and took part in the training. All of the participants then participated in the full training and were willing to fill in the informed consent, pre-test, and post-test. There are more female trainees than male trainees, which is 83%. For age, it varies between the age of 16 years to the age of 18 years, but the most is the age of 17 years, which is 88%. The result of Paired Sample T-Test can be seen in the table 2 and 3 below.

Table 2. Data Correlation

<table>
<thead>
<tr>
<th>Pair</th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Pre-test &amp; Post-test</td>
<td>23</td>
<td>.618</td>
<td>.002</td>
</tr>
</tbody>
</table>

Based on the table 2 above, the sig value is 0.002, the value is smaller than 0.05, it can be concluded that the two data have a significant correlation or relationship.

Table 3. Paired Sample T-Test

<table>
<thead>
<tr>
<th>Pair</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of The Difference</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>-6.565</td>
<td>4.399</td>
<td>.917</td>
<td>-8.467, -4.663</td>
<td>-7.158</td>
<td>22</td>
<td>.000</td>
</tr>
</tbody>
</table>

Based on the results of the different test using Paired Sample T-Test, sig. is 0.000, the value is smaller than 0.05, it can be concluded that there is a significant difference in the results of the CDMSE scale test between before and after the career planning training.

Table 4. Statistic Data – Pre-test and Post-test

<table>
<thead>
<tr>
<th>Pair</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>33.35</td>
<td>23</td>
<td>5.399</td>
<td>1.126</td>
</tr>
<tr>
<td>Posttest</td>
<td>39.91</td>
<td>23</td>
<td>4.492</td>
<td>.937</td>
</tr>
</tbody>
</table>

Based on table 4, it can be seen that the mean on the pre-test is 33.35 while the mean on the post-test is 39.91. This value indicates that the average value of the CDMSE scale of the research subjects after the career planning training was higher than before the training, so it can be concluded that the career planning training was proven to significantly increase the CDMSE scale value of the trainees.

Kirkpatrick & Kirkpatrick (2007) explains that the evaluation of training effectiveness includes four levels, namely reaction evaluation (level 1), learning evaluation (level 2), behaviour evaluation (level 3), and outcome evaluation (level 4). The evaluation of the training carried out in this research is the evaluation of reactions, evaluation of learning, and evaluation of behaviour. The results were not evaluated by the researcher. To be able to evaluate the results, it is necessary to have a longer period of time in order to determine the outcome of a training as a whole.

Level 1, reaction evaluation is a measurement of the trainee's satisfaction with the facilities and the overall implementation of the training program. The training program is considered effective at level 1 if the participants are satisfied and happy with the training process so that they feel interested and motivated in participating in the training. In this study, the level 1 reaction evaluation was carried out by asking the trainees to fill out a questionnaire after the training process was completed. The following is the data on the results of the evaluation of the reactions.

Table 5. Level 1: Reaction Evaluation of Training

<table>
<thead>
<tr>
<th>Item</th>
<th>Evaluation of Training</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VP</td>
<td>P</td>
</tr>
<tr>
<td>Method and Media</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Equipment</td>
<td>14(60.9%)</td>
<td>9(39.1%)</td>
</tr>
<tr>
<td>Timekeeping</td>
<td>11(47.8%)</td>
<td>12(52.2%)</td>
</tr>
<tr>
<td>Material Equipment</td>
<td>10(43.5%)</td>
<td>13(56.5%)</td>
</tr>
<tr>
<td>Overall Rating</td>
<td>12(52.2%)</td>
<td>11(47.8%)</td>
</tr>
<tr>
<td>Material relevance and usefulness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material relevance to work</td>
<td>10(43.5%)</td>
<td>13(56.5%)</td>
</tr>
<tr>
<td>Possibility of applying the material to</td>
<td>11(47.8%)</td>
<td>12(52.2%)</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Benefits for future life</th>
<th>8(34.8%)</th>
<th>15(65.2%)</th>
<th>4.65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Rating</td>
<td>11(47.8%)</td>
<td>12(52.2%)</td>
<td>4.52</td>
</tr>
</tbody>
</table>

**Presenter**

<table>
<thead>
<tr>
<th>Material Mastery</th>
<th>14(60.9%)</th>
<th>9(39.1%)</th>
<th>4.39</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serving method</td>
<td>12(52.2%)</td>
<td>11(47.8%)</td>
<td>4.48</td>
</tr>
<tr>
<td>Interaction with Participants</td>
<td>2(8.7%)</td>
<td>10(43.5%)</td>
<td>11(47.8%)</td>
</tr>
<tr>
<td>Overall Rating</td>
<td>3(13%)</td>
<td>11(47.9%)</td>
<td>9(39.1%)</td>
</tr>
</tbody>
</table>

**Training Facilities**

<table>
<thead>
<tr>
<th>Venue</th>
<th>3(13%)</th>
<th>13(56.5%)</th>
<th>7(30.5%)</th>
<th>4.17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>2(8.7%)</td>
<td>16(69.6%)</td>
<td>5(21.7%)</td>
<td>4.13</td>
</tr>
<tr>
<td>Consumption</td>
<td>2(8.7%)</td>
<td>18(78.3%)</td>
<td>3(13%)</td>
<td>4.04</td>
</tr>
<tr>
<td>Overall Rating</td>
<td>3(13%)</td>
<td>17(74%)</td>
<td>3(13%)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Source:** Data Processed

Based on the results of the training evaluation at level 1, it can be seen that the average evaluation score given by the participants is above 4. This score indicates that the training has been held is considered good by the training participants. So, it can be concluded that the training evaluation at level 1 has been fulfilled and successful.

Level 2, learning evaluation is seen by measuring the knowledge or mastery of the participants' material on the training material that has been given. In this study, the learning evaluation of training was carried out by giving the participants a pre-test and post-test regarding career planning materials. When the results of the post-test scores show a higher value when compared to the pre-test scores, it can be concluded that the career planning training that has been carried out has succeeded in increasing the participants' knowledge or mastery of the material regarding career planning.

To determine whether there is a difference in the average of two paired samples, there are two statistical testing techniques that can be used, namely the Paired Sample T-Test for data that is normally distributed and the Wilcoxon test for data that are not normally distributed. Testing the normality of a data can be seen through the significance of the Kolmogorof-Smirnov and Shapiro-Wilk tests of normality. The Kolmogorov-Smirnov test is used for large samples (more than 50 data) while the Shapiro-Wilk test is used for studies with small samples (less than 50 data). Because in this study, the sample used was only 23 subjects, so the normality test used was the Shapiro-Wilk test. Table 6 below describe the result of normality test.

**Table 6. Normality Test**

<table>
<thead>
<tr>
<th></th>
<th>Kolmogorov-Smirnov*</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>Df</td>
</tr>
<tr>
<td>Pre-test</td>
<td>.252</td>
<td>23</td>
</tr>
<tr>
<td>Post-test</td>
<td>.265</td>
<td>23</td>
</tr>
</tbody>
</table>

**Source:** Data processed

According to Santoso (2014), the data is said to be normally distributed in the Shapiro-Wilk test if the significance value is greater than 0.05. It can be seen in table 6, that the significance value for the pre-test group is 0.005 and the significance value for the post-test group is 0.015. The significance value of the two groups is less than 0.05, so it can be concluded that the data from the pre-test and post-test results of the learning evaluation of the training subjects were not normally distributed. Because the results of the normality test indicate that the learning evaluation data is not normally distributed, the analysis of the learning evaluation results of the career planning trainees is carried out using the Wilcoxon test method.

**Table 7. Wilcoxon Signed Ranks Test**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Post-test-Pre-test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Ranks</td>
<td>0^</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Positive Ranks</td>
<td>21^5</td>
<td>11.00</td>
<td>231.00</td>
</tr>
<tr>
<td>Ties</td>
<td>2^</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Data Processed

Based on the result of the Wilcoxon test, it can be seen that the negative ranks or negative difference between the learning outcomes of career planning materials for the pre-test and post-test is 0, both in...
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the N value, Mean Rank, and Sum Rank. The value of 0 indicates that there are no subjects experiencing a decrease (reduction) from the pre-test value to the post-test value. The positive ranks or the positive difference between the learning outcomes of career planning materials in the pre-test and post-test is 21, meaning that there are 21 subjects who have increased learning outcomes of career planning materials from the pre-test and post-test. The mean rank or average increase is 11.00 while the number of positive differences or sum of ranks is 231. Ties indicates the number of subjects who obtained the same value in the pre-test and post-test learning evaluations. So, it can be concluded that there are 2 subjects who have the same pre-test and post-test scores of learning evaluation or do not experience an increase in knowledge related to career planning materials.

Table8. Wilcoxon Test

<table>
<thead>
<tr>
<th></th>
<th>Post-test – Pre-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>-4.070</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Data Processed

Based on table 8 above, it is known that asymp. sig. (2-tailed) is worth 0.000. This value is smaller than 0.005, meaning that there is a significant difference between the learning outcomes of career planning materials on the pre-test and post-test scores. It can also be concluded that there is a significant effect of providing an intervention in the form of career planning training on increasing knowledge of career planning materials in class XII high school students.

Level 3, behavioural evaluation is the result of changes in participants' behaviour from before the intervention and behaviour changes that occur after the intervention. In this study, behavioural evaluation was carried out by measuring the pre-test and post-test scores of participants using a career decision making self-efficacy scale. Changes in behaviour are assessed by looking at whether there is a change in the level of career decision making self-efficacy of the trainees before attending career planning training and after attending career planning training. When the results of the post-test scores show a higher value when compared to the pre-test scores, it can be concluded that the training provided can improve the career decision making self-efficacy of the trainees. Based on the results of the pre-test and post-test data analysis on the CDMSE scale of the trainees using the Paired Sample T-Test, sig. of 0.000, the value is smaller than 0.05, it can be concluded that there is a significant difference in the results of the CDMSE scale test between before the career planning training and after the career planning training. The results of data analysis also showed that the mean on the pre-test was 33.35 while the mean on the post-test was 39.91. This value indicates that the average value of the CDMSE scale of the research subjects after the career planning training was higher than before the training, so it can be concluded that the career planning training was proven to significantly increase the CDMSE scale value of the trainees.

5. CONCLUSIONS

The results of this study have strengthened previous studies which revealed that career planning training can improve CDMSE. CDMSE is a dynamic construct that can be enhanced through career development programs (Betz 2006; Betz and Luzzo, 1996; Luzzo, Funk, & Strange, 1996; Luzzo & Taylor, 1994; Scott & Ciani, 2008 in Miles, 2015). Research has shown that CDMSE students' progress through career intervention programs by increasing their knowledge of careers, course options, curriculum demands, as well as teaching them the skills necessary to access information about work, set career goals, plan their careers, and develop a career identity. Dillinger & Landrum, 2002; Landrum & Mulcock, 2007; Prehar & Igelazzi, 2012; Reese & Miller, 2006; Thomas & Mc Daniel, 2004 in Miles, 2015). Through this research, it can be concluded that career planning training for class XII high school students can effectively improve CDMSE.

The results of this study also cannot be separated from the training method used, namely the experiential learning approach. The process of experiential learning approach is carried out by making participants face learning in real situations (concrete experience), observing and reflecting, making abstract concepts in cognitive, and actively conducting experiments (Kolb et al., 2001). The training method using an experiential learning approach makes research subjects able to realize the importance of making career planning and makes research subjects have high motivation in participating in the career planning training process. In addition to the training methods used, the selection of learning activities used such as group discussions and filling out worksheets allows research subjects to directly experience and practice the career decision-making process that can improve their CDMSE.
REFERENCES


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