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Effects of career readiness module on career self-efficacy among university students

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ABSTRACT

This study aimed to identify the effects of the Career Readiness Module on career self-efficacy and its subscales, namely self-appraisal, occupational information, goal selection, planning and problem solving among university students. The randomized pretest-posttest control group were used in this study. A total of 60 second year students from the School of Computing, Faculty of Engineering, Universiti Teknologi Malaysia, were selected as research subjects using random cluster sampling. Both groups completed the Career Decision Self-Efficacy–Short Form (CDSE-SF) and the Big Five Inventory (BFI) questionnaires before and after the two-month intervention sessions. Data were analyzed using Statistical Package for Social Science version 23.0. The repeated-measures ANOVA and effect size were used to test the hypotheses of study. The study results showed significant differences in the experimental group for career self-efficacy and each of its subscale between pre-test, post-test 1, and post-test 2 at the $p \leq .05$ significant level. This study also demonstrated the significance of implementing the Career Readiness Module among university students prior to graduation in order to improve their career self-efficacy.

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1. INTRODUCTION

Career readiness is an important aspect that students need to pay attention to while studying at university. Career readiness refers to the level of achievement of a student in terms of readiness to work and successfully venture into the field of employment [1]. Career readiness denotes a student's ability and knowledge to prepare for employment. [2]. Universities need to play an essential role in producing graduates who can meet the job market's needs for career readiness [3].

In the Malaysian context, the Ministry of Education Malaysia is always concerned about the career readiness of students for the job market. Among them is the introduction of the Malaysian Education Development Plan 2015-2025 (Higher Education), where Leap 1 has emphasized the production of graduates with holistic, entrepreneurial and balanced characteristics [4]. Through the leap, the resulting graduates are expected to have knowledge in relevant fields and appropriate to knowledge, ethics and morality in terms of morals, behavior, way of thinking, cultural literacy and proper civilization [4].

In addition, one of the core strategies in the 11th Malaysia Plan is to increase human capital development for developed countries [5]. Human capital development is one of the critical factors to generate and sustain the growth of the Malaysian economy, where the availability of a highly skilled workforce is

important to support the transition of all sectors towards knowledge-intensive activities, generate labor productivity and attract investment to Malaysia [5]. This is in line with Malaysia's achievements in the 10th Malaysia Plan (2011-2015), namely by creating more employment opportunities and maintaining full employment [5]. Therefore, career readiness among university students is vital to meet the opportunities and job market provided in Malaysia.

Various aspects need to be emphasized for the career readiness of students at the university. Among them is the role of career self-efficacy based on the recommendations of several studies [6]–[8]. Career self-efficacy has become one of the popular topics among researchers as it provides a significant impact on university students, particularly concerning their careers [9]. Career self-efficacy is one of the groups for self-efficacy. The concept of self-efficacy refers to an individual's understanding in their own capability to achieve of their goals and planning [10].

Even so, career readiness from the aspect of career self-efficacy among university student is still not fully developed. For example, according to previous findings [11], students in universities acquire only a moderate level of career self-efficacy, which shows that they are in dire need of appropriate guidance. In addition, studies related to career choice decisions, one of the domains in career self-efficacy based on Walker and Tracey [12] are still lacking in local Malaysian universities [13]. The Ministry of Education Malaysia also reported that some industry professionals have expressed concern that some university graduates lack knowledge, skills, and attitudes for career readiness [4].

The Malaysian government has implemented various efforts and initiatives to improve the career readiness of university students. Among the initiatives of the Malaysian government are the Malaysia Education Development Plan 2015-225 and the National Graduate Employability Blueprint 2012-2017 [5], [14]. However, the percentage of marketability among university graduates has not yet reached the target set by the Ministry of Higher Education. In fact, employability also has been discussed in recent years for university students [15].

Statistics released by the Ministry of Higher Education Malaysia until 2019 showed that the rate of graduates from public universities working within six months after graduation is only 57.7% [16]. This percentage has not yet reached the target set by the Ministry of Higher Education Malaysia, which is 80% [4]. In addition, almost 60% of graduates at the first-degree level and above are still unemployed after one year of graduation [17]. A total of 59.9% of graduates who have not worked are among graduates at the undergraduate level and above [17]. Furthermore, graduate unemployment statistics also increased to 4.6% in 2019 compared to 3.9% in 2018 [17].

Based on the analysis of previous studies, experimental studies related to the effects of career modules on career self-efficacy were not widely conducted at the university level. According to the prior study, the researchers was able to identify just two local studies that focused on university students [18], [19]. While research on the results of career interventions overseas has been done by several researchers [20]–[25]. Such studies also did not directly involve the industry in the implementation of career modules. According to previous studies, universities play an important role in producing quality graduates in line with the needs of employers and industry [7], [26].

Additionally, most of the implementation of career modules developed by past researchers at the university level did not involve the industry in their career modules and most of the modules have not been tested for validity and reliability. According to several studies [27], [28], the industry professionals plays an important role in students' career readiness at the university. Therefore, several activities in the career readiness module content have involved the industry to fill the research gap. Looking at the problems that exist among university students in relation to career readiness, it is necessary to identify the Career Readiness Module's effect on their career self-efficacy. Additionally, the module's content includes the use of technical aspects like online games, which is something that is uncommon in the majority of career modules created by previous academics. Online games can enhance one's cognitive abilities as well as boost understanding and knowledge of the activities that students engage in [29], [30].

Career self-efficacy consists of five subscales, namely: self-appraisal, occupational information, goal selection, planning and problem solving. Self-appraisal is defined as assessing the strengths and weaknesses of career [31]. Occupational information is referred to find out about the career interest [31]. Goal selection is defined as exploring how to match yourself to a suitable career [31]. Planning is referred as planning how to get a chosen job [31]. Problem solving is referred as knowing the challenges to getting a chosen job [31].

According to Creswell, the study's objectives are the goals that need to be achieved by the researcher in a quantitative research [32]. Therefore, the following are the study's objectives: i) to identify the effects of the Career Readiness Module on the career self-efficacy of university students; ii) to identify the effects of the Career Readiness Module on the career self-efficacy subscales (self-appraisal, occupational information, goal selection, planning and problem solving) of university students.

2. LITERATURE REVIEW

Researchers have used Social Cognitive Career Theory by Bandura as a theoretical basis to explain the career self-efficacy variables in this study [33]. The Social Cognitive Career Theory is one of the well-known theories and approaches in career [34]. The selection of Social Cognitive Career Theory is based on several justifications. Social Cognitive Career Theory has been used by most past researchers who have studied career interventions on career self-efficacy [21]–[23], [25], [35]–[37]. In fact, this Social Cognitive Career Theory also emphasizes aspects of outcome expectation and goal construction as variables in academics and career choice [36], [38]. On the other hand, goal construction is a determinant of the completion of a task or striving to achieve targeted outcomes [39], which drives individuals to aspire or be ambitious in education and career [37].

Meanwhile, the construction of this Career Readiness Module is based on the Social Cognitive Career Theory by Bandura [39] and improved by Lent *et al.* [40]. Bandura introduced the Self-Efficacy Model and the Social Cognitive Theory Diagram Model in 1986. The Self-Efficacy Model describes the components of behavior, personality factors and environmental factors that influence each other. In contrast, the Social Cognitive Diagram Model describes the interaction between career choices and self-efficacy that ultimately results in achievement and eventually leads to the formation of the individual's self-efficacy [39].

Based on the analysis of the previous study, Mahmud conducted a research related to the effects of the Psycho-Educational Cognitive Information Processing Career Program on career thinking dysfunction and career self-efficacy among students of Universiti Kebangsaan Malaysia (UKM) [37]. Ninety final year students were randomly selected for the experimental study. The questionnaires used in this study are Career Thoughts Inventory (CTI) and Career Decision Self-Efficacy Short-Form (CDSE-SF). The results from the repeated measures ANOVA tests revealed that the experimental group showed effects in reducing career thinking dysfunction, subscales of decision-making confusion, commitment anxiety and external conflict. However, the results of this study cannot be generalized to first, second and third-year students because it focuses only on the final year students of Universiti Kebangsaan Malaysia.

Mustafa *et al.* conducted a study to look at the impact of the Career Integration Module as a strategy to assist students in making career choices [19]. Their study uses a quasi-experimental design involving pre-test and post-test to the experimental and control groups, which involved 64 students aged between 21 and 25 years old from Universiti Pendidikan Sultan Idris (UPSI). The questionnaire used in this study was the CDSE-SF [41]. The results of the analysis showed that there was an increase in the mean score for post-test compared to the mean score of pre-tests, there was a significant difference between the mean of pre-test and post-test for the five subscales of career self-efficacy, namely self-appraisal, occupational information, goal selection, planning and problem solving for the experimental group versus the control group. However, this study reviewed pre-test and post-test only and did not perform post-test 2 or follow-up test. The advantage of conducting post-test 2 is that it can measure the consistency and consistency of interventions [42], [43].

Chiesa *et al.* conducted a study on career self-efficacy to high school students in Italy to examine the effects of career interventions on structured groups among 280 high school students [21]. In addition, this study also aims to investigate the effectiveness of interventions conducted on the experimental group to improve career self-efficacy and career exploration and further reduce career choice concerns during the transition process from high school to university or the world of work. Subjects of research filled out a questionnaire, namely CDSE-SF and Lack of Self Knowledge subscale twice, namely before and after being subjected to intervention. The results indicate that there are changes in career self-efficacy and career exploration behaviors. This suggests that interventional treatment can improve career self-efficacy. However, this study did not involve a control group. The disadvantage of this type of experimental study is that it cannot control the external variables that can interfere with the study's validity [44].

Based on the analysis of the previous studies, experimental studies related to the effects of career modules on career self-efficacy were found to not have been widely conducted at the university level. Mahmud examined the effects of Career Readiness Module-Cognitive Information Processing (CRM-CIP) on career thinking dysfunction and career self-efficacy [37], while the study of Mustafa *et al.* examined the effectiveness of the Career Integration Module as a strategy to assist students in making career choices [19].

Although these studies examined the self-efficacy of careers, their studies were found not to involve the industry in the implementation of career modules. Universities play an important role in producing quality graduates in line with the needs of employers and industry [7], [45]. Moreover, past researchers focused on psychological officers, counsellors and teachers to conduct interventions on research subjects [20], [24], [35], [37]. Therefore, in order to fill the research gap, this study enlisted the help of industry professionals as well as psychological officers who are Malaysian registered counsellors in the implementation of the Career Readiness Module.

Other experimental studies did not administer the second post-test after the completion of the first post-test [19], [21], [22], [25], [35], [36], [46]–[50]. Therefore, to fill the research gap, this study conducted post-test 2 which is a follow-up test after four weeks of post-test 1. Post-test 2 should be implemented to

measure the consistency and consistency of interventions [42], [43]. Based on the justifications, the research hypotheses are constructed as: i) There is a significant difference in career self-efficacy between pre-tests, post-test 1 and post-test 2 among experimental group university students (H1); ii) There is a significant difference in self-appraisal subscale between pre-tests, post-test 1 and post-test 2 among experimental group university students (H2); iii) There is a significant difference in the occupational information subscale between pre-tests, post-test 1 and post-test 2 among experimental group university students (H3); iv) There is a significant difference in the goal selection subscale between pre-tests, post-test 1 and post-test 2 in experimental group university students (H4); v) There is a significant difference in the planning subscale between pre-tests, post-test 1 and post-test 2 among experimental group university students (H5); vi) There is a significant difference in the problem-solving subscale between pre-tests, post-test 1 and post-test 2 among experimental group university students (H6).

3. RESEARCH METHOD

3.1. Research design

This study uses an experimental research approach, which attempts to determine the effect of assumptions made either in terms of behavior, thinking, or even emotions [51]–[54]. The types of experimental studies for this study are pre-test and post-test random groups. According to previous researchers, the pre-test and post-test random group design can improve internal validity [55], [56]. The pre-test and post-test random group design for the experimental and control groups were implemented. That is, the dependent variables were measured before and after the manipulation were carried out on an independent variable.

The design of pre-test and post-test random groups is also a good experimental study design. It can control hypotheses from being influenced by external variables, including aspects of history and maturity [57]. According to Christensen, historical and maturity variables need to be controlled because any historical event can produce differences in the control group [51].

Post-test 2 was conducted to subjects of research to assess the consistency and stability of the intervention [42], [43]. For this study, post-test 2 was implemented after four weeks, as soon as post-test 1 was completed. This is because the four-week period is the most minimal and appropriate period to measure the consistency and stability of the outcomes of the intervention implemented [58], [59].

3.2. Research subjects

A total of 60 second-year students from the School of Computing, Faculty of Engineering, Universiti Teknologi Malaysia were selected as research subjects of the study using random cluster sampling. According to previous studies [44], [60], [61], the minimum number of experimental research subjects is 30 people. Furthermore, if the sample size for each experimental group is 30 people, the score obtained would be close to the normal distribution [61]. Therefore, the number of respondents for each experimental group and control group was set at 30 people[44], [60], [61].

Subjects of the research were randomly distributed into the experimental group and the control group through a matching procedure. This matching procedure was performed by identifying the starting scores of careers and personality self-efficacy variables of the Big Five that were similar and subsequently distributed alternately into each group. The random distribution of research subjects through matching procedures can help improve the similarity of research subject characteristics in each group [52]. In turn, each group has the same characteristics [62].

3.3. Research instruments

Career Decision Self-Efficacy-Short Form has 25 items for measuring career self-efficacy using the Likert scale [41]. This CDSE-SF measurement tool measures five subscales: self-appraisal, occupational information, goal selection, planning, and problem-solving [63], [64]. This tool was selected because the scales used in this measurement tool were clearly developed based on Cognitive Social Theory [65].

Reliability tests for CDSE-SF were performed using the Rasch Measurement Model. The Rasch Measurement Model is a modern and state-of-the-art psychometric approach that ensures that essential scales are measured along with basic psychometric assessments, namely construct validity and reliability [66]. The item reliability value analysis for career self-efficacy was 0.84. While the item reliability value for the self-appraisal subscale was 0.64, the occupational information subscale was 0.97, the goal selection subscale was 0.90, the planning subscale was 0.60, and the problem-solving subscale was 0.92. The reliability values of these items are in line with the acceptable values in the Rasch Model, which is 0.60 based on Bond and Fox and Linacre [67], [68]. Aron *et al.* stated that a good reliability value is 0.6 and above [69]. Thus, the reliability values for CDSE-SF are acceptable for adoption in the actual study.

The Career Readiness module has a career self-efficacy submodule with five subscales: self-appraisal, occupational information, goal selection, planning, and problem-solving [41] [65]. The duration of this treatment is 8 weeks. According to Pickering and Vacc [70], the minimum number of interventions is 6 sessions or less, however, the more sessions implemented, the more effective the intervention is.

Social Cognitive Career Theory (SCCT) and the item content in the CDSE-SF measure were used as a guide and reference by the researcher to develop the Career Readiness Module. There are 15 activities in this Career Readiness Module containing graphic, audio and visual elements to attract the interest and maintain the focus of the research subjects when using this module.

3.4. Data analysis

This study uses Statistical Package for Social Science version 23.0 for data analysis. Inferential statistics i.e., repeated measures ANOVA was used to test the study hypotheses. Effect size is to analyze the strength of the effect independent variable interventions on dependent variables [54], [71].

4. RESULTS AND DISCUSSION

4.1. Results

The study results showed significant differences between pre-tests, post-test 1 and post-test 2 in the experimental group for career self-efficacy and each of its subscales, namely self-appraisal, occupational information, goal selection, planning, and problem-solving. Table 1 shows the results related to the comparison between pre-tests, post-test 1 and post-test 2 for the career self-efficacy variable in experimental groups (EG). The finding of the repeated measures ANOVA test was [F (2,58)=28.507, p<.05]. The significance value obtained, 0.000, is smaller than the set significance level, .05. Thus, hypothesis testing, H1a stating that there was a significant difference between pre-tests, post-test 1 and post-test 2 for career self-efficacy in EG, was accepted at the α.05 level.

The effect size was also analyzed using Cohen's formula to identify the effects of the Career Readiness Module on career self-efficacy among the research subjects [72]. The findings of the study show that the analysis for the value of d for career self-efficacy was small (d=0.50) among the research subjects of the experimental group. In brief, there was a significant effect in Career Readiness Module treatment between pre-tests, post-test 1 and post-test 2 on career self-efficacy among EG research subjects.

Table 1. ANOVA analysis of repeated measures for career self-efficacy variables in EG

Subscale	Dk	Sum of squares	Mean Square	F Rate	Sig.	D
Career self-efficacy	2	7.92	3.96	28.507	.000*	.50

*Significant at the p≤ .05 level

Table 2 shows the results related to the comparison between pre-tests, post-test 1 and post-test 2 for the career self -efficacy subscale in EG. The repeated measures ANOVA test in EG, the results show that self-appraisal subscale [F (2,58)=19.28, p<.05], employment information subscale [F (2,58)=54.88, p<.05], goal selection subscale [F (2,58)=22.80, p<.05], planning subscale [F (2,58)=14.45, p<.05] and problem-solving subscale [F (2,58)=38.55, p<.05].

These career self-efficacy subscales have obtained significant values of .000 that are smaller than the set α level of .05. These results indicate that the study hypothesis stating that there is a significant difference between pre-tests, post-test 1 and post-test 2 in EG for self-appraisal subscale (H2a), employment information subscale (H3a), goal selection subscale (H4a), planning subscale (H5a) and the problem-solving subscale (H6a) was accepted at the α .05 level.

The effect size was also analyzed using the formula to identify the effects of the Career Readiness Module on the career self-efficacy subscale among the research subjects [72]. The findings show that the analysis of the value of d for self-appraisal subscale (d=0.40), small, employment information subscale, (d=0.65), medium, goal selection subscale, (d=0.44), small, planning subscale (d=0.33), small, and the problem-solving subscale (d=0.40), small. All subscales show a small effect size, except for the occupational information subscale, whose effect size was moderate among the research subjects for the experimental group. In conclusion, there was a significant effect in Career Readiness Module treatment on career self-efficacy subscale, namely self-appraisal, occupational information, goal selection, planning and problem-solving between pre-tests, post-test 1 and post-test 2 among research subjects for the experimental group.

Table 2. ANOVA analysis of repeated measures for the career self-efficacy subscale in EG

Subscale	Dk	Sum of squares	Mean square	F Rate	Sig.	d
Self-appraisal	2	3.98	1.99	19.28	.000*	.40
Occupational information	2	9.53	4.76	54.88	.000*	.65
Goal Selection	2	5.96	2.98	22.80	.000*	.44
Planning	2	3.23	1.61	14.45	.000*	.33
Problem-solving	2	11.60	5.80	38.55	.000*	.40

*Significant at the p≤ .05 level

4.2. Discussion

The study results found that the Career Readiness Module treatment followed by the research subjects in the experimental group had an effect on the improvement of career self-efficacy compared to the control group who did not follow any activities in the Career Readiness Module. The results of this study are in line with the results of previous researchers who conducted a study on university students [19], [23], [37]; a study on secondary school students [21]; a study on college students [35], [22], [73]. The results of previous studies found that there was an increase in career self-efficacy among research subjects who had followed the treatment compared to those who did not. However, the results of this study contradict the findings of Joslyn's study, which show no significant difference in career self-efficacy between the research subjects of the experimental group compared to the experimental group [36].

The results indicate that participants who followed the Career Readiness Module treatment successfully improved their career self-efficacy involving subscale of self-appraisal compared to subscales of career interest, occupational information, goal selection, planning and problem solving [41], [65]. The self-appraisal subscale can raise awareness in an individual's cognitive terms to identify the type of job that best suits them and their self-worth towards a particular job [65]. This is supported by Lent *et al.* [74], who state that career treatment can help individuals produce positive career self-efficacy and expected career outcomes that aid their career development.

Live sessions with individuals who have worked are one of the effective activities to increase self-confidence, especially in terms of cognitive for the occupational information subscale [21], [75]. The involvement of industry representatives in the content of the Career Readiness Module has influenced the results of this study. Research subjects in the experimental group were given initial exposure through sharing sessions with industry representatives to get an accurate picture of the work environment and work challenges.

The findings of this study also support Luzzo's opinion that through activities in the goal selection subscale, participants can identify career goals by matching the characteristics present in themselves and subsequently making accurate career choices [65]. Next, the research subjects learned how to build self-confidence based on the selection of goals that have been made to implement actions to achieve career goals that have been identified [76]. According to Sari, individuals with high self-efficacy will have high cognitive awareness to make career choices [77].

Meanwhile, for the planning subscale, the participants in the experimental group were given exposure to build self-confidence in making career planning with the involvement of industry representatives. The industry plays a vital role in university students' career readiness [27], [28], [78]. The findings of this study are in line with the view of Lip that students who participated in career planning activities increased their awareness of the importance of making plans before exploring a career that suits them [79]. For the problem-solving subscale, the findings of this study also support the findings of Lusk and Cook, who emphasize cognitive aspects related to problem-solving in career by identifying problems, approaches to solve the problems, and subsequently identifying strategies to solve the problems [80]. Besides that, the findings are similar to previous study, that research subjects were able to increase self-confidence to solve career-related problems, and in turn, become more internally motivated as well as satisfied with their field of study [22].

This study also employs an experimental study to determine the effect of assumptions made in terms of behavior, thoughts, or emotions [51]–[54]. The purpose of this design selection was to improve the internal validity of this study [44]. Therefore, this study is limited to the design of this study and does not include the design of other experimental studies.

Apart from that, the uniqueness of this study is that post-test 2 was conducted, which is a follow-up test four weeks after the completion of post-test 1. This post-test 2 must be carried out in order assess the consistency of the intervention [42], [43]. Universities play an important role in producing quality graduates in line with the needs of employers and industries [7], [45]. Previous researchers are focus more on psychological officers, counsellors, and teachers to carry out interventions on study subjects without the involvement of industry [20], [24], [35], [37]. Hence, in order to fill the research gap, the industry was

involved in the implementation of the Career Readiness Module in this study. In short, the participants in the experimental group showed a significant improvement in their career self-efficacy and its subscales. In other words, there is an effect of the Career Readiness Module on career self-efficacy and its subscales through the treatment given.

The findings of this study have shown that there is an effect of the Career Readiness Module on career self-efficacy and career self-efficacy subscales, namely self-appraisal, occupational information, goal selection, planning and problem-solving. However, this study has some limitations. First, this study only focuses on second-year students in the School of Computing, Faculty of Engineering, Universiti Teknologi Malaysia. The researchers chose students from only one school at Universiti Teknologi Malaysia because it is difficult for them to determine an appropriate time if students from multiple schools are combined. Second, this study uses a quantitative approach by using questionnaires to collect the data. Third, this study focuses on one research variable in the construction of the Career Readiness Module, namely career self-efficacy. Therefore, this study does not involve other variables such as academic achievement, motivation, stress, self-esteem, emotional intelligence in the construction of this module. Fourth, this study used a study design, namely the randomized pretest-posttest control group.

Based on the results of this study, several suggestions are presented to future researchers who are interested in conducting research in this field. This study focuses only on second-year public university students. Therefore, the findings of this study are not suitable to be generalized to other populations except those with similar characteristics. Therefore, further studies are suggested to involve students from various years of study in the university in order to make comparisons in terms of years of study and to obtain diverse study results. Future studies are proposed to conduct mixed-method studies, combining quantitative research and qualitative research. In addition, further studies can also examine other aspects such as family background, socioeconomic status, gender, race, and so on, to see the diversity of aspects studied. Comparisons can also be seen from such aspects, for example, making comparisons between male and female students on the effects of career treatment.

5. CONCLUSION

Psychology officers at universities are also suggested to implement this module to students to improve career readiness that focuses on career self-efficacy. This Career Readiness Module can be used as an additional program to complete the existing career program at the university. In addition, this module can also be applied periodically for eight weeks in each faculty run by psychological officers who have attended training sessions for trainers. The university and faculty are proposed to support the implementation of this Career Readiness Module for university students in an effort to enhance career readiness that emphasizes career self-efficacy based on Social Cognitive Career Theory. This Career Readiness Module is appropriate for use as a module by university students at both public and private universities.

Based on the findings of this study, it is suggested that all second-year university students are advised to complete this module in light of the study's findings. To assess the impact of the module on students' career self-efficacy, university students are also advised to complete the Career Decision Self-Efficacy Short-Form questionnaires before and after the module. The Social Cognitive Career Theory is appropriate in developing Module Career Readiness. Future researchers may conduct in-depth research on demographic factors. In order to investigate the variety of aspects researched, more research can also be done on other aspects including family background, socioeconomic level, gender, race, and others. Comparisons can also be made based on those factors, such as comparing the effects of career counselling on men versus women.

In conclusion, the research subjects in the experimental group have shown significant improvement for career self-efficacy and subscales, namely self-appraisal, occupational information, goal selection, planning and problem-solving. This study also showed the importance of the Career Readiness Module to be implemented by the university, especially through counsellors or university psychology officers, to help students improve their career self-efficacy before they graduate.

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