

Gitmind-Based mapp engineering career information service to improve students career planning decisions

Hijrah Eko Putro^{1*}, Sugiyadi¹

¹ Universitas Muhammadiyah Magelang, Magelang, Indonesia

*Corresponding author email: hijrah_ekoputro@unimma.ac.id

Abstract

The purpose of this study was to find out how career counseling using gitmind-based mindmapp techniques improved career planning as perceived by several career planning factors for students at Al Iman Junior High School in Magelang City. Eight ninth-graders from Al Iman Junior High School in Magelang City make up the study's population. Purposive sampling is used in the pre-experimental, one-group pretest-posttest design of the study. Given that there is just one independent variable (Independent Variable) in this study, the Paired Sample t-Test is the data analysis method employed. The study's influence test indicates that using a gitmind-based mindmapp technique for career assistance increases career planning. Students' degree of career planning has improved as a result of using gitmind-based mindmapp tactics for career advising. An influence test employing a t-test that reveals -t count (-4,743) < -t table (-2,365) or Sig data (0,002) < 0,05 supports this, as evidenced by the 23% rise in career planning scale findings before and after receiving career guidance services.

Keywords

Career planning, Career guidance, Gitmind techniques

Introduction

Humans who have fully developed are believed to be able to face every challenge and change that develops in the surrounding community, furthermore, the whole human being is expected to be dynamically able to play a role in answering challenges and changes. The development of a whole human being is not easy, various obstacles and failures are encountered in these development efforts. Various obstacles and failures and their sources can be in humans as a group of people or as individuals.

According to [1] Career guidance is one approach that can help adolescents in overcoming these problems. Through this guidance, adolescents can understand their potential, explore various career options, and plan concrete steps that need to be taken. Training and mentoring also play an important role in this process, providing the skills

Published:
April 15, 2025

This work is licensed
under a [Creative Commons Attribution-NonCommercial 4.0 International License](#)

Selection and Peer-review under the responsibility of the 6th BIS-HSS 2024 Committee

and knowledge needed to enter the workforce. Career guidance involves interaction between counselors and adolescents, where counselors provide information, support, and strategies that help adolescents identify their interests and talents. Career development itself is a series of changes that occur at every level of life influenced by self-understanding, values, attitudes, views, abilities possessed and all hopes that determine the career choices that will be chosen, and is a process that occurs because it is influenced by internal factors within a person and the influence of external factors outside a person [2].

One way to enhance the teaching and learning process is through the usage of media, as each type of media has unique qualities. Because of this, it is essential to pick it carefully and suitably in order to use it properly and turn the media into a tool that can help or speed up the accomplishment of counseling objectives [3]. Information is data that has been obtained from media that is processed as a basis for making a decision. The availability of information is important for counselors to equip the guidance and counseling service room with information materials that are as complete as possible and as diverse as possible [4]. Career problems are problems of students' future, so current activities will greatly affect students' future [5].

Mind mapping can be interpreted as the process of mapping thoughts to connect concepts about certain problems from branches of nerve cells to form conceptual correlations leading to an understanding [6].

A primary factor contributing to students' limited understanding in career planning is often their lack of access to comprehensive career information. The immediate consequence students experience is confusion when selecting academic majors and pursuing higher education at tertiary institutions. It is anticipated that through effective career information services, students will acquire and comprehend diverse information. This information can then serve as a crucial basis for their thoughtful consideration and informed decision-making regarding career paths [7]. Career planning is an activity or action carried out in a directed and focused manner based on the potential interests, talents, beliefs and values that are possessed to produce a source of income that allows for progress and development both in quality and quantity [8].

The use of the mind mapping method is one of the easiest learning methods to put information into the brain and take information out of the brain [9]. The Mind Map learning model is one of the learning models for creating drawings/diagrams about key concepts that are interconnected, marked by curved lines that connect to the second and third branches. According to [10], the learning process of the Mind Map model has several syntax, the syntax is: a. Problem / concept giving b. Group formation c. Record alternative answers d. Reading the results of the discussion e. Attachment of discussion results f. Identify the outcome of the discussion. The mapping application used in this study is the Gitmind Mapping application, namely AI in making concept maps technologically. Because of the benefits of the mind mapping approach based on

Mindmaple Lite, which include: 1) students' ability to plan, 2) active communication, 3) creativity, and 4) time savings in learning planning.

Al Iman Junior High School in Magelang City serves as a vital laboratory school, facilitating student internships, surveys, and teaching practices (*Praktik Pengalaman Lapangan* - PPL). The proposed research topic is particularly relevant to this institution, addressing two critical needs: the scarcity of Guidance and Counseling (BK) teacher human resources and a significant finding from preliminary surveys indicating that nearly 75% of students exhibit low levels of career planning.

Given these circumstances, the researcher deems it imperative to implement career guidance utilizing GitMind strategies to enhance students' career development. Therefore, this research aims to develop and evaluate the effectiveness of career guidance interventions, employing the GitMind strategy to improve career planning among ninth-grade students at Al Iman Junior High School Magelang City.

Method

This study used a pretest-posttest design and a quasi experimental methodology. A career planning scale was used to examine the students' career planning features. The experimental group, which lacked a control group, was assigned to the research subjects based in part on their characteristics (One Group Pretest Posttest Design). The experimental group received treatment in the form of gitmind strategy-based career counseling. The measurement's design is displayed in Table 1.

Table 1. design of the measurement

Group	Pre-test	Treatment	Post-test
Experiment	O1	X	O2

Information: O1: Pretest; O2: Posttest; X: Treatment (career guidance with gitmind strategy)

This study employed a purposive sampling method to select participants, specifically targeting Grade IX students at Al Iman Junior High School in Magelang City. The selection was driven by the specific objective of investigating student career planning.

Data collection was multifaceted, utilizing interviews, observations, and a career planning scale. While the sampling technique was purposive and non-random, the data analysis combined both qualitative and quantitative approaches. Descriptive qualitative analysis was applied to data concerning the implementation of group guiding services, whereas quantitative data from the career planning scale was analyzed using a t-test.

All gathered data underwent thorough and systematic analysis using statistical methods—the scientific process of collecting, presenting, compiling, and analyzing numerical data. This rigorous analysis aimed to establish factual insights and draw conclusions. Specifically, SPSS For Windows Version 24.0 was the statistical software utilized. Given the presence of a single independent variable in this study, the Paired Sample T-test was employed for the statistical analysis.

Here is one of the views of a mind mapping application using the gitmind strategy seen in Figure 1.

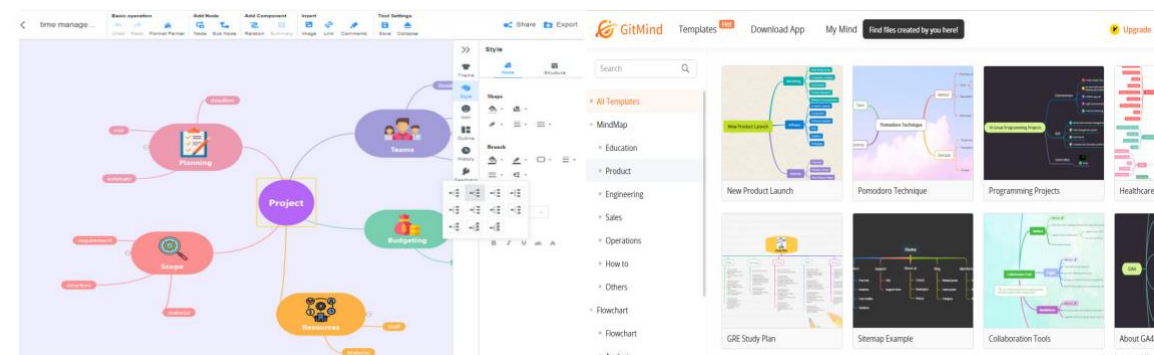


Figure 1. Gitmind mapping application

Results and Discussion

Data analysis is the next step after acquiring research data, including pre-test and post-test data. The purpose of data analysis is to test theories that have already been put forth. Following that, the hypothesis test results will be utilized to discuss current issues.

Sample in Pairs Two paired samples are used in the t-test. When two distinct treatments or measurements are applied to the same subject, the sample is said to be paired.

The comparison of each group member's pretest and posttest results quantitatively demonstrates the improvement in career planning. A summary of the information service services' score based on all indicators utilizing the gitmind technique is provided below.

Self-understanding indicators

The markers of self-understanding show a quantitative improvement in students' career planning. The following are the details of the acquisition of pre-test and post test scores on self-monitoring indicators.

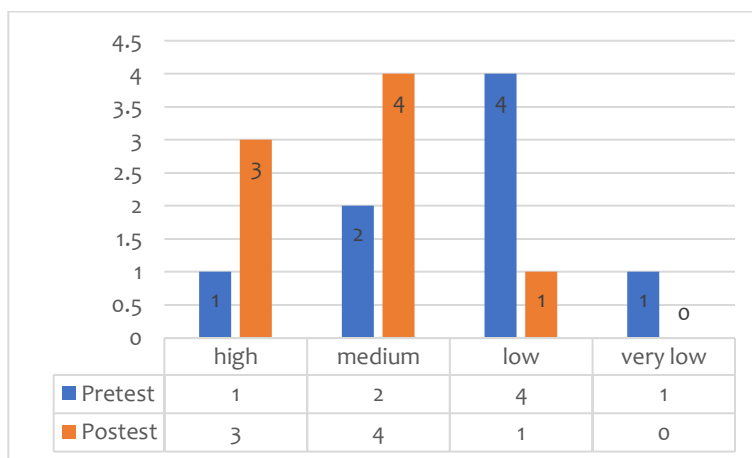


Figure 2. Pretest and posttest scores self-understanding indicators

Figure 2 shows that group members who engage in career advice activities have increased their career planning, as indicated by an average rise of 15% in indication 1. The results demonstrated that the group leader's career counseling was successful in

enhancing the students' career planning. The posttest scores, which are greater than the pretest findings, demonstrate the improvement of the markers. Stated differently, the implemented intervention has the ability to regulate and modify components of self-awareness associated with inadequate career planning among students.

Indicators of communication and cooperation

The indices of cooperation and communication show a quantitative improvement in students' career planning. The specifics of the Communication and Cooperation indicators' pretest and posttest results are as follows.

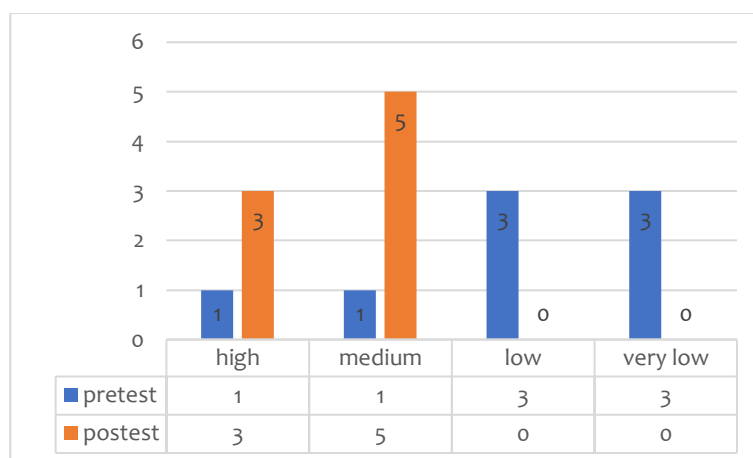


Figure 3. Pretest and posttest scores indicators of communication and cooperation

Based on Figure 3, it is evident that group members who engage in information service activities have increased their career planning, as indicated by indicator 2's average rise of 38%. The statistics demonstrated the effectiveness of group leaders' gitmind strategy career assistance in enhancing students' career planning. The posttest findings, which are greater than the pre-test results, demonstrate the improvement of indicator 2. In other words, the interventions carried out can control and change the aspects of communication and cooperation related to career planning.

Indicators of improving self-achievement

The indicator of Improving Self-Achievement shows a quantitative improvement in students' career plans. Here are the specifics of the Improving Self-Achievement indicator pretest and posttest results.

Figure 4 illustrates a notable enhancement in career planning among group members who engaged in information service activities, specifically within indicator 3. This improvement is substantiated by an average increase of 26%, evidenced by the post-test results surpassing those of the pre-test. These findings strongly suggest that the GitMind strategy career guidance, as implemented by group leaders, was effective in fostering students' career planning abilities. Therefore, it can be concluded that the intervention successfully influenced and modified self-achievement aspects pertinent to career planning.

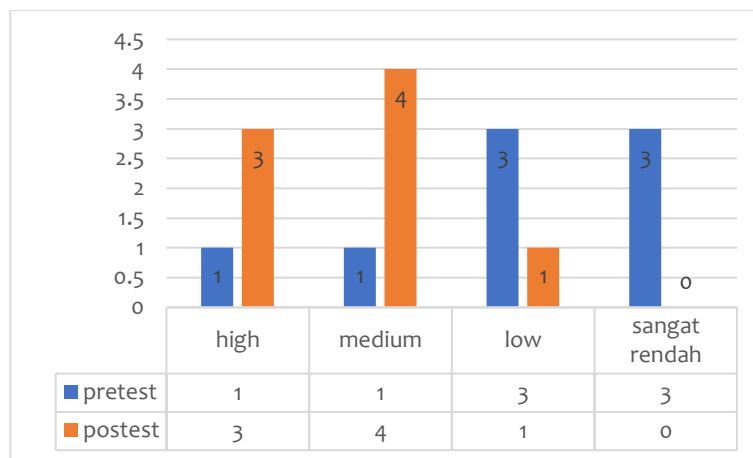


Figure 4. Pretest and posttest scores indicators of improving self-performance

Indicators of getting to know the world of work

The Getting to Know the World of Social Work indicator provides quantitative evidence of the improvement in student career planning. The Getting to Know the World of Work indicator's pretest and posttest results are detailed below.

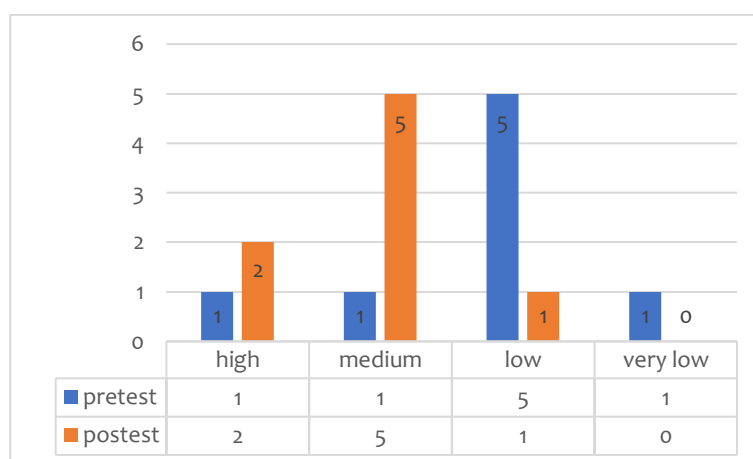


Figure 5. Pretest and posttest scores indicator getting to know the world of work

Figure 5 shows that group members who engage in information service activities have increased their career planning, as indicated by indicator 3, which shows an average increase of 21%. The information demonstrated how well group leaders' gitmind strategy career counseling improved students' career planning. The posttest findings, which are greater than the pretest results, demonstrate the improvement of indicator 4. Put differently, career planning-related components of learning about the workplace can be controlled and altered by the interventions that are implemented.

Conclusion

The findings of the study of four (4) career planning indicators show that, on average, the scale of career planning based on categorization has increased along with the results of the first evaluation (pretest) and final evaluation (posttest).

Successful career planning is based on self-awareness and self-understanding. Self-awareness is the cornerstone of effective career planning. To choose the best career,

one must consider values, interests, and personality in addition to skills and abilities. based on the findings of the study using the self-understanding indicator's planning scale questionnaire.

Effective communication is paramount to career success, as it directly influences organizational achievement, employee satisfaction, and identity reinforcement. Leaders who cultivate a culture of constructive communication can significantly accelerate a company's progress toward its objectives. This fosters a more engaged and content workforce and strengthens the collective identity of the organization, all of which are integral to a leader's individual success. Furthermore, research indicates that communication is a pivotal factor in students' career planning, underscoring its foundational importance from the outset of one's professional journey.

The following crucial roles are played by career planning: recognizing your talents and weaknesses. Expand your knowledge of potential career paths that fit your interests. presenting employment opportunities across a range of industries in line with the growth of the target labor market. The factor of growing self-achievement in enhancing career planning is related to the findings of the research that has been conducted.

In order to develop skills that are acceptable and pertinent to the most recent trends in the business, career education assists students in understanding the shifting demands of the labor market. First of all, it enables students to see how lessons apply to real-world situations. Increasing the social mobility of kids from low-income backgrounds comes in second. Thirdly, it assists students in weighing the pros and cons of various career alternatives before ruling them out. The factor of career education.

Students' career planning improves on all metrics when they receive career counseling using the GitMind-based Mindmapp method. This result is based on the difference between the initial and final assessment ratings, which show that students' career planning increased by 23% before and after receiving career coaching using a gitmind-based mindmapp technique. An effectiveness test with a t-test that revealed -t count $(-4,743) < -t \text{ table } (-2,365)$ reinforced this conclusion.

Acknowledgement

Thank you to all the Guidance and Counseling Teachers of Al Iman Junior High School Magelang City.

References

- [1] N. Hidayati et al., "Bimbingan Karir dalam Perencanaan Karir Remaja Akhir," *J. Bintang Pendidik. Indones.*, vol. 3, pp. 169–179, 2025.
- [2] R. I. Farida, Teti Sobari, "Layanan Bimbingan Karier terhadap Perencanaan Karier Peserta Didik di SMA," *Fokus*, vol. 3, no. 5, pp. 164–170, 2020.
- [3] M. Putro, Hijrah Eko;Japar, "Penerapan Layanan Informasi Karir Berbasis Media Interaktif Inovativ (MII) Terhadap Keputusan Perencanaan Karir Siswa," *J. Bimbing. Konseling Indones.*, vol. 6, no. September, pp. 58–65, 2021.
- [4] H. E. Putro and M. Japar, "Layanan Informasi Karier Berbasis Field Trip untuk Meningkatkan

- Pemahaman Karier Siswa,” *Indones. J. Educ. Couns.*, vol. 3, no. 3, pp. 243–252, 2019.
- [5] H. E. Putro and Sugiyadi, “Layanan Informasi Karir Berbasis Ajaran Islam Untuk Meningkatkan Kemampuan Membuat Keputusan Karir Siswa Smk Muhammadiyah Salaman,” *G-COUNS J. Bimbing. dan Konseling*, vol. 1, no. 1, pp. 1–11, 2016.
- [6] H. E. Putro and M. Japar, “Studi Pengaruh Layanan Bimbingan Kelompok Dengan Teknik Mind Mapping Berbasis Mindmaple,” vol. 3, no. 2, pp. 140–152, 2018.
- [7] P. H. Eko and Indiati, “The Effectiveness of Life Skills Technical Career Information Services to Improve Career Understanding Viewed from Career Planning Aspects,” *Int. J. Multi Discip. Sci.*, vol. 6, no. 2, pp. 132–141, 2023.
- [8] F. Fitrianingsih, F. F. Kurniawan, F. Y. Fahmi, and R. Annisa, “Analisis Perencanaan Karir Bagi Siswa Berdasarkan Bimbingan Karir Teori Holland,” *J. Muria Pengabd. Masy.*, vol. 1, no. 2, pp. 183–192, 2024.
- [9] E. C. Irania Puspa Anggraeni Santoso, “Metode Mind Mapping Dalam Bimbingan Kelompok Untuk Meningkatkan Minat Belajar Siswa Kelas VIII Di Smp Negeri 1 Kamal,” *J. BK Unesa*, vol. 10, pp. 28–34, 2019.
- [10] S. P. Lukita Octavia Lukman Putri, “Mind Map Sebagai Model Pembelajaran Menilai Penguasaan Konsep Dan Alat Evaluasi Menilai Kemampuan Berpikir Kreatif Siswa,” *Semin. Nas. Pendidik. dan Saintek*, no. March, pp. 629–634, 2017.