



CAREER EXPLORATION AND INFORMATION LITERACY SELF-EFFICACY IN SOCIAL  
MEDIA USAGE AMONG UNIVERSITY STUDENTS

CHIA CHING YI

A RESEARCH PROJECT

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS  
FOR THE BACHELOR OF SOCIAL SCIENCE (HONS) GUIDANCE AND COUNSELLING  
FACULTY OF ARTS AND SOCIAL SCIENCE  
UNIVERSITI TUNKU ABDUL RAHMAN

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Career Exploration and Information Literacy Self-Efficacy in Social Media Usage among

University Students

Chia Ching Yi

Universiti Tunku Abdul Rahman

This research project is submitted in partial fulfilment of the requirements for the Bachelor of Social Science (Hons) Guidance and Counselling, Faculty of Arts and Social Science, Universiti Tunku Abdul Rahman. Submitted on April 2024.

**UNIVERSITI TUNKU ABDUL RAHMAN  
FACULTY OF ARTS AND SOCIAL SCIENCE  
DEPARTMENT OF PSYCHOLOGY AND COUNSELLING**

**UAPC3093 PROJECT PAPER II**

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Supervisor: Mr Ho Khee Hoong	
Student's Name: Chia Ching Yi	Student's ID  20AAB03981

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**UAPC3093 PROJECT PAPER II**

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		font sizes enhance readability. Strategically positioned graphics and text.	Appropriate font size enhances readability. Content arrangement easily understood. Graphics enhances text.	size affects readability. Confusing content arrangement. Graphics help to highlight some content.	Inconsistent font sizes and content arrangement Mismatch of graphics and text.
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<b>Language</b>		Excellent and competent use of subject-related vocabulary and correct pronunciation.	Presentation shows competent use of subject-related vocabulary and correct pronunciation.	Some parts of lapse into colloquialism with inappropriate vocabulary and pronunciation.	Mostly inappropriate vocabulary and pronunciation.
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Department of Psychology and Counseling  
 Faculty of Arts and Social Science  
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## **ACKNOWLEDGEMENT**

During the journey of completing this research, I received a lot of support and assistance from various parties. Therefore, I would like to take this opportunity to express my appreciation for them for their help and support.

First of all, I would like to extend my appreciation to my project supervisor, Mr. Ho Khee Hoong, who provided me with the most support and guidance throughout this journey. I would like to thank him for his guidance, patience and encouragement, especially when I faced problems and difficulties. The expertise and invaluable insight from him indeed enhanced the quality of my project. His patience and encouragement not only helped me solve the difficulties, but also assisted me in managing my emotions.

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CHIA CHING YI

## APPROVAL FORM

The research paper attached herewith, entitled “Career Exploration and Information Literacy Self-Efficacy in Social Media Usage among University Students” written and submitted by Chia Ching Yi in partial fulfilment of the requirement for the Bachelor of Social Science (Hons) Guidance and Counselling is hereby accepted.

\_\_\_\_\_

Date: \_\_\_\_\_

Supervisor

(Mr. Ho Khee Hoong)

## ABSTRACT

This research aimed to determine the relationship between career exploration, information literacy self-efficacy and social media usage among university students, and to determine whether information literacy self-efficacy and social media usage are able to predict career exploration. The research was designed as a quantitative cross-sectional correlational study. A purposive technique method was used, and 194 responses were collected throughout this research. The participants of this study were undergraduates, who were aged between 18 to 25, from different universities across Malaysia. The participants were approached by sending or showing the research survey physical face-to-face and also via social media platforms, such as Instagram, WhatsApp and “Little Red Book”. The questionnaire included informed consent, demographic information and three scales which were the Career Exploration Survey, Information Literacy Self-Efficacy Scale and Social Media Use Scale. The results of this research showed there are significant positive relationships between career exploration, information literacy self-efficacy and social media usage. It also showed that career exploration is significantly predicted by information literacy self-efficacy and social media usage. This research not only provided theoretical support for the Social Cognitive Career Theory’s Interest Model but also provided insights to the professionals in the Guidance and Counselling field, especially career counsellor, and undergraduate students on how career exploration affects information literacy self-efficacy and social media usage.


*Keywords:* Career exploration, Information literacy self-efficacy, Social media usage, Social Cognitive Career Theory

## DECLARATION

I declare that the materials and contents in this paper are the end results of my own work, and that due acknowledgement has been given in the bibliography and references to ALL sources, be they printed, electronic, or personal

Name : Chia Ching Yi

Student ID : 20AAB03981

Signature : 

Date : 18<sup>th</sup> April 2024



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## Chapter 1 Introduction

### Background of the Study

Career is very important to an individual as it will accompany an individual more than half of the time in life. According to OECD (2024), those aged between 15 to 64 is the working age population. In Erik Erikson's theory, he mentioned that in adolescence stage, which is ages between 12-18, individuals will start to think about future roles and career while in the last stage of life, which is ages above 65, individuals will reflect on lives, especially look back on the accomplishments in the roles and career (Cherry, 2022). It showed that most of life is connected with career. Therefore, career development is very important for individuals as it will affect the most of life and cause career related issues. According to Career Research (n.d.), career related issues include career transitions, job satisfaction, career decision, career motivation and career coping strategies. These career related issues will also cause mental health impact, such as career distress, anxiety and depression (Hinkelman & Luzzo, 2007).

Nacházellová and Reissová (2020) reported that almost 57% of the participants did not have a clear idea of the specific job they would like to work in. A research study that surveyed 1000 students in US colleges showed nearly half of them were not ready for a career, as 47% of them felt uncertain or only had limited confidence in understanding how to successfully find employment opportunities or apply for jobs after completing college education (Bellassai, 2023). Besides, in 2021, there was also a research study which surveyed more than 7000 university students and graduates from the UK, the result showed that more than a third of the students were uncertain towards future plans (Prospects, 2021). According to Nasreen et al. (2022), Malaysia graduates are also facing an unemployment situation, and the main reason is because of lack of employability skills. These research results indicated that many university and college



students and graduates are facing career-related issues due to the insufficient preparation before graduation. Therefore, the outcome variables for this study will be career exploration, one of the ways to prepare before graduation, and the population will focus on university students.

Social media platforms, which enable people to stay connected and share ideas online (Johan, 2023). It also can be used for information seeking and gathering (Päivitetty, 2023) Dean (2023) reported that the average social media user is using an average of 6.6 different social media platforms, and 56.8% of the people worldwide are using social media, as indicated in 2023 statistics. Since 2005, there has been a rise in social media usage across all educational attainments, especially among college students (Perrin, 2015). According to Kosine and Lewis (2008), individuals engage in career exploration by gathering information and discovering more about self, own interests and abilities through participation in educational programs or work-related experiences. Therefore, one of the independent variables for this study will be social media usage, as it can be used to look for information that can affect career exploration.

Moreover, information literacy self-efficacy is very important for university students who are constantly looking for different information. Nowadays, the internet is a primary resource for obtaining the information needed in daily life. The ability to identify and evaluate information becomes increasingly important, especially towards university students. The career exploration among university students appears to be influenced by the information literacy self-efficacy, as the self-efficacy will affect the motivation (Schunk & DiBenedetto, 2021). Therefore, the information literacy self-efficacy may affect the student's motivation to search and evaluate information. Additionally, according to Spisak (2018), students tend to overestimate their own ability in information literacy and have too high self-efficacy. Hence, the next independent

variable for this study will be information literacy self-efficacy, as it is very important for students during information seeking.

In conclusion, this study will focus on the interrelated relationship between career exploration, information literacy self-efficacy and social media usage. According to the findings above, career exploration serves as one method that university students can carry out to prevent career-related issues and also mental health impacts. Career exploration involves the process of searching for career information, information literacy self-efficacy influences students' motivation in searching for information, and social media usage can be used to search for information. With this study, it can determine whether the information literacy self-efficacy and social media usage can facilitate university students' career exploration so it can provide students with more resources for information. This finding holds potential benefits for the career counselling field, as the career counsellor can consider strategies to increase the information literacy self-efficacy of clients or use social media as a resource for obtaining career-related information in the future if the hypotheses are supported.

### **Problem Statements**

Previous research suggests that social media can affect career exploration by searching information through social media. However, there are conflicting views on this statement. Some studies affirm the significant relationship between social media and career exploration during career development (Roman, 2014; Kumar et al., 2022; Brown et al., 2019). However, Bhore and Tapas (2022) argue that relying solely on social media is insufficient to influence the career decision which involves career exploration. Other than social media, Matthew (2019) places greater emphasis on the variety of career information sources which greatly impact students'

career exploration, such as sources from parents and career service centers. Different research yields different results when examining the relationship between social media usage and career exploration.

Besides, the Malaysian government has made significant efforts in building different platforms for career exploration. However, despite these efforts, the unemployment rate in Malaysia has not changed much compared with the previous year, especially for fresh graduates. According to Zamsari (2024), Malaysia offers a variety of job platforms, including MYFuture Jobs, Jobstreet, Indeed and LinkedIn. MYFuture Jobs, one of the platforms created by the Malaysian government, provides different services to the public, such as career fairs, free career services, labor market services and so on. The public can get different valuable career information from the platforms. This indicates that the government put a lot of effort and commitment into creating different platforms to assist the Malaysian citizens. However, in 2022, Malaysia had 5.92 million graduates, with a graduate's unemployment rate of 3.7% (The Star, 2023). The Statistics Department of Malaysia also reported that until January 2024, Malaysia's overall unemployment rate remained at 3.3%, affecting around 567,800 people (The Star, 2024). Although a 3.3% unemployment rate is considered low, when compared to some of the countries, Malaysia's unemployment rate remains higher than theirs.

Moreover, there is a lack of research showing the relationship between social media usage, career exploration and information literacy self-efficacy, especially for the connection between social media usage and information literacy self-efficacy, and the career exploration and information literacy self-efficacy. However, there is still some research on similar variables. For example, for the career exploration and information literacy self-efficacy, the study done by Ross et al (2016) on the information literacy self-efficacy and academic motivation and Kleine (2021)

on the career related self-efficacy and career exploration show positive relationships. For social media usage and information literacy self-efficacy, the study done by John (2013) on computer self-efficacy and social networking sites and Wang et al. (2015) on social networking sites use and internet self-efficacy show positive relationships. And also, most of the similar study that was found has passed over five years which means there is also lack of recently similar study.

### **Significance of the Study**

This study holds significance as it can provide valuable information on the combination of career exploration, information literacy self-efficacy, and social media usage. According to the Google Scholar, there is no any researcher has carried out the research related to career exploration, information literacy self-efficacy and social media usage in Malaysia within the past ten years. Additionally, the empirical findings from the present study have significant contributions towards theoretical and practical aspects. It also can benefit various stakeholders across different fields.

First of all, this study, which investigated the unique combination of career exploration information literacy self-efficacy and social media usage, can contribute to further theoretical support and evidence for the Social Cognitive Career Theory's Interest Model. According to Wang et al. (2022), the interest model includes the interest, outcome expectation, self-efficacy and learning experience as variables. This study investigates how social media usage serves as learning experience, information literacy self-efficacy acts as self-efficacy and career exploration influences each other during career development. The Social Cognitive Career Theory's Interest Model was developed in 1994, which is a model that has stood the test of time. However, considering the changing eras and evolving societal context, it is important to assess whether the

model remains suitable for contemporary individuals. Therefore, this study can also determine whether the model is still suitable in the current era. By carrying out this study, it seeks to enhance better understanding towards the interest model of Social Cognitive Career Theory and potentially provide further support for this model if the result shows alignment with the principles.

This study also contributes by providing empirical support for the practice in the field of guidance and counselling, especially for career counsellor. As career exploration is one of the important processes in the career counselling, where the counsellor needs to assist clients to explore interests, values and skills (Talukder, n.d.). The client's career decision making will be affected by the process of career exploration (Aneesh, 2023). Therefore, the career counsellor plays an important role in the career counselling which will affect the clients' final decision. So, this study would be useful for the career counsellor as the result of this study able to know how well the career exploration is affected by social media usage and information literacy self-efficacy. This study also provides insights to career counsellor during counselling sessions whether they can use social media to help the client in career exploration and also work on the client's information literacy self-efficacy to help the client in career exploration.

Furthermore, this study also benefits university students by revealing how information literacy self-efficacy and social media usage influence university students' career exploration. According to Howe (2023), the majority of social media users are adulthood, including university students who are exploring career options. University students also use social media for staying in touch with others and passing the time. This study can provide insights for university students to encourage them to leverage social media not only for socializing but also for exploring potential career paths. Moreover, career exploration is influenced not only by

individual factors but also by the environmental resources (Olowolabi & Osakuade, 2020). Additionally, according to Spisak (2018), research shows that students often struggle with searching information online, face difficulty in evaluating the information, and also tend to overestimate their own ability. Therefore, this study definitely helps university students access career information from different resources during exploration, such as using social media usage as environmental resources and enhancing information literacy self-efficacy as self-resources.

### **Research Objectives**

There are two research objectives for this study, which are:

1. To identify the relationship between career exploration, information literacy self-efficacy and social media usage.
2. To identify whether information literacy self-efficacy and social media usage are able to predict career exploration.

### **Research Questions**

Four research questions were formulated to address the research objectives listed above, which are:

1. What is the relationship between career exploration and information literacy self-efficacy?
2. What is the relationship between career exploration and social media usage?
3. What is the relationship between information literacy self-efficacy and social media usage?

4. Does the information literacy self-efficacy and social media usage are able to predict career exploration?

### **Research Hypotheses**

A list of hypotheses is formulated to answer the research questions listed above, which are:

1.  $H_1$ : There are positive relationships between career exploration, information literacy self-efficacy and social media usage.  
 $H_{1a}$ : There is a positive relationship between career exploration and information literacy self-efficacy.  
 $H_{1b}$ : There is a positive relationship between career exploration and social media usage.  
 $H_{1c}$ : There is a positive relationship between information literacy self-efficacy and social media usage.
2.  $H_2$ : Career exploration is significantly predicted by information literacy self-efficacy and social media usage.  
 $H_{2a}$ : Career exploration is significantly predicted by information literacy self-efficacy.  
 $H_{2b}$ : Career exploration is significantly predicted by social media usage.

### **Conceptual Definitions**

*Career exploration.* According to the Cambridge Dictionary, exploration is defined as the act of looking for and learning about something. Career exploration can be defined as the act of looking for and learning information about a job. The majority of people will go through this process, which entails discovering more about self, researching their own alternatives, trying new things, and creating a strategic plan to reach their own career goals (Seaver College, n.d.).

*Information literacy self-efficacy.* Information literacy is the capacity to recognize, evaluate, communicate, and use the information in any format (Indeed Editorial Team, 2023). Meanwhile, self-efficacy refers to an individual's belief in own ability to carry out actions required to achieve specific performance goals (Carey, 2009). Information literacy self-efficacy can be defined as an individual's belief in own capacity to recognize, evaluate, communicate and use the information in any format.

*Social media usage.* Social media is a collective term for websites and applications that prioritize communication, community participation, engagement, content-sharing and collaboration (Lutkevich, 2021). The term "social media usage" refers to interacting with and utilizing social media platforms. For example, creating and sharing content with text, images, videos or audio (Drew, 2023).

## **Operational Definitions**

*Career exploration.* In the present study, career exploration will be operationalized by using the Career Exploration Survey, which consists of 62 items. In this study, only six items from the 62 items will be used which are from the environment exploration category. The higher the scores indicate the higher the career environment exploration.

*Information literacy self-efficacy.* In the present study, information literacy self-efficacy will be operationalized by using the Information Literacy Self-Efficacy Scale, developed by Kurbanoglu et al (2004). There are 28 items across seven dimensions. The higher the scores indicate the higher the level of self-efficacy regarding issues related with the information.

*Social media usage.* In the present study, social media usage will be operationalized by using the Social Media Use Scale. It was developed by Tuck and Thompson in 2023, consisting



of 17 items. It is used to measure the frequency of using social media in the past seven days.

There are five items from image-based, three items from comparison-based, four items from belief-based and five items for consumption based. The higher the scores indicate the higher the social media use.

## Chapter 2 Literature Review

### Career Exploration

Career exploration is the process of gathering information relevant to one's professional advancement, and it encompasses deliberate behavior and cognitions that provide access to relevant information about jobs and occupations (Jiang et al., 2019). According to Kleine et al. (2021), career exploration can be defined as the exploration of the environment and the self with the aim of gathering career-related information. The exploration of the environment refers to the environmental resources and obtaining information about potential occupations, while the exploration of the self refers to integrating values, goals, and past behavior with possible career paths (Kleine et al., 2021). According to Logan and Tadros (2021), career exploration is a tool for defining the next step in a world where there are many existing next steps, and it is very important since people will spend a long time on working, thus, trying out several jobs before making a decision is very important.

Career exploration had been included in the career development process as one of the stages (Super, 1957, as cited in Jiang et al., 2019). Based on the Super's theory, there are five stages for career development in people's life, which include growth, exploratory, establishment, maintenance and decline. Every stage can occur in a variety of age ranges. For example, not only exploratory stage happens among adulthood, but the decline stage can also happen among adulthood, such as reducing hobby time and starting to focus on working (Careers New Zealand, 2012). However, career exploration is more likely to happen among adulthood aged between 18-24. According to Kosine and Lewis (2008), during the exploratory stage, individuals explore information about self and jobs.

Inappropriate career exploration resulted in various career problems (Sinring & Umar, 2023). Career problems that may be faced including career indecision and career dissatisfaction. Career exploration can be affected by the resources for career information. Individuals can get career-related information from family members, educators and the internet. As stated by Akosah-Twumasi et al. (2018), parents have a significant influence on children's career decision and they tend to perceive career congruence with parents. It is because of the fact that students are influenced by their parents' profession and tend to concentrate more on the parents' profession information during career exploration. Besides, the internet provides many career-related possibilities, advice and information (Epstein, n.d.). The internet provides a variety of information resources as well, such as career tools websites.

Career development is an important process for every one since early stages. Therefore, there are many different measurements created for career exploration. For example, the Self-Directed Search developed by John Holland is a famous exploration tool used to explore interests, abilities, personality and fields that are suitable to oneself. According to Indeed Editorial Team (2023), career tests that can be used to explore interests and personality include Career Cluster Interest Survey, Charity Village Career Assessment Questionnaire and Entrepreneurial Potential Self-Assessment. The scale used in this study is the Career Exploration Survey developed by Stumpf et al. (1983).

### **Information Literacy Self-Efficacy**

Information literacy is one of the many skills related to information use, such as information seeking (Clark, 2017). It is a necessary survival skill in the information age. According to Kilic-Cakmak (2010), information literacy is a necessary skill for individuals to

recognize when need information and be able to find, assess and use the needed information effectively. The researcher also mentioned that information literacy is a critical ability, especially for self-directed studying, lifelong learning and social growth. The American Library Association considers people who are information literate to be “prepared for lifelong learning, as they are always able to find the information needed for any task or decision at hand” (Ross, 2013).

As for self-efficacy, it refers to people’s judgements of their capabilities to organize and execute courses of action required to attain designated types of performances (Hatlevik et al., 2018, as cited in Bandura, 1986). According to Clark (2017), people with low self-efficacy and lack confidence in their capability normally respond to new tasks with anxiety, may try to avoid obstacles entirely, and ultimately live up to own self-made failure prophecy. Additionally, self-efficacy will affect students in the educational field, as self-efficacy can affect students’ learning motivation (Schunk & DiBenedetto, 2020).

According to Spisak (2018), after reviewing a few studies on information literacy self-efficacy, the researcher found that students overestimate own information literacy skills and have an excessive amount of information literacy self-efficacy, especially when the subject is easy to understand. When the students find the topic easier to perceive, the students tend to overestimate own abilities and competence. Other than that, the amount of time students spend in studying is significantly correlated with information literacy self-efficacy (Ross, 2013). Similar to how the self-efficacy affect students academically, as mentioned in the study carried out by Schunk and DiBenedetto (2020), the information literacy self-efficacy will affect the students’ motivation to study. Besides, according to Aharony and Gazit (2020), the information literacy self-efficacy will be affected by personality characteristics. The result from their study showed a positive

significant relationship between openness to experience personality and information literacy self-efficacy.

Due to there being very few articles studying on information literacy self-efficacy, there are only few scales being developed to study the information literacy self-efficacy. The only scale found and recently used is the Information Literacy Self-Efficacy Scale, which was developed by Kurbanoglu, Akkoyunlu and Umay in 2004. This is also the scale used in this study. Other than the scale, other scales are more focused on the general self-efficacy or the information literacy only. For example, self-efficacy questionnaire developed by Pintrich et al. (1991) and information literacy questionnaire developed by Hsieh et al (2014, as cited in Zou et al., 2021).

### **Social Media Usage**

Social media is a group of web-based tools that allow the production and sharing of material created by users (Brooks, 2015). According to Parveen et al. (2015), social media can also know as a platform that encourages users to participate in the media and share information in order to produce or distribute content. Social media can also be defined as social networking. According to Kenton (2023), social networking refers as the practice of maintaining relationships with others through the use of internet-based social media sites. The growth of social media has completely changed the way people communicate and interact with each other and also the way people share information or knowledge (Ahmed et al., 2018).

According to Dean (2023), the first social networking and video websites is Bolt, which was active from 1996-2007, and followed by Six Degrees, Instant Messenger and so on. Facebook, YouTube, WhatsApp, Instagram and FB Messenger are currently the top five most

popular social media platforms. Compared to desktop usage, these social media platforms are used more on mobile devices (Dean, 2023). As more people are using social media on mobile devices like smartphone, they can easily log in to their social media accounts. And also, at the same time, people also can log in into different accounts from different social media platforms in a single smartphone.

Most of the social media users use social media for entertainment. According to Naqvi et al. (2020), the research demonstrates the entertainment value of social media, and the result supports the hypothesis 'Entertainment value significantly affects the sustainable intention to use social networking site'. The research carried out by Whiting and Williams (2013) is also showing the similar result, where 64% of respondents used social media as a source of entertainment. Other than entertainment, social media can be used for information seeking. A study done by Kligler-Vilenchik et al. (2020) during the time of Covid-19 showed social media, such as Twitter, is helpful in seeking and obtaining the information or news about the spread of Covid-19. Social media not only able for news information seeking but also knowledge seeking. Some of the social media users will use social media for knowledge-sharing, which encouraging other users to utilize it more to learn more knowledge (Ahmed et al, 2018).

Besides, social media is also used to maintain social connections. During the Covid-19 pandemic, the social media users used social media to communicate with others and see how friends are doing to maintain the social connections with each other and reduce the feeling of loneliness (Kligler-Vilenchik et al., 2020). According to Roberts and David (2019), social media has helped in social connections but is affected by fear of missing out. Because of the fear of missing out causing the social media users reduce the willing to have connections with others through online. Social media also can be used for online business especially during and after

Covid-19 pandemic. The reason for this is that consumers can easily purchase the things they need through online business without going out, and the sellers can cut their expenses such as rental (Zanzalari, 2022).

Because of the number of social media users is increasing, the different researches studying on social media usage also had increase. Many different scales have been developed to measure the social media usage. For example, Social Media Use Integration Scale which developed by Jenkins-Guarnieri, Wright and Johnson (2012). The Social Media Use Disorder Scale, which adapted from Gaming Disorder Scale, was developed by Paschke et al. (2021) to measure social media use among adolescent. The latest scale for social media usage is Social Media Use Scale which created by Tuck and Renee (2023). It also is the scale that used in this study.

### **Career Exploration and Information Literacy Self-Efficacy**

Research on career exploration and information literacy self-efficacy is very limited. However, there are still some research studied on the similar variables have been found. According to Ross et al. (2016), there is a positive relationship between information literacy self-efficacy and academic motivation, which affect students' desire to know. In career exploration, the desire to know is very important to motivate individuals to explore more on career details. Besides, a study conducted by Kleine et al. (2021) showed a positive relationship between career related self-efficacy and career exploration. Career related self-efficacy in the research refers to the self-efficacy for career exploration and decision-making, which involves exploring the details and information related to a career.

### **Career Exploration and Social Media Usage**

In career exploration, searching for information is the most important step. Most of the studies show there is a relationship between social media usage and career exploration, as social media can be used to search the information related to careers. According to Roman (2014), social media can facilitate career development and professional preparation through participation in communities of practices, the utilization of hashtags to search for resources specific to one's interests, and the provision of opportunities for interaction with international, national or local professional organizations. Besides, there is a significant mean difference among social media access and career opportunity and development, indicating that social media influences the youth regarding career opportunity and development (Kumar et al., 2022). Not only social media, but also print and electronic media also have an impact on career decisions during the career exploration, such as print and electronic media highlighting benefits, privileges and qualification requirements. This information can help in making well-informed decisions (Yunusa et al., 2022).

However, research done by Bhore and Tapas (2022) showed that using social media alone does not influence career decisions. The study done by Kettunen et al. (2015) mentioned that although social media can help in career exploration, there are still certain ethical concerns, such as privacy and confidentiality.

### **Information Literacy Self-Efficacy and Social Media Usage**

Research on social media usage and information literacy self-efficacy is very limited. However, there still some research studied on the similar variables have been found. John (2013) had carried out a study on computer self-efficacy and social networking sites, and the result



showed that computer self-efficacy can predict the intention to use social networking sites with the p-value is .03. Low computer self-efficacy reduces the intention to use social networking sites. Wang et al. (2015) had carried out a research on the social networking sites use and internet self-efficacy, a positive and significant relationship was found. From the research, the researchers obtained a result that the r between social networking sites use and internet self-efficacy is .35, p-value is less than .01.

### Theoretical Framework

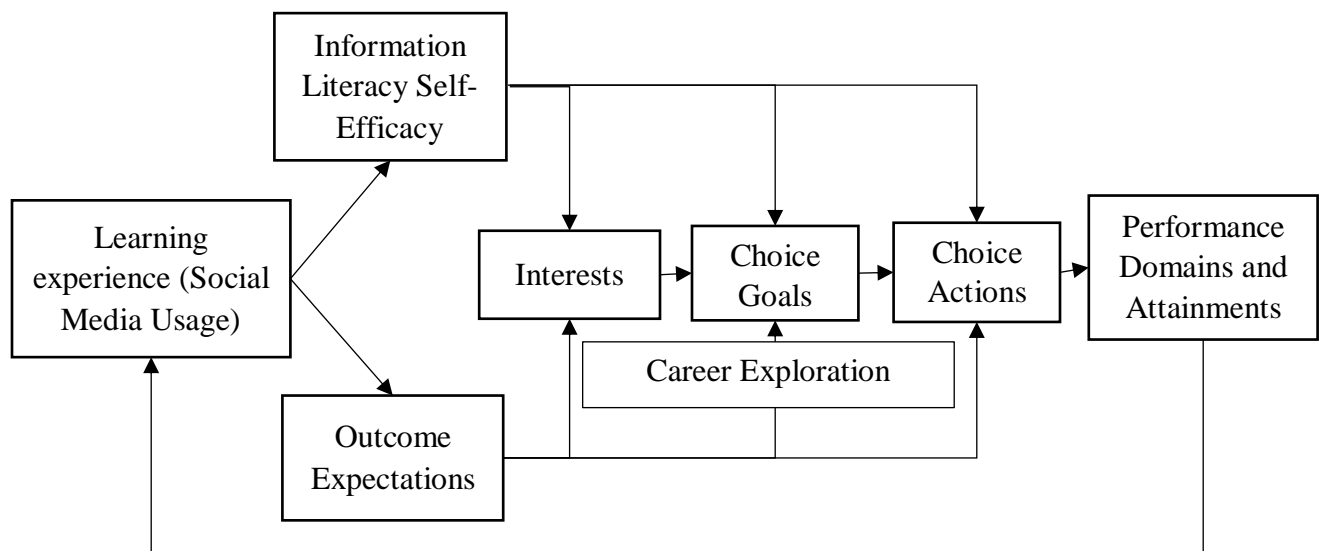


Figure 2.1. *The theoretical framework of the study, “Career exploration and information literacy self-efficacy in social media usage among university students”.*

Social Cognitive Career Theory was developed by Lent, Brown and Hackett in 1994, it is building on the framework of Social Cognitive Theory which developed by Bandura in 1986 (Lent & Brown, 2019). The aim of Social Cognitive Career Theory is to identify the connections between individuals and career related situations. It also aims to consider the entire environment

into account when making career related decisions (Career Marcr, n.d.). According to Lent et al. (2006), the fundamental components of Social Cognitive Career Theory consist of three interconnected variables, which are self-efficacy, outcome expectations and goals. These three variables play key roles in the interest model, which is the Social Cognitive Career Theory's model for developing educational and vocational interest.

The interest model, which emphasizes how interests influence career related decisions and behaviors, is the Social Cognitive Career Theory's model that used in this study. The main focus of the interest model is on how observational learning influence an individual's self-efficacy and outcome expectations during career development. In Social Cognitive Career Theory's interest model, the self-efficacy and outcome expectation play important roles which will affect the interests (Career Marcr, n.d.). According to Lent (2020), when interests emerge, individuals with self-efficacy and outcome expectations will be encouraged to set intents or goals for continuing involvement in an activity or career. However, interests can be changed due to different factors, such as exposed to learning experiences that cause individuals to rethink or expand own capabilities and outcomes offered by different work. The career exploration occurs in the process.

In this study, the social media usage is considered a learning experience from the environmental factor that affect individuals' interests, the information literacy self-efficacy is the self-efficacy to achieve outcome, and the career exploration is the process of rethinking or expanding own capabilities and outcomes when exposed to learning experiences. Based on the interest model, the motivation of career exploration will be affected by the social media usage and the information literacy self-efficacy. At the same time, the result of the career exploration also will affect the social media usage and the information literacy self-efficacy. Therefore, the

Social Cognitive Career Theory is used as the theoretical framework that supports this study, where it is hypothesized that there are positive relationships between social media usage, career exploration and information literacy self-efficacy.

### Conceptual Framework

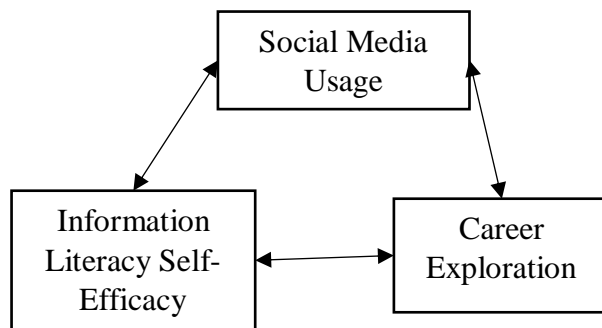


Figure 2.2. *The conceptual framework of the first research objective of the study, “Career exploration and information literacy self-efficacy in social media usage among university students”.*

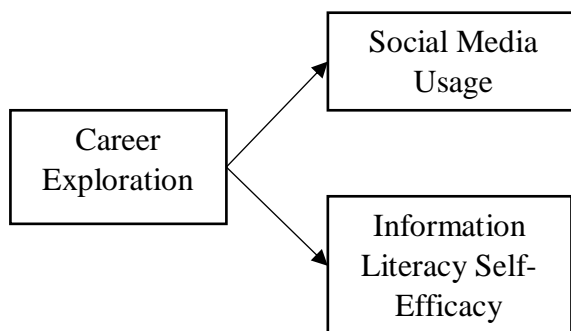


Figure 2.3. *The conceptual framework of the second research objective of the study, “Career exploration and information literacy self-efficacy in social media usage among university students”.*

The figures above illustrate the conceptual framework of this study. The key variables are career exploration, information literacy self-efficacy and social media usage. Figure 2.2 shows that the primary objective of this study is to determine the relationship between the variables. Figure 2.3 illustrated the framework which determines whether the two of the key variables (career exploration and information literacy self-efficacy) can predict another key variable (social media usage). Therefore, the correlation and regression model between three variables will be determined through statistics analysis.

## Chapter 3 Methodology

### Research Design

This study was designed as a quantitative study, which involving the process of collecting and analyzing numerical data (Bhandari, 2023). Quantitative research was used because it can be used for hypothesis testing, and the results can be statistically compared (Bhandari, 2023). Besides, according to Mander (2022), quantitative research is advantageous because it was faster, easier and less expensive.

A correlational design was implemented to investigate how career exploration, information literacy self-efficacy and social media usage are related to each other. It was also used to identify whether information literacy self-efficacy and social media usage are able to predict career exploration. According to Bhandari (2021), correlational designs are effective for measuring the relationship between variables and make predictions.

Besides, cross-sectional design was implemented in this study. According to Thomas (2020), a cross-sectional design involves data collection from different groups at a single time point, it allows for collecting data from a large pool of groups and in a time-efficient manner.

Throughout the research, the data were collected through an online self-report survey which required participants to respond to questions without interference. The survey was created by using Google Form and included a brief description of the research, informed consent, demographic information and questionnaire. By using Google Form, not only the data can be collected online, but the anonymity of the participants can also be ensured. It is because the Google Form can be set to collect responses anonymously. According to Cleave (2021), an anonymous survey fosters comfort and encourages participants provide more honest results.

The questionnaire included in the Google Form survey is aimed to collect primary data regarding career exploration, information literacy self-efficacy and social media usage. The reason for using questionnaire is that it standardizes responses and make analysis easier (Lindermann, 2023). Three scales were included in the questionnaire, which are the Career Exploration Survey, Information Literacy Self-Efficacy Scale and Social Media Use Scale.

## **Sampling Procedures**

### ***Method of Sampling***

The purposive sampling technique, one of the techniques under non-probability sampling, was used in this study. Non-probability sampling is a sampling method that does not require a sampling frame and uses criteria that are not random (Nikolopoulou, 2023). According to Vijayamohan (2023), purposive sampling is a technique that chooses a specific group of individuals accordance with the requirements in study. In this study, the specific group of individuals being selected are university students because according to Super's theory, adulthood aged between 15-24 are more likely to involve career exploration (Dumsch, 2016). They fall within the category of active social media users as well (Howe, 2023).

### ***Location of Study***

The location of study included the university from different states. This study was planned to engage the participants from various universities in Malaysia. The survey was distributed via online platforms such as Instagram, WhatsApp, and “Little Red Book”, which have a high chance of reaching the potential targeted participants. At the same time, the survey was also distributed at UTAR, Kampar campus, through physical face-to-face approaches. Initially, the survey was shared on the researcher’s Instagram account, which has followers

studying at different universities. The researcher also sent the survey to secondary school friends who studying in different universities through WhatsApp and asked for help to share the survey with their friends in the same university but different courses. Lastly, the “Little Red Book” app approached the greatest number of different students from different universities as the content shared could reached a wide array of people who were not following each other. The app can reach people from all over Malaysia and also from different countries. So, before sharing the survey, the participants were screened based on the inclusion criteria.

### ***Ethical Clearance***

The ethical clearance was approved by the UTAR Scientific and Ethical Review Committee through the supervisor of this study (Mr Ho Khee Hoong) and Head of the Department of Psychology and Counselling (Dr Pung Pit Wan) by providing the title of the study “Career Exploration and Information Literacy Self-Efficacy in Social Media Usage Among University Students”. The approval was received on 13<sup>th</sup> January 2024 (Re: U/SERC/78-208/2024), pilot study was initiated on 25<sup>th</sup> January 2024 and ended on 3<sup>rd</sup> February 2024. Actual study was initiated on 5<sup>th</sup> February 2024 and ended on 13<sup>rd</sup> March 2024.

### **Sample Size, Power and Precision**

The highest number of samples required was 79, and the sample size was increased by 40% due to potential missing data, outliers and non-responsive data (Salkind, 1997, as cited in Bartlett et al., 2001). A 40% increase in sample size is 110.6, rounded up to 111. This increase could improve the accuracy of the result.

G\*Power 3.1.9.7 version was used to calculate the sample size for the statistical techniques used in this study based on the pilot study effect size. A 5% alpha error (Type I error)

and an 80% power level (1-Type II error) was utilized in the sample size calculation for each hypothesis. This ensures an 80% likelihood of identifying a real effect. The rationale behind this decision was to strike a reasonable balance between alpha and beta risk, permitting a 5% possibility of a Type I error and a 20% possibility of a Type II error (Ellis, 2010).

For  $H_{1a}$ , the Spearman Correlation Test was used to examine the relationship between career exploration and information literacy self-efficacy. The effect size obtained from the JASP based on the pilot study result is .347, indicating a low effect size. Subsequently, G\*Power suggests a total sample size of 47, and the actual power is .80 (Appendix A).

For  $H_{1b}$ , the Pearson Product Moment Correlation (PPMC) was used to examine the relationship between career exploration and social media usage. The effect size obtained from the JASP based on the pilot study result is .392, indicating a low effect size. Subsequently, G\*Power suggests a total sample size of 36, and the actual power is .81 (Appendix A)

For  $H_{1c}$ , the Spearman Correlation Test was used to examine the relationship between the information literacy self-efficacy and social media usage. The effect size obtained from the JASP based on the pilot study result is .273, indicating a low effect size. Subsequently, G\*Power suggests a total sample size of 79 and the actual power is .80 (Appendix A).

For  $H_2$ , the Multiple Linear Regression was applied to investigate information literacy self-efficacy and social media usage as predictor for career exploration. The effect size obtained from the JASP based on the pilot study result is .235, indicating a medium effect size. Subsequently, G\*Power suggests a total sample size of 45 and the actual power is .81 for  $H_{2a}$  and  $H_{2b}$  (Appendix A).

JASP 0.18.3 was used to calculate the effect size based on the pilot study result. According to the Appendix, the  $p$ -values of Shapiro-Wilk test for  $H_{1a}$  (.007) and  $H_{1c}$  (.005) are



$<.05$ , which means that the data was not normally distributed, and the Spearman Correlation test was used to calculate the effect size. However, the Shapiro-Wilk test  $p$ -value for  $H_{Ib}$  is  $.500$ , indicating that the data was normally distributed, and the Pearson Product Moment Correlation (PPMC) was used to calculate the effect size. Multiple Linear Regression in JASP 0.18.3 was performed to determine the  $H_2$  effect size.

### **Data Collection Procedures**

The inclusion criteria included, (i) aged between 18 to 25, (ii) undergraduate students, (iii) studying in Malaysia university, (iv) having social media accounts for at least seven days, (v) access to the internet, (vi) not UTAR Guidance and Counselling course student. The exclusion criteria included (i) aged below 18 or above 25, (ii) non-undergraduate student, (iii) studying abroad, (iv) not having social media accounts for at least seven days, (v) not access to the internet. These inclusion and exclusion criteria were established to ensure that participants are aligned with the research population.

An informed consent form will be included in the first part of the Google Form survey. This is very important for the research participants as it respects the right to personal autonomy and ensures that the participants fully informed about the research before taking part (NIH, 2022). The inclusion of this form was aimed to inform the participants about the study objectives, privacy and confidentiality matters, voluntary nature of participation, potential benefits and risks, consequences of pre-maturely terminating the research, and the researcher's contact details. The information provided by the participants will solely be presented as aggregate form without identifying details and will be deleted after completing the research. The potential benefits to participants included gaining insight into own behaviors and attitude, as well

as engaging in self-reflection regarding own career exploration, level of information literacy, and social media usage habits. While the potential risk to participants was that the participants may feel discomfort or distress when filling the survey or engaging in self-reflection. Participants were filling the survey voluntarily and were allowed to stop answering and exit the survey page when wished to terminate the answering pre-maturely. The researcher's contact information was included to allow the participants to reach out if facing any problems during the survey completion process.

The data collection procedures started by including the participants' demographic information and the questionnaire of three variables in the second and third parts of the Google Form survey. Once the participants consented to take part in this study, they needed to fill in their personal information in the demographic information section. The personal information included gender, age, ethnicity, university, programme and year of study. This information aided in comprehending the diverse background of participants, which may also affect the research results. The third part of the Google Form is the questionnaire pertaining to the three variables, along with accompanying instructions. Each scale, namely the Career Exploration Survey, Information Literacy Self-Efficacy scale and Social Media Use scale, was included clear instructions and the rating scale.

After creating the survey and obtaining the ethical clearance approval, a pilot study was carried out and followed by the actual study. Data gathered from the pilot study were used to determine the internal consistency for all instruments. According to the Table 3.1, the Cronbach's alpha for three scales ranged between .85 to .93, which were above .70, indicating reliability. The pilot study started from 25<sup>th</sup> January 2024 and ended on 3<sup>rd</sup> February 2024 and the targeted participants were undergraduates enrolled in the Guidance and Counselling course at

UTAR. The researcher approached the participants using WhatsApp. The survey was sent via private message to different batches of Guidance and Counselling course students.

After confirming the internal consistency for all instruments as reliable, the actual study started from 5<sup>th</sup> February 2024 and ended on 13<sup>rd</sup> March 2024. These data were also used to assess the reliability of the scales by determining the internal consistency. According to the Table 3.1, the three scales showed strong internal consistencies, with Cronbach's alpha for three scales ranged between .89 to .95, which were above .70, indicating reliability. The targeted participants were undergraduates who studying at university in Malaysia, excluded the Guidance and Counselling undergraduate students at UTAR. The participants were approached using two methods which were physical face-to-face approach and online approach. Most responses from UTAR were obtained through physical approaches, where the QR code of the survey was presented. Responses from other universities were approached via online social media platform by sending link or QR code. The researcher approached these participants using Instagram, WhatsApp and "Little Red Book" app. The final number of responses collected were 204, but only 194 responses were used in the analysis.

**Table 3.1**

*Instrument's Reliability in Pilot Study (n=30) and Actual Study (n=194)*

Variables	Pilot Study (Cronbach's alpha)	Actual Study (Cronbach's alpha)
Career Exploration	0.857	0.897
Information Literacy Self-Efficacy	0.924	0.944
Social Media Usage	0.889	0.938

## **Instruments**

The Career Exploration Survey which developed by Stumpf et al. (1983) was used to measure the career environment exploration. It consists of 62 items across 16 dimensions and only one of the dimensions being used which is environment exploration dimension. The dimension comprises six items with a Likert scale ranging from 1 to 5, where 1 represents little and 5 represents a great deal. The minimum score for this scale is 6 and the maximum score is 30. An example of the item would be “Went to various career orientation programs”. The scale does not include any reverse items. The final score was determined by summing the scores from all six items. Higher scores indicate higher career environment exploration. Besides, this scale demonstrated good reliability and validity as the internal consistency for items ranging between .71 and discriminant validity is supported by non-significant association of the Career Exploration Survey subscales with a measure of social desirability (Bartley & Robitschek, 2000; Nauta, 2007; Stumpf et al., 1983).

The Information Literacy Self-Efficacy Scale, created by Kurbanoglu et al. (2004), was used to measure information literacy self-efficacy. The scale is used to measure the level of efficacy on issues related with the information. It was refined from a 40-item scale into a 28-item scale with a Likert scale ranging from 1 to 7, where 1 represents almost never true and 7 represents almost always true. The minimum score for this scale is 28 and the maximum score is 196. An example of the item would be “I feel confident and competent to: Identify a variety of potential sources of information”. The scale does not include any reverse items. The final score was determined by summing the scores from all 28 items. Higher scores indicate greater information literacy self-efficacy. Besides, this scale demonstrated good reliability as the internal consistency for items is .91. It also exhibited validity, as the discriminant validity of the

subscales ranges between .43-.61, compared with the original 40-items scale subscales (Kurbanoglu et al., 2004).

The Social Media Use Scale which developed by Tuck and Thompson (2023) was used to measure social media usage. The scale is designed to measure the frequency of using social media in the past seven days. It comprises four subscales which are image-based, comparison-based, belief-based and consumption-based. It contains 17 items with a Likert scale ranging from 1 to 9, where 1 represents never and 9 represents hourly or more. The minimum score for this scale is 17 and the maximum score is 153. An example of the item would be “Made or shared a post or story about something positive that was personally about me”. The scale does not include any reverse items. The final score was determined by summing the scores from all 17 items. Higher scores indicate greater social media use. Besides, this scale demonstrated good reliability as the internal consistency for items ranging between .77 to .83. It also exhibited validity, as the convergent validity between subscales was evidenced by assessed several constructs related to beliefs, behaviors and personality (Tuck & Thompson, 2023).

## Chapter 4 Results

### Descriptive Statistics

#### *Demographic Characteristics*

The demographic data in this research was reported in Table 4.1. This study involved 194 undergraduate students from 20 universities in Malaysia, with ages ranging from 18 to 25 years ( $M=21.861$ ,  $SD=1.159$ ). The distribution of ages was 0.52% were 18 years old ( $n=1$ ), 3.09% were 19 years old ( $n=6$ ), 8.25% were 20 years old ( $n=16$ ), 18.04% were 21 years old ( $n=35$ ), 45.36% were 22 years old ( $n=88$ ), 18.56% were 23 years old ( $n=36$ ), 5.16% were 24 years old ( $n=10$ ), and 1.03% were 25 years old ( $n=2$ ).

Within the 194 responses, there were 106 female respondents (54.64%) and 88 male respondents (45.36%). There were four different ethnicities among the participants, which included 129 Chinese respondents (66.50%), 39 Malay respondents (21.10%), 24 Indian respondents (12.37%) and two Bumiputera respondents (1.03%).

These participants were studying in eight different programme, with 64 studying in Social Science, Business and Law related programme (32.99%), 42 studying in Science, Mathematics, and Computer related programme (21.65%), 36 studying in Engineering, Manufacturing, and Construction related programme (18.55%), 23 studying in Health and Welfare related programme (11.86%), 12 studying in Arts and Humanities related programme (6.19%), eight studying in Education related programme (4.12%), six studying in Services related programme (3.09%), and three studying in Agriculture and Veterinary related programme (1.55%). Out of 194 respondents, 14.95% of the respondents were Year 1 students ( $n=29$ ), 28.87% were Year 2 students ( $n=56$ ), 50.00% were Year 3 students ( $n=97$ ), and 6.18% were Year 4 and above students ( $n=12$ ).

### *Topic-specific Characteristics*

The descriptive statistics and the normality of the total scores from the three scales that measure the three variables in this study was reported in Table 4.2. The three variables included career exploration ( $M=19.969$ ;  $SD=5.274$ ), information literacy self-efficacy ( $M=136.567$ ;  $SD=23.269$ ) and social media usage ( $M=70.268$ ;  $SD=25.336$ ). The normality of the data was checked by referring to the skewness, kurtosis and  $p$ -value of Shapiro-Wilk. According to the skewness and kurtosis values presented in the Table 4.2, all three variables were deemed normal as the results fell within  $\pm 2.000$ . Besides, according to the Shapiro-Wilk  $p$ -value, only the information literacy self-efficacy achieved normality with the  $p$ -value is .727, which above .05; while the career exploration ( $p$ -value=.002) and social media usage ( $p$ -value<.001) did not achieve normality as the  $p$ -values were below .05. The data collected is significantly different from a normal distribution, suggesting the possible violation of parametric tests assumptions. Therefore, the interpretations derived from the data should be examined with prejudice.

**Table 4.1***Demographic Characteristics of Participants (n=194)*

	<i>n</i>	<i>%</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Age			21.861	1.159	18.000	25.000
18	1	0.52				
19	6	3.09				
20	16	8.25				
21	35	18.04				
22	88	45.36				
23	36	18.56				
24	10	5.16				
25	2	1.03				
Gender						
Male	88	45.36				
Female	106	54.64				
Ethnicity						
Malay	39	21.10				
Chinese	129	66.50				
Indian	24	12.37				
Bumiputera	2	1.03				
Programme						
Social Science, Business and Law	64	32.99				
Science, Mathematics, and Computer	42	21.65				
Engineering, Manufacturing, and Construction	36	18.55				
Health and Welfare	23	11.86				



Arts and Humanities	12	6.19
Education	8	4.12
Services	6	3.09
Agriculture and Veterinary	3	1.55
Year of Study		
Year 1	29	14.95
Year 2	56	28.87
Year 3	97	50.00
Year 4 and above	12	6.18

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*Note.*  $n$  = number of respondents; % = percentage;  $M$  = mean;  $SD$  = standard deviation;  $Min$  = minimum value;  $Max$  = maximum value

**Table 4.2**

*Descriptive Statistics of Topic-Specific Variables (i.e. Career Exploration, Information Literacy Self-Efficacy, and Social Media Usage)*

	Career Exploration	Information Literacy Self-Efficacy	Social Media Usage
Valid	194	194	194
Missing	0	0	0
Mode	24.000 <sup>a</sup>	149.000 <sup>a</sup>	57.000 <sup>a</sup>
Median	21.000	137.500	63.000
Mean	19.969	136.567	70.268
Std. Deviation	5.274	23.269	25.336
Skewness	-0.390	-0.109	0.567
Std. Error of Skewness	0.175	0.175	0.175
Kurtosis	-0.311	-0.159	-0.271
Std. Error of Kurtosis	0.347	0.347	0.347
Shapiro-Wilk	0.976	0.995	0.963
P-value of Shapiro-Wilk	0.002	0.727	< .001
Range	23.000	116.000	120.000
Minimum	7.000	80.000	19.000
Maximum	30.000	196.000	139.000

<sup>a</sup> The mode is computed assuming that variables are discreet.

## Data Diagnostic and Missing Data

### *Frequency and Percentages of Missing Data*

There were no any missing data were found among the gathered responses. However, there were five unengaged responses and one invalid response had been found and deleted. According to Sankaran (2021), unengaged responses refer to those responses that select a consistent answer for every question, whereas the invalid responses refer those responses that do not meet the inclusion criteria. In the research done by Lungisa et al. (2019), the researchers mentioned that unengaged responses were determined by standard deviation, where the results showing the value of 0 or approximately 0.5 may indicate that the participant did not fully

engaged in the survey and need to be removed. Among the five deleted unengaged responses, one response exhibited a standard deviation lower than 0.5, while four responses select a consistent answer across three scales.

### ***Methods Employed for Addressing Missing Data***

One of the methods which used to avoid missing data was to set all the questions as compulsory to answer. By this way, the respondents needed to answer all questions that set before submitting the form. Besides, the formula “=COUNTBLANK(A2:BF2)” was used to check the missing data in the Microsoft Excel. The formula was applied for each respondent to ensure all respondents completed the entire survey, which included demographic information and questionnaire items.

### ***Criteria for Post Data-Collection Exclusion of Participants***

The initial criterion for post data-collection exclusion was to remove the responses that showed low engagement, which also known as unengaged responses. There were five unengaged responses were identified and deleted by calculating the standard deviation of all items in the three scales using the formula “=STDEV.P(H2:BF2)” in Microsoft Excel. After that, the whole data were rearranged from smallest to largest based on the computed standard deviation. Case number 27 showed “0”, where the respondent was responded “1” for all items. Similarly, the case number 62, 96, 134 and 173 also been deleted as well. Although the standard deviation for these four responses were 0.636, but the response for each item in each scale were same where the respondent was responded “3” for all items in Career Exploration Survey, “4” for all items in Information Literacy Self-Efficacy Scale and “5” for all items in Social Media Use Scale. Hence, the five unengaged responses, which were case number 27, 62, 96, 134 and 173, were excluded from this study to prevent affect the data analysis.

Besides, there was one invalid response been excluded because did not to meet the inclusion criteria of the study. The case number 163 was excluded because the participant was 26 years old which failed to meet the criteria of “aged between 18 to 25”. This was identified by using Highlight Cell Rules under Conditional Formatting in the Microsoft Excel. The age column was selected and the age above 18 and below 25 was highlighted with red color. Case number 163 was the only cell highlighted in red color, indicating exclusion.

### ***Criteria for Imputation of Missing Data***

Missing data should be imputed based on the level of measurement. For the items in questionnaire were ordinal level, the missing data should be imputed by the median, with the formula of “=MEDIAN(H2:H195)” in the Microsoft Excel. However, since there were no missing data in this research, so the imputation was not applied.

### ***Defining and Processing of Statistical Outliers***

Boxplot in the JASP was used to check the outliers for career exploration, information literacy self-efficacy and social media usage. According to the result (Appendix B), there were one outlier was found for each total career exploration and total information literacy self-efficacy, and two outliers were found for total social media usage. These four outliers were excluded and deleted, which were the case number 5, 23, 57, and 124.

### ***Data Transformation***

For reverse item, the formula “=IF(H2=1,5,IF(H2=2,4,IF(H2=3,3,IF(H2=4,2,IF(H2=5,1))))))” should be used to reverse the item scores for five range Likert scale in the Microsoft Excel. However, as there were no reverse item in these three scales, so the formula was not applied.

For data computation, the formula “=SUM(H2:M2)” was used to total up the score of Career Exploration Survey. The score of Information Literacy Self-Efficacy Scale and Social Media Usage Scale also totaled up by using the formula in the Microsoft Excel.

### *Analyses of Data Distributions*

Normality tests, including skewness, kurtosis, and Shapiro-Wilk, were used to analyze the data distribution.

For the skewness that showed in the Table 4.2, career exploration, information literacy self-efficacy and social media usage were normally distributed as the results were within  $\pm 2.000$ . The skewness of career exploration is -0.390, information literacy self-efficacy is -0.109, social media usage is 0.567.

For the kurtosis that showed in the Table 4.2, career exploration, information literacy self-efficacy and social media usage were also normally distributed as the results were within  $\pm 2.000$ . The kurtosis of career exploration is -0.311, information literacy self-efficacy is -0.159, social media usage is -0.271.

For the Shapiro-Wilk that showed in the Table 4.2, only information literacy self-efficacy was normally distributed, while career exploration and social media usage were not normally distributed as the Shapiro-Wilk test  $p$ -value were lower than the standard  $p$ -value, .05. The Shapiro-Wilk of information literacy self-efficacy is 0.995,  $p$ -value=.727, which indicated normally distributed. The Shapiro-Wilk of career exploration is 0.976,  $p$ -value=.002 and the Shapiro-Wilk of social media usage is 0.963,  $p$ -value<.001, which indicated not normally distributed.

## Data Analysis

*H<sub>1</sub>: There are positive relationships between career exploration, information literacy self-efficacy and social media usage.*

Spearman Rank Correlation Coefficient was utilized to study the association between career exploration, information literacy self-efficacy and social media usage. This was because the assumptions of Spearman Rank Correlation Coefficient were fulfilled, where: career exploration, information literacy self-efficacy and social media usage were measured in a ratio scale and paired observations, and there is a monotonic relationship between career exploration and information literacy self-efficacy, career exploration and social media usage, and information literacy self-efficacy and social media usage. According to the Table 4.3, the *p*-value of Shapiro-Wilk for the relationship between career exploration and information literacy self-efficacy (*p*-value=.003), career exploration and social media usage (*p*-value<.001), and information literacy self-efficacy and social media usage (*p*-value<.001) were all lower than .05, which indicated the bivariate normality was not achieved.

**Table 4.3**

*Shapiro-Wilk Test for Bivariate Normality*

		Shapiro-Wilk	<i>p</i>
Career Exploration	- Information Literacy Self-Efficacy	0.977	0.003
Career Exploration	- Social Media Usage	0.960	<.001
Information Literacy Self-Efficacy	- Social Media Usage	0.973	<.001

**Table 4.4***Spearman's Correlations (n=194)*

Variable		Career Exploration	Information Literacy Self-Efficacy	Social Media Usage
1. Career Exploration	Spearman's rho	—		
	<i>p</i> -value	—		
2. Information Literacy Self-Efficacy	Spearman's rho	0.658***	—	
	<i>p</i> -value	< .001	—	
3. Social Media Usage	Spearman's rho	0.231***	0.175**	—
	<i>p</i> -value	< .001	0.007	—

*Note.* All tests one-tailed, for positive correlation.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , one-tailed

$H_{1a}$ : There is a positive relationship between career exploration and information literacy self-efficacy.

The results of Spearman correlation in the Table 4.4 showed  $r_s(192)=.658$ ,  $p<.001$ . As  $r_s$  *p*-value is less than .05, the null hypothesis was rejected. There was a significant positive relationship between career exploration and information literacy self-efficacy. The positive correlation indicated that as career exploration increased, information literacy self-efficacy also increased. Using Guildford's rule of thumb, the effect size of .658, suggesting a moderate relationship.

$H_{1b}$ : There is a positive relationship between career exploration and social media usage.

The Spearman correlation result show  $r_s(192)=.231$ ,  $p<.001$ . As  $r_s$  *p*-value is less than .05, the null hypothesis was rejected. There was a significant positive relationship between career exploration and social media usage. The positive correlation indicated the higher the

career exploration, the higher the social media usage. Using Guildford's rule of thumb, the effect size of .231, suggesting a weak relationship.

*H<sub>1c</sub>*: There is a positive relationship between information literacy self-efficacy and social media usage.

The results of Spearman correlation show  $r_s(192) = .175, p = .007$ . As  $r_s$   $p$ -value is less than .05, the null hypothesis was rejected. There was a significant positive relationship between information literacy self-efficacy and social media usage. The positive correlation indicated as information literacy self-efficacy increased, social media usage also increased. Using Guildford's rule of thumb, the effect size of .175, suggesting a negligible relationship.

***H<sub>2</sub>: Career exploration is significantly predicted by information literacy self-efficacy and social media usage.***

*H<sub>2a</sub>*: Career exploration is significantly predicted by information literacy self-efficacy.

*H<sub>2b</sub>*: Career exploration is significantly predicted by social media usage.



**Table 4.5***Assumption Checks for Multiple Linear Regression (Durbin-Watson)*

Model	Autocorrelation	Statistic	<i>p</i>
H <sub>1</sub>	0.094	1.809	0.182

**Table 4.6***Assumption Checks for Multiple Linear Regression (Collinearity Statistics)*

Model		Tolerance	VIF
H <sub>1</sub>	(Intercept)		
	Information Literacy Self-Efficacy	0.954	1.049
	Social Media Usage	0.954	1.049

**Table 4.7***Multiple Linear Regression Model (n=194)*

Model		<i>df</i>	<i>F</i>	<i>p</i>	Adjusted <i>R</i> <sup>2</sup>	<i>R</i> <sup>2</sup>
H <sub>1</sub>	Regression	2	79.242	<.001	0.448	0.453
	Residual	191				
	Total	193				

**Table 4.8***Multiple Linear Regression Coefficient*

Model		Unstandardized	Standard Error	Standardized	<i>t</i>	<i>p</i>
H <sub>0</sub>	(Intercept)	19.969	0.379		52.740	< .001
H <sub>1</sub>	(Intercept)	-1.499	1.735		-0.864	0.389
	Information Literacy Self-Efficacy	0.145	0.012	0.639	11.664	< .001
	Social Media Usage	0.024	0.011	0.116	2.112	0.036

The assumptions of Multiple Linear Regression were fulfilled, where: there is linear relationships between career exploration, information literacy self-efficacy and social media usage, there is multivariate normality with no significant outliers, there is homoscedasticity, independence of observation and no or little multicollinearity, the independent variables (information literacy self-efficacy and social media usage) and dependent variable (career exploration) are in ratio scale. As showed in the Table 4.6, there is no multicollinearity in this research data as the Tolerance in the Collinearity statistics is .954 which is not below 0.1 or 0.01. The VIF is 1.049 which is not larger than 5 or 10. Besides that, the values are independent as the Durbin-Watson shows 1.809 which is between 1.5-2.5 (see Table 4.5). According to the Cook's distance (Appendix F), all the data do not exceed one which considers no outliers from this research.

Multiple Linear Regression was utilized to examine how well information literacy self-efficacy and social media usage predict career exploration. According to the Table 4.7, the results were statistically significant  $F(2,191)= 79.242, p<.001$ . The multiple correlation coefficient is 0.673. The equation that identified to understand this relationship was Career exploration= $0.145(\text{information literacy self-efficacy})+0.024(\text{social media usage})-1.499$ . It was found that information literacy self-efficacy ( $\beta=.639, p<.001$ ) and social media usage ( $\beta=.116, p=0.036$ ) significantly predicted career exploration among university students. The adjusted  $R^2$  value was 0.448. This indicated 44.8% of the variance in career exploration was explained by information literacy self-efficacy and social media usage. According to Cohen, the effect size of  $f^2=.828$  was large.

## Chapter 5 Discussion and Conclusion

### Discussion

The current study designed to examine the relationship between career exploration, information literacy self-efficacy and social media usage. Besides, this study also aimed to identify whether information literacy self-efficacy and social media usage could predict career exploration.

#### *Career Exploration and Information Literacy Self-Efficacy*

The  $H_{1a}$  of this research hypothesized there is a positive relationship between career exploration and information literacy self-efficacy. The result shown by the Spearman Correlation was consistent with  $H_{1a}$ , indicating that the two variables were positively correlated. This result was also supported by past findings with similar variables (Gkorezis, 2017; Pratiwi et al., 2019; Aharony & Gazil, 2020). A past study carried out by Gkorezis (2017) discovered that there was a significantly positive relationship between information seeking and self-efficacy, where the higher the information seeking, which is one of the important processes in career exploration, the higher the self-efficacy. Additionally, Pratiwi et al. (2019) found a positive significant relationship between career exploration and self-efficacy, which showed that the higher the career exploration, the higher the self-efficacy. The positive relationship between motivation and information literacy self-efficacy among university students was observed in the study done by Aharony and Gazil (2020). However, among university students, only intrinsic motivation was observed affected information literacy self-efficacy, while extrinsic motivation did not affect information literacy self-efficacy, as intrinsic motivation offers greater self-benefit by learning through challenges searching.

The results could be justified as career exploration is one of the pathways that university students must go through, it can increase their self-efficacy throughout the process of searching for information, and the process can be also supported by self-efficacy. When engaging in career exploration, looking for career-related information was one of the important steps to better understand career and self. According to Indeed Editorial Team (2024), information literacy can be developed through experience and interactions with technology. When the ability is developed, self-confidence increases, directly enhancing the efficacy in finding information, which leads to an increase in self-efficacy. The self-efficacy also increases motivation and interest to continue looking for information (Newby, 2023). As more exploration is done and experience accumulates, the ability to discern and evaluate information increases. Consequently, confidence in one's own ability increases and strengthens the relationship between career exploration and information literacy self-efficacy among university students.

### ***Career Exploration and Social Media Usage***

The  $H_{1b}$  of this research hypothesized there is a positive relationship between career exploration and social media usage. The result shown by the Spearman Correlation was consistent with  $H_{1b}$ , indicating that the two variables were positively correlated. This result was also supported by past research (Bridgstock, 2019; Fetherston, 2019). A past study done by Bridgstock (2019) showed that social media platforms, such as LinkedIn, Instagram and Pinterest, were useful for career development and employability learning more broadly. The researcher found that practicing social media reputation management and developing professional social media profiles helped in career exploration. This result consistently proved that increased social media usage in proper ways is related to increased career development which included career exploration. Besides, a past study carried out by Fetherston (2019),

regarding source experience through internet and information seeking among college students, there was a significantly positive relationship between source experience and information seeking among college students. This result indicated that the increase in the use of internet-based sources is related to the increase in information seeking, one of the important steps in career exploration.

The results could be justified as university students being able to access career-related information through social media. In the current digital age, not only do individuals have their own social media accounts, but companies also maintain a strong presence on social media and share their company-related information online. According to Wong (2023), in 2023, there were around 4.9 billion people were using social media, 77% of companies were using social media to reach customers, and around 90% of social media users following at least one company on social media. This can be known as social media is another platform for university students to easily access career-related resources and information, connect with the professionals in same field, and gain insights into various industries. As increase in social media usage, increases the chance to engage with different company's social media accounts and obtain more career-related information.

### ***Information Literacy Self-Efficacy and Social Media Usage***

The  $H_{1c}$  of this research hypothesized there is a positive relationship between information literacy self-efficacy and social media usage. The result shown in the Spearman Correlation was consistent with  $H_{1c}$ , indicating that the two variables were positively correlated. This result was also supported by past findings with similar variables (Wang et al., 2015, Medaile, 2021). A past study done by Wang et al. (2015) showed that there was a positive significant relationship between social networking sites use and internet self-efficacy. This result indicated that higher

social networking sites usage are related to higher internet self-efficacy. Medaile (2021) had done research among undergraduate students regarding information literacy practices and self-efficacy. The results showed that undergraduate students can increase information literacy self-efficacy by using familiar search tools. This result consistently proved that higher social media usage related to higher information literacy self-efficacy as increase in social media usage can increase the familiarity towards the platforms.

The results could be justified as university students use social media as a primary source of information. According to Sivua Päivitetty (2024), social media is not only seen as a source of entertainment, but also useful information sources. It can serve as a tool for searching and producing information. University students can effectively leverage social media to find the information they need. However, when searching for or evaluating information through social media, information literacy skills becomes important, such as critical thinking, research skill and critical analysis (Rollo, 2023). The ability to identify and evaluate information can be developed through experiences, particularly through the successful acquisition of needed information using social media. This process leads to increased self-confidence. Consequently, increased usage of social media can increase self-efficacy in information literacy. Conversely, higher self-efficacy in information literacy also can lead to increase social media usage, as high self-efficacy normally will be followed by high motivation (Ackerman, 2018). Therefore, improving information literacy self-efficacy can increase the motivation to use social media.

### ***Predictors of Career Exploration***

The  $H_2$  of this research hypothesized that career exploration is significantly predicted by information literacy self-efficacy and social media usage. The results shown in the Multiple

Linear Regression were consistent with  $H_2$ , indicating that information literacy self-efficacy and social media usage predict career exploration. This result was also supported by past research.

The  $H_{2a}$  result was supported by past studies (Pratiwi et al., 2019; Sutiman et al., 2022). Pratiwi et al. (2019) found that self-efficacy predicts career exploration. The researchers emphasized that career interest development is an ongoing process that begins at a young age, with self-efficacy serving as a core element in the process of career interest development and career exploration. Similarly, a study done by Sutiman et al. (2022) showed similar results with  $H_{2a}$ , demonstrating that self-efficacy significantly influenced career decision-making. The results could be justified as students' belief in their ability to identify information can influence their motivation to explore. According to Almutawa (2023), self-efficacy theory states that an individual's belief in own ability to complete tasks has a significant impact on motivation and behavior, and motivation can boost individual's energy and drive to explore during career development (Babić, 2023). The higher the self-efficacy in information literacy, the higher the motivation to explore. Therefore, the information literacy self-efficacy is able to predict career exploration.

The  $H_{2b}$  result was supported by past studies (Davis et al., 2020; Zhang et al., 2023). A study done by Davis et al. (2020) showed similar results with  $H_{2b}$ , which demonstrated that social media usage was able to predict career exploration. Specifically, the frequency of LinkedIn usage was able to significantly predict career benefits, including access to information and ideas, as well as job search assistance. Additionally, Zhang et al. (2023) discovered that career exploration was influenced by career-oriented social media usage. The results indicated that using social media for work-related purposes raised career anxiety, which in turn promoted career exploration. The results could be justified as the impact of the frequency of social media

usage on the chance to access career-related information through social media. In the digital age, much information is shared through online or through social media platforms. Social media usage influence career exploration not only by providing access to information and opportunities to connect with companies or professionals but also by offering a chance to showcase skills to enhance own professional image (Muthusamy, n.d.). Thus, the more frequently individuals use and manage own social media accounts, the higher the chance of accessing career-related resources.

## **Implication of the Study**

### ***Theoretical Implication***

The theoretical framework used to formulate this study was Social Cognitive Career Theory's Interest Model which was developed by Lent, Brown and Hackett in 1994. The findings of this study helped to verifying the theory within the context of university students. It was found that career exploration, information literacy self-efficacy and social media usage have statistically significant relationships. Additionally, it was also found that information literacy self-efficacy and social media usage are able to predict career exploration.

According to the Social Cognitive Career Theory's Interest Model, the process of making a career choice reflects self-efficacy and outcome expectations, which will be influenced by learning experiences (Lent, 2020). This concept aligns with the study results where career exploration, which is considered as the process of making a career choice, is influenced by information literacy self-efficacy and social media usage, which is considered as learning experiences. Career exploration, as the process of identifying interest and making career choices, can be affected by the information literacy self-efficacy through its impact on the motivation to



explore, as well as by social media usage as a source of getting information. The outcomes of career exploration also affect information literacy self-efficacy, with self-efficacy increasing when the outcome is favorable. Social media usage also impacts information literacy self-efficacy and motivation for career exploration. Therefore, the results of this study were able to validate the theory within the context of university students.

### ***Practical Implication***

First of all, this study has significantly contributed to professionals in the Guidance and Counselling field, particularly career counsellors, by providing practical insights. The results reveal information literacy self-efficacy and social media usage have statistically significant relationships with career exploration. Both variables are also able to predict career exploration. Consequently, the counsellors may find it beneficial to focus on enhancing client's information literacy self-efficacy when carrying out career counselling sessions. The career counsellors can acquire relevant skills through attending training to effectively improve clients' information literacy self-efficacy. Subsequently, the counsellors can apply these skills to enhance clients' information literacy self-efficacy during career exploration sessions. Moreover, counsellors can use social media as one of the resources to facilitate clients to self-career guidance and exploration before making career decisions. According to Maddox (2024), one of the career counsellor responsibilities that emphasized is to help the clients in connecting themselves with useful resources. Therefore, counsellors can introduce various social media platforms to clients as resources for accessing different career-related information. In the future, counsellors can prioritize work on improving clients' information literacy self-efficacy and incorporating social media as a resource to get career related information.

Besides, this study also benefits university students in revealing how career exploration affects information literacy self-efficacy and social media usage. Not only can career counsellors address information literacy self-efficacy and social media usage during career counselling sessions, but university students can also take proactive steps to improve them independently. Through this study, university students can increase self-awareness on career exploration. As the results showed by Kleine et al. (2021), there is a positive association between age and career exploration, suggesting that younger individuals tend to explore careers lesser. However, career exploration can commence as early as possible, such as before graduating from secondary school, individuals can start to explore self-interests. Throughout the process of career exploration, individuals can use social media as a tool or resource to access information, and develop skills to enhance their information literacy and information literacy self-efficacy.

### **Limitation of the Study**

The first limitation of this research is the imbalance in participant demographics. In this study, there is an uneven representation of participants across different categories such as age, ethnicity and year of study. According to Wise (2017), the Malaysian school structure for university student age is 18 and above. However, the majority of the research participants aged between 21 to 23, with smaller number of participants aged between 18 to 20 and 24 to 25. Among the data collected, the ethnicity of the research participants was also imbalanced with 66.50% being Chinese participants, compared to 21.10% Malay participants and 12.37% Indian participants. These imbalances in the number of participants in different categories will under-represent certain groups and cohort, resulting in a lower external generalizability of the study.

Therefore, it is important to acknowledge that this study's results could be affected by this limitation.

The second limitation of this study is the instruments used. In this study, there were three instruments used which included the Career Exploration Survey (Stumpf et al., 1983), Information Literacy Self-Efficacy (Kurbanoglu et al., 2004) and Social Media Use Scale (Tuck & Thompson, 2023). Within these three instruments, there are 51 items and no containing reverse item. Due to the large number of items included, participants need to spend around ten to fifteen minutes to fill up the entire survey which may lead to fatigue. There was a high chance where the participants simply filling in the survey without carefully considering all items. This could lead to inaccurate data collected and potentially affect the results of the research.

Therefore, it is important to acknowledge that the data collected should be processed with caution.

The potential for response bias is the third limitation in this study, specifically socially desirable bias. According to Nikolopoulou (2022), socially desirable bias occurs when participants tend to answer according to society's expectation rather than own experiences. For example, in the Information Literacy Self-Efficacy Scale section. As university students are always expected to have the capacity to recognize and use the information especially when doing assignments, the participants might feel pressured to indicate high level of competency to fulfill the societal expectation of being proficient in information literacy. This socially desirable bias might affect the results of the research.

## **Recommendations for Research in the Future**

The first recommendation is to change the sampling technique from non-probability sampling to probability sampling. According to Fleetwood (n.d.), probability sampling involves randomly selecting a small group of samples from a large population with the same characteristics as representative samples. For example, select 75 participants from three different ethnicities to become representatives in each ethnicity, so the participants' demographics can be balanced. According to McCombes (2023), stratified sampling, one of the probability sampling techniques which involves dividing the population into subgroups based on characteristics, can be used in this study. After dividing the population into different subgroups, random participants can be chosen within each subgroup.

The second recommendation is to choose instruments carefully. The instruments with a large number of items can be replaced with the instruments with fewer items. However, the reliability and validity of the instruments also need to be considered to maintain the integrity of the study. The instrument with a large number of items can also be replaced with the instrument that contain reverse items. According to Samir et al. (2023), by including reverse questions can avoid automatic and superficial responses. After including reverse items, it is important to mention them in the survey so the participants will answer the survey carefully.

The third recommendation is to create a comfortable survey for the participants. According to Nikolopoulou (2022), one of the ways to reduce socially desirable bias is through anonymity and confidentiality, as it is important to reassure participants by protecting their identities. Although the survey of this study was anonymous and confidential, it was only mentioned once in the survey. Privacy and confidentiality matters can be restated in each section

of the survey so participants can always know that it is anonymous and confidential, and filled the survey honestly.

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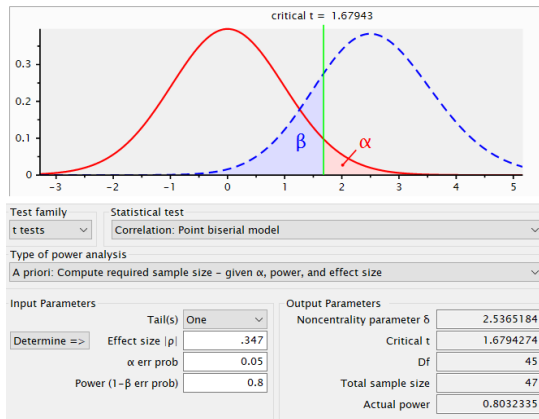
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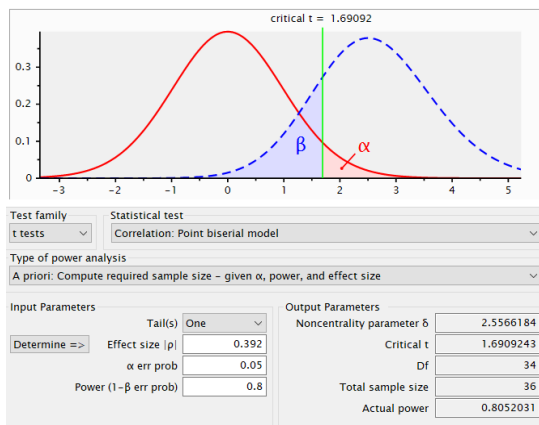
## Appendices

### Appendix A: Sample Size Calculation

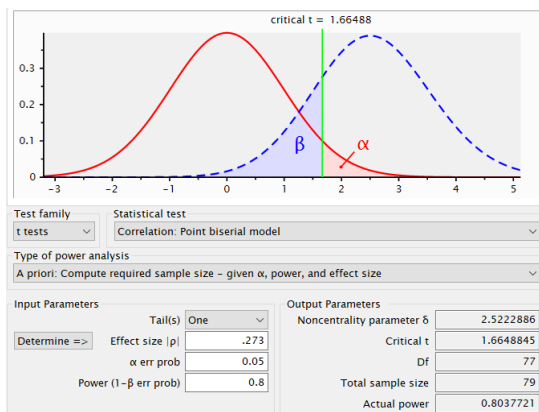
#### *H<sub>1a</sub> Career Exploration and Information Literacy Self-Efficacy*



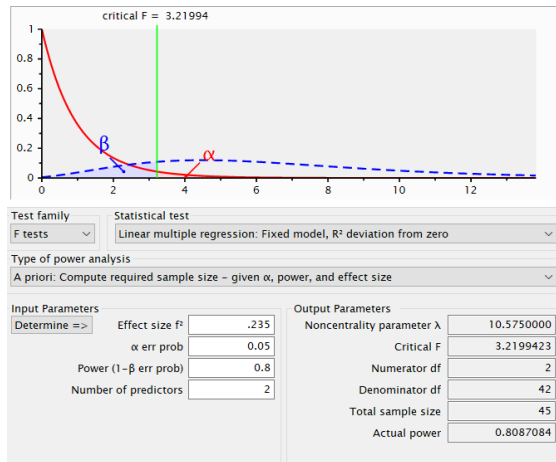
#### *H<sub>1b</sub> Career Exploration and Social Media Usage*



#### *H<sub>1c</sub> Information Literacy Self-Efficacy and Social Media Usage*

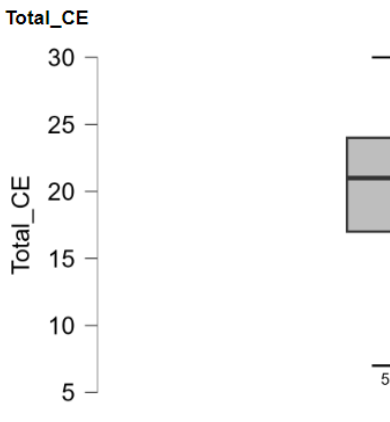


## *H<sub>2</sub> Predictor*

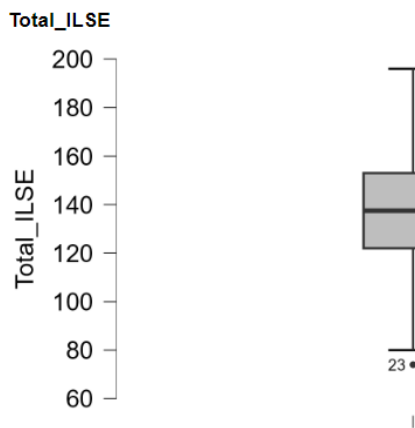


## Appendix B: Boxplots

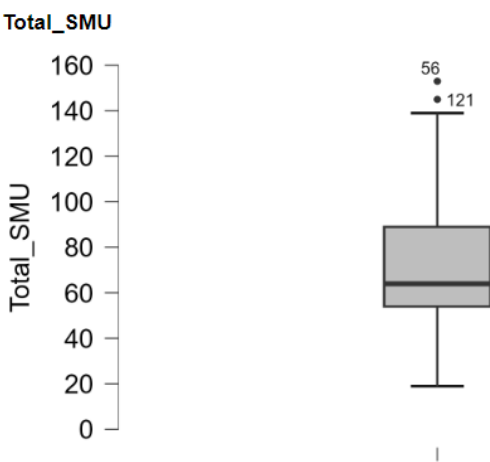
### *Career Exploration*



### *Information Literacy Self-Efficacy*



### *Social Media Usage*



## Appendix C: JASP Output for Reliability in Pilot Study

### *Career Exploration*

#### **Frequentist Scale Reliability Statistics**

<b>Estimate</b>	<b>Cronbach's <math>\alpha</math></b>
Point estimate	0.857
95% CI lower bound	0.758
95% CI upper bound	0.921

### *Information Literacy Self-Efficacy*

#### **Frequentist Scale Reliability Statistics**

<b>Estimate</b>	<b>Cronbach's <math>\alpha</math></b>
Point estimate	0.857
95% CI lower bound	0.758
95% CI upper bound	0.921

### *Social Media Usage*

#### **Frequentist Scale Reliability Statistics**

<b>Estimate</b>	<b>Cronbach's <math>\alpha</math></b>
Point estimate	0.889
95% CI lower bound	0.816
95% CI upper bound	0.937

## Appendix D: JASP Output for Reliability in Actual Study

### *Career Exploration*

#### **Frequentist Scale Reliability Statistics**

<b>Estimate</b>	<b>Cronbach's <math>\alpha</math></b>
Point estimate	0.897
95% CI lower bound	0.873
95% CI upper bound	0.918

### *Information Literacy Self-Efficacy*

#### **Frequentist Scale Reliability Statistics**

<b>Estimate</b>	<b>Cronbach's <math>\alpha</math></b>
Point estimate	0.944
95% CI lower bound	0.932
95% CI upper bound	0.955

### *Social Media Usage*

#### **Frequentist Scale Reliability Statistics**

<b>Estimate</b>	<b>Cronbach's <math>\alpha</math></b>
Point estimate	0.938
95% CI lower bound	0.924
95% CI upper bound	0.949

## Appendix E: JASP Output for Spearman Rank Correlation Coefficient

### *Shapiro-Wilk Test for Bivariate Normality*

		Shapiro-Wilk	<i>p</i>
Career Exploration	- Information Literacy Self-Efficacy	0.977	0.003
Career Exploration	- Social Media Usage	0.960	<.001
Information Literacy Self-Efficacy	- Social Media Usage	0.973	<.001

### *Spearman Correlation*

Variable		Career Exploration	Information Literacy Self-Efficacy	Social Media Usage
1. Career Exploration	Spearman's rho	—		
	<i>p</i> -value	—		
2. Information Literacy Self-Efficacy	Spearman's rho	0.658***	—	
	<i>p</i> -value	< .001	—	
3. Social Media Usage	Spearman's rho	0.231***	0.175**	—
	<i>p</i> -value	< .001	0.007	—

*Note.* All tests one-tailed, for positive correlation.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , one-tailed



## Appendix F: JASP Output for Multiple Linear Regression

### Model Summary – Career Exploration

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	RMSE	R <sup>2</sup> Change	F Change	df1	df2	p	Durbin-Watson		
										Autocorrelation	Statistic	p
H <sub>0</sub>	0.000	0.000	0.000	5.274	0.000		0	193		-0.028	2.049	0.729
H <sub>1</sub>	0.673	0.453	0.448	3.919	0.453	79.242	2	191	< .001	0.094	1.809	0.182

### ANOVA

Model		Sum of Squares	df	Mean Square	F	p
H <sub>1</sub>	Regression	2434.205	2	1217.102	79.242	< .001
	Residual	2933.610	191	15.359		
	Total	5367.814	193			

*Note.* The intercept model is omitted, as no meaningful information can be shown.

### Coefficients

Model		Unstandardized	Standard Error	Standardized	t	p
H <sub>0</sub>	(Intercept)	19.969	0.379		52.740	< .001
	Total_ILSE	0.145	0.012	0.639	11.664	< .001
H <sub>1</sub>	(Intercept)	-1.499	1.735		-0.864	0.389
	Total_SMU	0.024	0.011	0.116	2.112	0.036

### Casewise Diagnostics

Case Number	Std. Residual	Total_CE	Predicted Value	Residual	Cook's Distance
1	0.673	26.000	23.379	2.621	0.002
2	0.288	19.000	17.879	1.121	0.000
3	-2.177	12.000	20.485	-8.485	0.018
4	-0.291	20.000	21.136	-1.136	0.000
5	-2.085	12.000	20.146	-8.146	0.008
6	1.711	26.000	19.324	6.676	0.009
7	1.666	23.000	16.528	6.472	0.016
8	0.213	19.000	18.168	0.832	0.000
9	-0.475	15.000	16.838	-1.838	0.002

Case Number	Std. Residual	Total_CE	Predicted Value	Residual	Cook's Distance
10	-1.894	14.000	21.378	-7.378	0.015
11	-0.243	17.000	17.950	-0.950	0.000
12	-0.348	17.000	18.360	-1.360	0.000
13	-0.364	14.000	15.417	-1.417	0.001
14	-0.624	14.000	16.431	-2.431	0.002
15	-0.601	9.000	11.314	-2.314	0.004
16	0.476	22.000	20.148	1.852	0.001
17	-1.528	11.000	16.961	-5.961	0.007
18	-2.679	8.000	18.458	-10.458	0.019
19	-1.854	13.000	20.243	-7.243	0.007
20	-0.415	22.000	23.599	-1.599	0.002
21	-0.667	16.000	18.603	-2.603	0.001
22	0.479	30.000	28.156	1.844	0.003
23	0.290	16.000	14.883	1.117	0.001
24	0.021	21.000	20.917	0.083	0.000
25	0.078	19.000	18.697	0.303	0.000
26	-2.782	12.000	22.848	-10.848	0.026
27	-0.763	17.000	19.978	-2.978	0.001
28	0.350	27.000	25.646	1.354	0.001
29	-0.126	24.000	24.488	-0.488	0.000
30	0.442	27.000	25.287	1.713	0.001
31	0.102	19.000	18.602	0.398	0.000
32	0.578	21.000	18.745	2.255	0.001
33	-0.691	16.000	18.699	-2.699	0.001
34	0.522	21.000	18.963	2.037	0.001
35	-3.540	11.000	24.729	-13.729	0.089
36	-0.472	24.000	25.814	-1.814	0.003
37	-0.083	22.000	22.320	-0.320	0.000
38	-0.135	23.000	23.523	-0.523	0.000
39	0.450	28.000	26.278	1.722	0.003
40	-1.461	17.000	22.704	-5.704	0.006
41	0.273	18.000	16.937	1.063	0.000
42	-0.212	22.000	22.823	-0.823	0.000
43	-0.016	21.000	21.063	-0.063	0.000
44	1.272	19.000	14.065	4.935	0.011
45	1.607	24.000	17.759	6.241	0.016
46	0.015	19.000	18.939	0.061	0.000
47	0.709	24.000	21.232	2.768	0.001
48	-0.404	20.000	21.568	-1.568	0.001
49	-0.838	16.000	19.255	-3.255	0.004
50	0.232	21.000	20.100	0.900	0.000

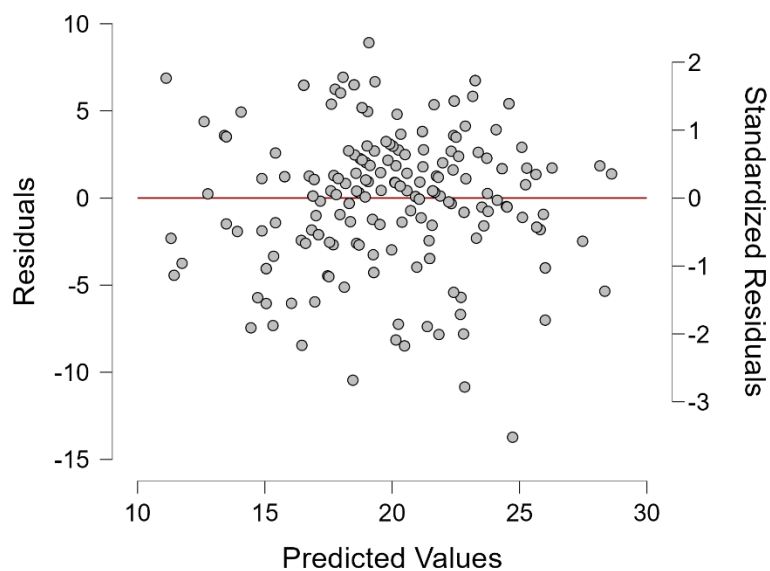
Case Number	Std. Residual	Total_CE	Predicted Value	Residual	Cook's Distance
51	0.928	17.000	13.412	3.588	0.008
52	0.459	23.000	21.208	1.792	0.000
53	1.142	17.000	12.615	4.385	0.018
54	0.324	18.000	16.742	1.258	0.001
55	0.752	28.000	25.091	2.909	0.005
56	1.795	18.000	11.123	6.877	0.050
57	0.365	20.000	18.579	1.421	0.001
58	-0.688	15.000	17.684	-2.684	0.001
59	0.029	17.000	16.886	0.114	0.000
60	-1.716	16.000	22.681	-6.681	0.013
61	0.333	19.000	17.707	1.293	0.001
62	-0.056	22.000	22.220	-0.220	0.000
63	-0.187	20.000	20.727	-0.727	0.000
64	-0.316	18.000	19.227	-1.227	0.001
65	-1.809	19.000	26.009	-7.009	0.025
66	-1.037	22.000	26.011	-4.011	0.010
67	-0.080	18.000	18.311	-0.311	0.000
68	0.907	17.000	13.486	3.514	0.006
69	0.030	22.000	21.885	0.115	0.000
70	0.315	17.000	15.777	1.223	0.001
71	0.714	23.000	20.245	2.755	0.005
72	-0.389	18.000	19.518	-1.518	0.000
73	-1.551	10.000	16.044	-6.044	0.009
74	0.690	25.000	22.316	2.684	0.002
75	-0.242	25.000	25.937	-0.937	0.000
76	-1.389	23.000	28.351	-5.351	0.023
77	-0.496	12.000	13.919	-1.919	0.002
78	1.665	25.000	18.504	6.496	0.009
79	-0.198	23.000	23.767	-0.767	0.000
80	-0.132	24.000	24.511	-0.511	0.000
81	0.375	21.000	19.545	1.455	0.001
82	-0.080	18.000	18.312	-0.312	0.000
83	0.438	26.000	24.318	1.682	0.003
84	-0.862	12.000	15.342	-3.342	0.005
85	1.330	24.000	18.817	5.183	0.007
86	0.641	23.000	20.506	2.494	0.002
87	2.291	28.000	19.086	8.914	0.026
88	0.980	25.000	21.185	3.815	0.004
89	-0.288	24.000	25.115	-1.115	0.001
90	0.235	22.000	21.086	0.914	0.000
91	0.062	13.000	12.762	0.238	0.000

Case Number	Std. Residual	Total_CE	Predicted Value	Residual	Cook's Distance
92	0.104	22.000	21.593	0.407	0.000
93	0.555	22.000	19.832	2.168	0.001
94	0.614	25.000	22.608	2.392	0.002
95	0.225	21.000	20.122	0.878	0.000
96	0.175	21.000	20.316	0.684	0.000
97	-0.628	19.000	21.448	-2.448	0.001
98	0.196	26.000	25.239	0.761	0.000
99	-1.311	13.000	18.119	-5.119	0.004
100	0.519	24.000	21.981	2.019	0.001
101	1.439	28.000	22.436	5.564	0.019
102	0.106	18.000	17.590	0.410	0.000
103	0.694	22.000	19.303	2.697	0.003
104	0.022	21.000	20.915	0.085	0.000
105	-0.046	17.000	17.178	-0.178	0.000
106	0.360	30.000	28.617	1.383	0.002
107	0.635	21.000	18.528	2.472	0.002
108	-1.920	7.000	14.452	-7.452	0.024
109	0.066	24.000	23.742	0.258	0.000
110	-0.592	21.000	23.307	-2.307	0.001
111	0.285	24.000	22.895	1.105	0.001
112	0.664	18.000	15.417	2.583	0.002
113	-0.649	25.000	27.479	-2.479	0.007
114	-0.032	24.000	24.126	-0.126	0.000
115	-0.355	19.000	20.387	-1.387	0.000
116	-2.007	14.000	21.835	-7.835	0.010
117	1.232	25.000	20.193	4.807	0.004
118	1.543	24.000	17.974	6.026	0.006
119	-0.259	16.000	17.009	-1.009	0.000
120	0.241	20.000	19.060	0.940	0.000
121	0.939	24.000	20.338	3.662	0.003
122	1.505	29.000	23.164	5.836	0.016
123	0.764	23.000	20.027	2.973	0.003
124	-2.170	8.000	16.455	-8.455	0.019
125	0.323	23.000	21.739	1.261	0.000
126	-1.148	13.000	17.466	-4.466	0.006
127	-2.012	15.000	22.802	-7.802	0.029
128	-1.881	8.000	15.320	-7.320	0.017
129	-1.020	17.000	20.968	-3.968	0.005
130	0.919	26.000	22.415	3.585	0.002
131	-1.387	17.000	22.414	-5.414	0.005
132	1.376	27.000	21.644	5.356	0.009

Case Number	Std. Residual	Total_CE	Predicted Value	Residual	Cook's Distance
133	-0.384	12.000	13.487	-1.487	0.001
134	-1.152	7.000	11.435	-4.435	0.016
135	0.085	22.000	21.667	0.333	0.000
136	0.480	21.000	19.131	1.869	0.001
137	0.108	21.000	20.579	0.421	0.000
138	0.265	20.000	18.964	1.036	0.000
139	0.792	23.000	19.905	3.095	0.001
140	0.363	22.000	20.581	1.419	0.000
141	-0.667	14.000	16.599	-2.599	0.002
142	1.380	23.000	17.612	5.388	0.005
143	0.225	21.000	20.123	0.877	0.000
144	1.009	28.000	24.081	3.919	0.006
145	0.413	24.000	22.391	1.609	0.001
146	-1.471	9.000	14.717	-5.717	0.013
147	1.271	24.000	19.037	4.963	0.004
148	-1.157	13.000	17.515	-4.515	0.004
149	0.894	26.000	22.511	3.489	0.002
150	-0.651	15.000	17.540	-2.540	0.001
151	1.058	27.000	22.873	4.127	0.003
152	1.392	30.000	24.587	5.413	0.010
153	-1.094	15.000	19.277	-4.277	0.002
154	0.829	23.000	19.759	3.241	0.001
155	-0.433	24.000	25.673	-1.673	0.002
156	1.733	30.000	23.260	6.740	0.016
157	-0.974	8.000	11.747	-3.747	0.012
158	-0.890	18.000	21.474	-3.474	0.002
159	-1.042	11.000	15.054	-4.054	0.006
160	0.111	20.000	19.567	0.433	0.000
161	0.558	21.000	18.819	2.181	0.001
162	0.305	23.000	21.812	1.188	0.000
163	-0.485	13.000	14.886	-1.886	0.001
164	1.774	25.000	18.071	6.929	0.007
165	0.586	26.000	23.717	2.283	0.001
166	0.050	18.000	17.805	0.195	0.000
167	0.694	21.000	18.288	2.712	0.001
168	-0.540	15.000	17.106	-2.106	0.001
169	0.765	22.000	19.012	2.988	0.001
170	-1.557	9.000	15.055	-6.055	0.013
171	-1.042	11.000	15.054	-4.054	0.006
172	0.175	21.000	20.316	0.684	0.000
173	0.315	17.000	15.777	1.223	0.001

Case Number	Std. Residual	Total_CE	Predicted Value	Residual	Cook's Distance
174	0.288	19.000	17.879	1.121	0.000
175	0.104	22.000	21.593	0.407	0.000
176	0.273	18.000	16.937	1.063	0.000
177	1.665	25.000	18.504	6.496	0.009
178	0.907	17.000	13.486	3.514	0.006
179	0.980	25.000	21.185	3.815	0.004
180	1.439	28.000	22.436	5.564	0.019
181	0.438	26.000	24.318	1.682	0.003
182	0.029	17.000	16.886	0.114	0.000
183	1.666	23.000	16.528	6.472	0.016
184	1.392	30.000	24.587	5.413	0.010
185	-1.094	15.000	19.277	-4.277	0.002
186	-0.433	24.000	25.673	-1.673	0.002
187	1.733	30.000	23.260	6.740	0.016
188	-0.890	18.000	21.474	-3.474	0.002
189	-0.540	15.000	17.106	-2.106	0.001
190	1.330	24.000	18.817	5.183	0.007
191	-0.132	24.000	24.511	-0.511	0.000
192	-1.037	22.000	26.011	-4.011	0.010
193	-0.212	22.000	22.823	-0.823	0.000
194	-0.016	21.000	21.063	-0.063	0.000

### *Residuals vs. Predicted*



## **Appendix G: Career Exploration Survey**

To what extent have you behaved in the following ways over the last 3 months?

1 represents little, 5 represents a great deal

1. Investigated career possibilities.
2. Went to various career orientation programs.
3. Obtained information on specific jobs or companies.
4. Initiated conversations with knowledgeable individuals in my career area.
5. Obtained information on the labor market and general job opportunities in my career area.
6. Sought information on specific areas of career interest.

## Appendix H: Information Literacy Self-Efficacy Scale

I feel confident and competent to:

1 represents almost never true, 7 represent almost always true

1. Define the information I need
2. Identify a variety of potential sources of information
3. Limit search strategies by subject, language and date
4. Initiate search strategies by using keywords and Boolean logic
5. Decide where and how to find the information I need
6. Use different kinds of print sources (i.e. books, periodicals, encyclopedias, chronologies, etc.)
7. Use electronic information sources
8. Locate information sources in the library
9. Use library catalogue
10. Locate resources in the library using the library catalogue
11. Use internet search tools (such as search engines, directories, etc.)
12. Use different kinds (types) of libraries
13. Use many resources at the same time to make a research
14. Determine the authoritativeness, currentness and reliability of the information sources
15. Select information most appropriate to the information need
16. Identify points of agreement and disagreement among sources
17. Evaluate www sources
18. Synthesize newly gathered information with previous information
19. Interpret the visual information (i.e. graphs, tables, diagrams)
20. Write a research paper
21. Determine the content and form the parts (introduction, conclusion) of a presentation (written, oral)
22. Prepare a bibliography
23. Create bibliographic records and organize the bibliography
24. Create bibliographic records for different kinds of materials (i.e. books, articles, web pages)
25. Make citations and use quotations within the text
26. Choose a format (i.e. written, oral, visual) appropriate to communicate with the audience
27. Learn from my information problem solving experience and improve my information literacy skill
28. Criticize the quality of my information seeking process and its products



## Appendix I: Social Media Use Scale

Please indicate how frequently you have engaged in each of the following social media activities in the PAST WEEK (7 days). Please only include activities engaged in on social networking sites such as Instagram, Facebook, etc.. Do not include activities related to direct messaging such as Facebook Messenger or Instagram direct messages. For each activity, please use the following scale:

1 represents never, 9 represents hourly or more

1. Made/shared a post or story about something positive that was personally about me
2. Looked at how many people liked, commented on, shared my content, or followed/friended me
3. Read comments to my own content
4. Edited and/or deleted my own social media content
5. Played with photo filtering/photo editing
6. Compared my body or appearance to others'
7. Compared my life or experiences to others'
8. Reminisced about the past
9. Made/shared a post or story about something negative that was personally about me
10. Made/shared a post or story about something negative that was NOT personally about me
11. Commented unsupportively or disliked/"reacted" unsupportively on other's post(s)
12. Sought out content that I morally or ethically disagreed with
13. Scrolled aimlessly through my feed(s)
14. Looked at others' stories
15. Navigated to others' profiles in my social network (e.g., friends or friends of friends)
16. Navigated to others' pages who I do not know (e.g., influencers or other famous people)
17. Watched videos such as memes, news content, how-tos/recipes, etc.

## Appendix J: Ethical Clearance Approval



**UNIVERSITI TUNKU ABDUL RAHMAN** DU012(A)  
Wholly owned by UTAR Education Foundation Co. No. 578227-M

Re: U/SERC/78-208/2024

13 January 2024

Dr Pung Pit Wan  
Head, Department of Psychology and Counselling  
Faculty of Arts and Social Science  
Universiti Tunku Abdul Rahman  
Jalan Universiti, Bandar Baru Barat  
31900 Kampar, Perak.

Dear Dr Pung,

### Ethical Approval For Research Project/Protocol

We refer to the application for ethical approval for your students' research project from Bachelor of Social Science (Honours) Guidance and Counselling programme enrolled in course UAPC3093. We are pleased to inform you that the application has been approved under Expedited Review.

The details of the research projects are as follows:

No	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	Career Exploration and Information Literacy Self-Efficacy in Social Media Usage Among University Students	Chia Ching Yi	Mr Ho Khee Hoong	13 January 2024 – 12 January 2025
2.	Attitude Toward Career Counselling Among Undergraduates in Malaysia: Decision-Making Style, Career Self-Efficacy and Perceived Social Support	Keh Jing En		

The conduct of this research is subject to the following:

- (1) The participants' informed consent be obtained prior to the commencement of the research;
- (2) Confidentiality of participants' personal data must be maintained; and
- (3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.
- (4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the research.

**Kampar Campus** : Jalan Universiti, Bandar Barat, 31900 Kampar, Perak Darul Ridzuan, Malaysia  
Tel: (605) 468 8888 Fax: (605) 466 1313  
**Sungai Long Campus** : Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia  
Tel: (603) 9086 0288 Fax: (603) 9019 8868  
**Website**: www.utar.edu.my



Should the students collect personal data of participants in their studies, please have the participants sign the attached Personal Data Protection Statement for records.

Thank you.

Yours sincerely,



**Professor Ts Dr Faiz bin Abd Rahman**  
Chairman  
UTAR Scientific and Ethical Review Committee

c.c    Dean, Faculty of Arts and Social Science  
        Director, Institute of Postgraduate Studies and Research



## Appendix K: Action Plan








### Action Plan of UAPC3093 Project Paper II

Supervisee Chia Ching Yi

---

Supervisor Mr. Ho Khee Hoong

---

Task Description	Date	Supervisee's Signature	Supervisor's Signature	Supervisor's Remarks	Next Appointment Date/Time
Research google form discussion - Email discussion	17/1/2024		Daniel Ho	Make amendments according to the comments	26/2/2024
Chapter three (Draft check)	26/2/2024		Daniel Ho	Make amendments according to the comments	28/3/2024
Chapter three (amended) and Chapter four (draft check)	28/3/2024		Daniel Ho	Make amendments according to the comments	12/4/2024
Draft Check - Abstract - Chapter three (amended) - Chapter four (amended) - Chapter five	12/4/2024		Daniel Ho	Make amendments according to the comments	15/4/2024
Turnitin Submission	15/4/2024		Daniel Ho	-	18/4/2024
Final Submission	18/4/2024				
Oral Presentation	18/4/2024				

- Notes:
1. Deadline for submission cannot be changed, mark deduction is as per faculty standard.
  2. Supervisees are to take the active role to make appointments with their supervisors.
  3. Both supervisors and supervisees should keep a copy of this action plan.
  4. This Action Plan should be attached as an appendix in Project Paper 2.

## Appendix L: Supervisor's Comment on Original Report

<b>Universiti Tunku Abdul Rahman</b>			
<b>Form Title : Supervisor's Comments on Originality Report Generated by Turnitin for Submission of Final Year Project Report (for Undergraduate Programmes)</b>			
Form Number: FM-IAD-005	Rev No.: 0	Effective Date: 01/10/2013	Page No.: 1 of 1



**FACULTY OF** Arts and Social Science

<b>Full Name(s) of Candidate(s)</b>	Chia Ching Yi
<b>ID Number(s)</b>	20AAB03981
<b>Programme / Course</b>	Bachelor of Social Science (Honours) Guidance and Counselling
<b>Title of Final Year Project</b>	Career Exploration and Information Literacy Self-Efficacy in Social Media Usage among University Students

Similarity	Supervisor's Comments (Compulsory if parameters of originality exceeds the limits approved by UTAR)
<b>Overall similarity index:</b> <u>  16  </u> %  <b>Similarity by source</b> Internet Sources: <u>  12  </u> % Publications: <u>  10  </u> % Student Papers: <u>  5  </u> %	
<b>Number of individual sources listed of more than 3% similarity:</b> <u>  Nil  </u>	
<b>Parameters of originality required and limits approved by UTAR are as follows:</b> (i) Overall similarity index is 20% and below, and (ii) Matching of individual sources listed must be less than 3% each, and (iii) Matching texts in continuous block must not exceed 8 words <i>Note: Parameters (i) – (ii) shall exclude quotes, bibliography and text matches which are less than 8 words.</i>	

Note Supervisor/Candidate(s) is/are required to provide softcopy of full set of the originality report to Faculty/Institute

*Based on the above results, I hereby declare that I am satisfied with the originality of the Final Year Project Report submitted by my student(s) as named above.*

Daniel Ho

Signature of Supervisor

Name: Ho Khee Hoong

Date: 16 Apr 2024

Signature of Co-Supervisor

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Appendix M: Turnitin Report

FYP2 turnitin.

### ORIGINALITY REPORT

<b>16%</b>	<b>12%</b>	<b>10%</b>	<b>5%</b>
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

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exploration", Career Development  
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7	Submitted to Glasgow Caledonian University Student Paper	<1 %
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9	"Information Literacy: Key to an Inclusive Society", Springer Science and Business Media LLC, 2016 Publication	<1 %
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## Appendix N: IAD Consent Form

<b>Universiti Tunku Abdul Rahman</b>			
Form Title : <b>Sample of Submission Sheet for FYP/Dissertation/Thesis</b>			
Form Number : <b>FM-IAD-004</b>	Rev No: <b>0</b>	Effective Date: <b>21 June 2011</b>	Page No: <b>1 of 1</b>

**FACULTY OF ARTS AND SOCIAL SCIENCE**  
**UNIVERSITI TUNKU ABDUL RAHMAN**

Date: 18<sup>th</sup> April 2024

**SUBMISSION OF FINAL YEAR PROJECT**

It is hereby certified that Chia Ching Yi (ID No.: 20AAB03981) has completed this final year project titled "Career Exploration and Information Literacy Self-Efficacy in Social Media Usage among University Students" under the supervision of Mr. Ho Khee Hoong (Supervisor) from the Department of Psychology and counselling, Faculty of Arts and Social Science.

I understand that University will upload softcopy of my final year project in pdf format into UTAR Institutional Repository, which may be made accessible to UTAR community and public.

Yours truly,




---

Name: Chia Ching Yi