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Employability Of Fine Arts Design Undergraduates:

Mixed-Method Research

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Abstract

This research paper has objectives: To identify the key factors that affect the employment ability of college students majoring in art design and puts forward a set of suggestions for improving the employment ability of college students majoring in art design. The target population is alumni from the art design program, comprising 200 people, whereas the actual responses are 200 respondents who completed the questionnaire, and 12 persons are the key informants who participated in the interview session. The research site is ABC Art University, Chengdu, Sichuan Province, China. Key findings showed that factors affecting employability by order of priority included professional ability; ability to adapt; ability to compete. Recommendations for strengthening the employability of the art design's undergraduate students consisted of the following: schools should pay more attention by developing students' professional ability to be more competitive; schools should improve employment guidance and training, providing students with employment guidance, employment services, career planning consultation, and other programs, schools should carry out more in-depth professional and skill training and provide more valuable opportunities, and schools should reform the teaching methods to be student-centered and results-oriented, promote the sustainable development of students and improve their employability. As a result, improving students' professional and competitive ability improves students' employability, thus improving students' employability.

Keywords: employability, professional ability, ability to adapt ability to compete

Introduction

Higher education has recently transitioned from elite to mass education for all due to reforms in the Chinese economic and educational system. Meanwhile, employment pressure is an inevitable phenomenon among undergraduates with art design majors, whereby job

opportunities are not widely available like those of science, engineering, literature, and history majors. Nevertheless, employability measures the marketization of art design's undergraduate program. Statistically, for ABC Art University (2020) officially announced, the employment rate of art graduates is trending down, with 87.7% in 2018, 80.2% in 2019, and 75.44%.

Concerning how higher-education institutions offering undergraduate programs prepare their students with the kind of abilities for employability, the curriculum mapping and course outline for teaching and learning today focus on 1. Cognitive skills, 2. Knowledge, 3. History of Art Design, 4. Integration of Design, 5. Technical software learning in various majors, and 6. Hands-on sketching courses. These represent learning domains that well justify the educational standards of fine art and design (Pei, 2018). However, based on the initial documentary review and analysis, it can be summarized that the priorities between the educational institutions and the future marketplace are overlapping.

Statement of the Problem

According to the employment situation and problems faced by art design graduates, take ABC Art University as an example this paper aims to 1) examine which competencies are variable for the employability of art design undergraduate students, consisting of professional ability, ability to adapt, and ability to compete, and 2) to propose student competencies development program for employability of art and design undergraduate students.

Research Objectives

1. To identify the most critical competencies for the employability of fine arts design undergraduate students.
2. To propose student competencies development program for the fine art design department for undergraduate students' employability.

Research Questions

1. What are the most critical competencies for the employability of fine arts design undergraduate students?
2. What student competencies' development program is appropriate for improving graduate employability with fine art and design degrees?

Hypotheses

H1o: Professional ability has no significant effect on employability.

H1a: Professional ability has a significant effect on employability.

H2o: Ability to adapt has no significant effect on employability.

H2a: Ability to adapt has a significant effect on employability.

H3o: Ability to compete ability has no significant effect on employability.

H3a: Ability to compete ability has a significant effect on employability.

Definition of Terms

Employability refers to the abilities of the person to achieve employment value; employability. Employability refers to an individual's ability to get, keep, and do an excellent job through the learning process. (Xie , et al., 2013)

Professional ability refers to the person's abilities through learning and training, gradually forming operational skills and thinking abilities. Professional skills include technical knowledge, design expertise, and communication skills. (Rosken, 2020)

Ability to adapt refers to the person's ability to be a comprehensive reflection of their quality and ability. Ability to adapt refers to people's psychological, physiological, and behavioral adaptation to better survive in society and achieve a harmonious state of executive adaptive ability. (Luo&Zhang, 2017).

Ability to compete refers to a person's competitive ability is a comprehensive reflection of his or her quality and ability form Employability pursuit.(2019).

Ability to adapt refers to the person's abilities to is a comprehensive reflection of its quality and ability. Ability to adapt refers to people's psychological, physiological, and behavioral adaptation to better survive in society and achieve a harmonious state of executive adaptive ability (Pei, 2018).

Literature Review

Employability

The concept of employability, which first appeared in Britain in the early 20th century, refers to an individual's ability to get and keep a job (Child, 2021). Employability is the ability an individual "needs to have to achieve the first employment, keep the current position and seek the next position when necessary (Coward Rhodes, 2018). Defining employability is more complex than might be imagined (Williams et al., 2019). According to Winstone & Avery, (2018), employability is a set of achievements – skills, understandings, and personal attributes – that make individuals more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community, and the economy (Coward & Rhodes, 2018).

From the perspective of graduates showing their advantages to employers, this paper

expounds that "employability is the relative opportunity to find and maintain other employment (Brown, 2019). Employability offers HEPs the opportunity to help individuals realize their potential, enhance their skills, attitudes, attributes, and knowledge, and become successful workers and citizens, which helps to increase the political legitimacy of higher education. It is explicit that employability is a work in progress throughout one's working life (Child, 2021). The earliest employability model examined by UK scholars who constructed the USEM employability model, which has been widely concerned and cited worldwide after being proposed. USEM model is mainly composed of understanding, skillful practices, efficacy beliefs, and metacognition (Coward & Rhodes, 2018).

According to Winstone & Avery (2018) employability is concerned with an individual's competencies and abilities to succeed and excel professionally and personally in his/her respective job roles and industries. Some of the attributes of competencies include professional ability, adaptability, competitiveness, technical knowledge and expertise, organizational skills, communication skills, objective evaluation and decision-making, self-management, innovative thinking, agility, and emotional intelligence.

Key Attributes of Competencies for Future Employability

The workplace competencies' attributes vary by job roles, functions, types of organization, industry, and marketplace, most of which are tailor-made to ensure congruency and relevance for local contexts. Higher education institutions play an essential role in equipping undergraduate students with the basic knowledge according to academic requirements; meanwhile, they encounter some challenges in complying with changing expectations and requirements from the marketplace. The following are examples of competencies essential for young graduates to fulfill in the marketplace.

Professional Ability

Professional ability is one of the competencies essential for future employability. Through learning and training provided by the workplace, employees gradually improve their operational skills and other abilities, including technical knowledge and communication. (Winch, 2017). Professional skills include technical knowledge, design expertise, and communication skills. These abilities are essential for an art design major. Today's society is diversified, and it is not enough to do design; but it also needs compound talents. They need comprehensive technical knowledge, excellent design expertise, and good communication skills to express their design. Therefore, it is helpful to improve the employability of art and design graduates. (Luo & Zhang, 2017).

Ability to Adapt

Adaptive ability is a comprehensive reflection of its quality and ability. Ability to adapt refers to people's psychological, physiological, and behavioral adaptation to better survive in society and achieve a harmonious state of executive adaptive ability. (Wang&Lee, 2019). Adaptive ability is a comprehensive reflection of its quality and ability. In this study, adaptive ability includes organizing systematically, objective evaluation ability, self-management ability, and emotional intelligence. Social adaptability is the psychological adaptation in the interaction between the individual and the social living environment, the response to social culture, values, and lifestyles. (Li, 2018). Adaptability is also the core ability of graduates' employability, which determines whether graduates can quickly adapt to the environment and adapt to work and other things and plays a crucial role in graduates' employability.

Ability to Compete

Competition and progress are the driving forces for success and personal competitive ability that reflect his or her qualities and abilities (Allen & Coenen, 2011). Ability to Compete is a comprehensive ability reflected by competition or comparison between both sides or many sides of the participants. It is a relative indicator that must be expressed through competition. Competitiveness can be big, small, strong, or weak. Ability to Compete is the ability of the object to show in competition. So, it is a kind of competence that changes with competition. Competitiveness is embodied in the object's present, but the object can display in the future. The determination of competitiveness requires the determination of a target time.

Technical Knowledge

Technical knowledge refers to the knowledge that technology is intangible and immaterial. Technology is practice; knowledge is a theory, technical knowledge integrates the two, and the theory combined with practice and reflected in work is an essential part of the employment. (Luo & Zhang, 2017). It is the driver of knowledge management and provides the basis for the knowledge management solution—automatic and centralized knowledge sharing and incentives for the innovation process (Glassman, 2007). The knowledge essence of technical competence has gained attention around studying the evolution law of technical competence. Empirical evidence suggests that tacit knowledge is an antecedent of innovation performance (Jisr & Maamari, 2017) and that brain processes required for technical knowledge creation are nonlinguistic (Amalric & Dehaene, 2016; Monti, Parsons, & Osherson, 2012).

Design Expertise

Design expertise mainly studies art design and art design's fundamental theories and professional skills. This paper refers to the knowledge of artistic design, which embodies the designer's comprehensive qualities such as expression ability, perception ability, imagination

ability, design ability, design theory, and software use. (Runco, 2010).

Design expertise mainly studies fundamental theories and professional art design skills and understands carving, jewelry, and ceramic processes. Having interior design, modern design creativity, and the ability to use new technology, new materials, and production site operation have specific art requirements—for example, the processing of various crafts; The interior design of the house. An excellent visual communication design should articulate the information with cognitive, emotional, and aesthetic functions as not a simple record but a feeling with the heart, the explanation of beauty, the observation of the soul, the communication and resonance of the soul (Li, 2018).

Communication Skills

Communication skills refer to using text, language, body language, and other means to communicate with others using skills. Communication skills involve many aspects, such as simplifying language, active listening, and valuing feedback; although having communication skills does not mean being an effective manager, a lack of communication skills can cause many troubles and obstacles for managers (Pei, 2018). For example, in *Career Planning for College Students*, the US Department of Labor lists desirable skills for employers as problem-solving, professional skills, communication, computer programming, training skills, financial management, information management, foreign language communication, and business management. In addition, employers in all four countries identified the soft skills and communication skills necessary to improve graduate employability (Stein-Parbury, 2019). Therefore, communication skills are essential for graduates for life and work and can improve employability.

Organizational Skills

Organizational skills refer to organizing and coordinating various forces reasonably and effectively by flexibly using various methods to achieve goals effectively, including coordinating relationships and being good at people. Organizational ability is the comprehensive external expression of a person's knowledge, quality, and other primary conditions (Pei, 2018). Organizational ability refers to the ability to carry out organizational work. It refers to the ability of a company to convert its various factor inputs into products or services with higher production efficiency or quality under the condition that the company has the same input as its competitors. Organizational capabilities include capabilities that a business possesses to reflect efficiency and effectiveness, from product development to marketing to production. With the reform of the graduate employment system, organizational management ability has gradually become an essential indicator for employers to consider college graduates. (Pei, 2018)

Ability to Evaluate Objectively

Objective evaluation is a realistic and fair evaluation. Compared with subjectivity, objectivity is the conclusion drawn through research and calculation, a tentative vocabulary hint to reduce the impact of ideas on the current dialogue content. It is synonymous with "neutrality." When used with justice to form the phrase "objective justice," it refers to a narration or demonstration that reduces the participation of "personal elements." (Panda, et al., 2018). It is a synonym for neutral. When combined with justice, the phrase "objective justice" refers to a narrative or argument that strives to reduce the involvement of the "individual component."; this is the adaptive ability that graduates need. They can know themselves, position themselves accurately, and find solutions in work more rationally and objectively.

Self-management ability

Self-management ability refers to consciously and purposefully controlling one's thoughts and behaviors according to social goals by subjective initiatives (Lee, 2017). From the aspect of influencing factors of self-management, a person's self-management ability is affected by his self-esteem level (Wynia et al., 2020). In addition, the strength of a person's self-management ability is affected by the degree of self-monitoring. (Gangestad, 2018). In psychology, the research on self-management mainly focuses on individual consciousness, involving students' self-education, self-awareness, self-monitoring, behavior and emotion regulation and control, time management, interpersonal relationship, socialization, and other aspects (Wang & Lee, 2019). Self-management ability is also an essential part of the adaptive ability, which is related to the employability of graduates.

Emotional intelligence

Emotional intelligence, usually referred to as the emotional quotient, is developed by psychologists instead of IQ. At a superficial level, improving emotional intelligence develops self-awareness, increasing understanding and expressing self. Emotional intelligence consists of five characteristics: self-awareness, emotion control, self-motivation, recognition of other people's emotions, and dealing with relationships. Goleman (1995) emphasizes that the success of socially integrating in the future depends on a person's emotional intelligence more than on cognitive intelligence (Mayer et al., 2012). coined the term "emotional intelligence" as relating to the ability of different individuals to cope with their feelings, including self-awareness of feelings, managing feelings, self-motivation, identification of feelings, and managing relationships. Thus, emotional intelligence represents the ability to understand and express feelings, implement emotions in our thoughts, understand and decide through emotions, and manage feelings about ourselves and others (Ben-Ari, 2013). Emotional intelligence is an

essential ability in both life and work.

Innovative Thinking

Innovative thinking refers to the thinking process of solving problems with novel and original methods. We can break through the boundaries of conventional thinking through this kind of thinking, think about problems with unconventional or even anti-conventional methods and perspectives, and propose distinctive solutions to produce novel, unique, and socially meaningful thinking results (Pei, 2018). Competitiveness is a comprehensive ability reflected by the competition or comparison between two or more participants. Competition and progress are the driving force for success and a sign of the progress of socialist civilization, and a person's competitive ability is a comprehensive reflection of his or her quality and ability (Li, 2018). West (2002) pointed out that it is necessary to distinguish the two concepts of "creation" and "innovation. "Creative thinking is original thinking based on imagination, genetics and talent, intelligence, and thought connection, developing into native thinking emphasizing originality, divergence, and appropriateness (Runco, 2010). Its essence is originality, and its core is divergent thinking.

Schumpeter first used "innovation" in his "Theory of Economic Development," which marked the formal emergence of "innovation" as an academic concept, and its definition of innovation emphasized the significance of economics. He believed that innovation was the first application of new technology and invention in production (Anderson et al., 2012). Innovative thinking is "new in something," but creative thinking is both "new in something" and "something out of nothing. "Runco, a professor at George University, suggests that the tipping point between creative and innovative is the balance between novelty and effectiveness (Runco, 2014).

Development Ability

Human development ability improves their ability, including primary development and advanced development ability of two levels. The primary developing ability is called the conventional developing ability, and the advanced developing ability is called the supernormal developing ability. The conventional development capacity is the capacity for self-improvement, for getting better and better, which most people have. (Sanford, 2016). Marxism holds that human development includes the development of the human body, human practice, and human spiritual activities. Human needs comprise three levels: survival, enjoyment, and development. Therefore, development needs are the highest level of human needs. "Human development needs consist of two aspects: one is the need to develop and enhance one's intelligence and ability; the other is the need to give play to and realize one's ability. Learning ability is the concentrated expression of adaptability, the foundation of innovation ability, and

guarantees knowledge for innovation activities. Therefore, development ability is an essential factor in the employability of art and design graduates and can directly affect graduates' prospects and future development in work.

Fast Learning Ability

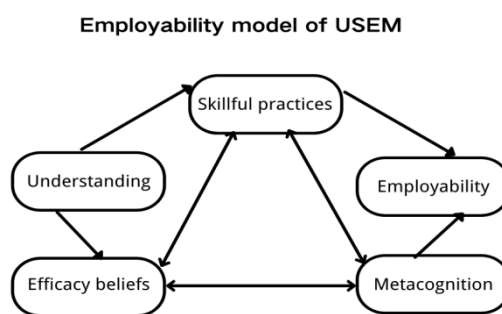
Learning ability refers to the psychological characteristics of individuals engaged in learning activities; it combines various abilities to complete learning activities, including perception and observation ability, memory ability, reading ability, and problem-solving ability. The ability to learn quickly should be treated as a core ability for non-technical positions because fast learning enables people to quickly enter a new field in business and play an essential role in the rapid transformation of personal careers. Even fast learning ability is inseparable from every aspect of daily life (Williams et al., 2019). Fast learning enables students to get into the subject as soon as possible and exercises their ability to solve practical problems after entering the job (Pei, 2018). At work, it is often necessary to cut into a new field in a short period, master the core methodology of a field, and lead the business to explore and make breakthroughs. =The ability to learn quickly. The most important points for improving fast learning ability are expanding basic knowledge, combining learning with practice, and intense action power.

Theoretical Framework I, II, and III

The first theoretical framework represented the earliest employability model in the UK in the study of employability by Knight and Yorke (2006), who constructed the USEM employability model. USEM model is composed of four aspects: Understanding, Skillful practices, Efficacy, beliefs, and Metacognition. The USEM model's central theme illustrates the interrelating variables of skills practice, efficacy beliefs, and metacognition, whereby understanding generates skillful practices and efficacy beliefs. Lastly, employability is the result of skill skills practices and metacognition.

Figure 1

Employability model of USEM

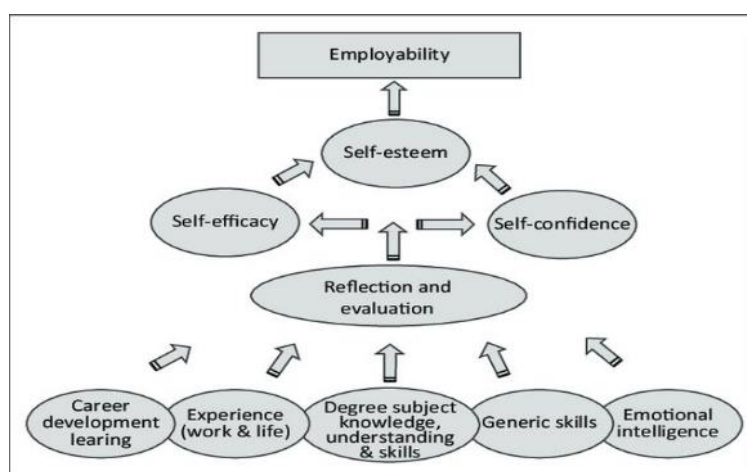


Source: Knight & Yorke,(2006)

The second theoretical framework is the Career EDGE model developed by Huang (2019). The framework was articulated with essential components of employability: career development learning, the experience of work & life, degree subject, knowledge, understanding skills, generic skills, and emotional intelligence. These essential components are the inputs of reflection and evaluation to developing and growing self-efficacy, self-confidence, and self-esteem, whereby these internal dimensions collectively determine employability.

Figure 2

Employability model of Career EDGE



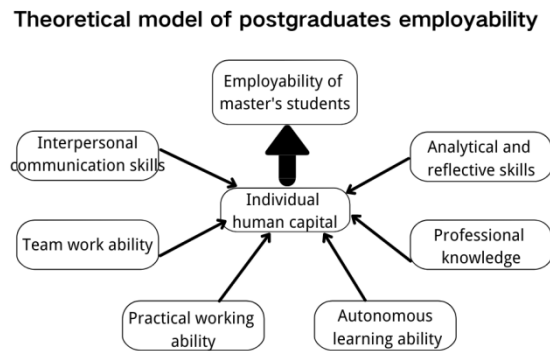
Source: Loring, (2007)

The third theoretical framework of employability of Master's students by Xu (2019) articulates the central theme of the individual human capital of analytical and reflective skills, professional knowledge, autonomous learning ability, practical working ability, teamwork

ability, and interpersonal communication skills. When an individual human capital is composed of these factors, they strengthen employability.

Figure 3

Conceptual model of postgraduates' employability



Source: Xu, (2019)

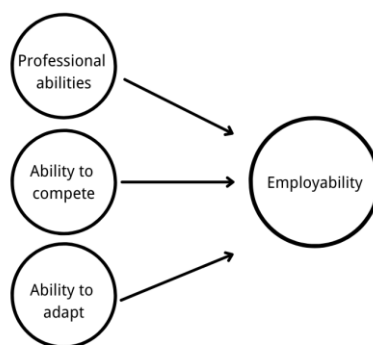
Conceptual Framework

The conceptual framework of this study is drawn from integrating literature, relevant research, and theoretical frameworks. The employability model of undergraduate students majoring in art design.

Figure 4

Employability model of Career EDGE

Employability of fine arts design undergraduates



As shown in the employability model of undergraduate students majoring in art design, employability comprises professional ability, ability to adapt, and ability to compete. Professional skills include technical knowledge, design expertise, and communication skills.

Ability-to-adapt is concerned with the ability to organize systematically, objectively evaluate, self-manage, and emotional intelligence, and lastly, ability-to-compete is concerned with developing innovative thinking, development, and fast learning. These factors affect employability.

Research Methodology

Population and Sampling

The research site is in Chengdu, the capital of China's Sichuan province. In terms of the target population, this study involved the alumni of the art and design major of ABC Art University. The sampling size comprises two groups: n=200, respondents for the questionnaire, and n=12, the key informants for the interview. According to Shewaraksakul (2016), the qualitative research through in-depth interviews should be 13 persons to ensure validity. The sampling method employed was simple random.

Research Instrument

The study employed two research instruments: 1. Structured questionnaire, and 2. Interview Questions. The first part of the questionnaire contained the basic information of the respondent: age, gender, and whether they are graduates of art and design of X University were selected for the first level. The second part of the questionnaire have 16 questions are the actual statements related to employability factors: professional competence, adaptability, and competitiveness. The questionnaire is constructed with five point Likert Scales, ranging from strongly disagree, disagree, neutral, agree, and strongly agree.

Validity and Reliability

Before distributing the questionnaire to the respondents, the researcher requested three experts to conduct the index items objective congruence (IOC), As Table 1. Content validity was tested by project-Objective Consistency Index (IOC). Three experts in the field of organization development grade the IOC. The actual data for IOC are shown below.

Table 1*No. of main variables & questions IOC*

Part	Main Variable	No. of questions	IOC Score
1	<u>Employability</u>	1-4	1.00,0.67,1.00,1.00
2	Professional ability	5-8	1.00,1.00,0.67,1.00
3	Adaptive ability	9-12	1.00,1.00,1.00,1.00
4	Ability to compete	13-16	1.00,1.00,1.00,1.00

Interview Questions

The second instrument was the interview questions. The study employed qualitative research, using the open-ended questions embedded in the structured questionnaire, aiming to gain insights into the current employment problems of art and design graduates, the challenges they encounter, and how they improve or enhance their employability. The followings are the interview questions.

Interview Question 1: What does employability mean to you for fine art and design graduates?

Interview Question 2: How do you prepare to ensure you are employable by the marketplace and organization before and after graduating from our fine art and design school?

Interview Question 3: What do you think our fine art and design school could do more or better to ensure the employability of our undergraduate students?

Interview Question 4: From your experience, what essential competencies and skills do we need to develop in our undergraduate students of fine art and design?

Data Collection

Given that the coronavirus is not yet fully controlled during the data collection period, the study employed online structured questionnaires to collect data to ensure safety, convenience, and effectiveness. The questionnaires were distributed to the relevant alumni through the Tencent WeChat questionnaire app. 200 questionnaires were sent to the relevant alumni and 200 were returned with a recovery rate of 100%. In addition, online focus-group interviews were conducted with 12 alumni.

Data Analysis

The study employed descriptive statistics and Multiple Linear Regression, and contents analysis. According to the research questions, the presentation below illustrates different datasets, data analysis treatment, and products/outputs.

Table 2

Scope of Data Analysis

Source of data	Data Analysis Treatment	Products or outputs	Research question
Questionnaire (n=200)	<ul style="list-style-type: none"> • Descriptive Statistics • Inferential Statistics (optional) 	<ul style="list-style-type: none"> • Percentage (%) • Mean (M) • Standard Deviation (S.D) • P-Value 	RQ1
Interview (n-12)	<ul style="list-style-type: none"> • Contents Analysis • Inter-coding • Triangulation 	<ul style="list-style-type: none"> • Themes of thoughts and experience 	RQ2

Results

The descriptive statistics results on all questions from the structured questionnaire are shown on Table 3.

Table 3

Descriptive Analysis

Main Variable	Question	N	Mean	SD
Professional Ability (IV)	Q1:I have professional skills that make me competent for the job	200	3.81	1.10
	Q2:I have the technical knowledge essential for my work.	200	3.67	0.899
	Q3:I communicate with people to ensure they understand my expectations.	200	3.71	0.896
	Q4:I assist my co-workers, clients, or customers to ensure they get what they look for, leveraging my design expertise.	200	3.16	1.16
Ability-to-adapt	Q5:I can organize my personal and professional life,	200	3.52	1.02

(IV)	ensuring the best use of my time and results.			
	Q6:I can evaluate objectively in my work life to make the right decision.	200	3.63	0.865
	Q7:I can self-manage my priorities.	200	3.48	0.942
	Q8:I can work under stress or when encountering work emergencies	200	3.53	0.920
Ability-to-compete (IV)	Q9:I am willing to compete to get ahead or advance my profession.	200	3.46	0.952
	Q10:I use creative thinking to complete my work.	200	3.57	0.934
	Q11:I look for ways how I can develop myself further.	200	3.41	0.888
	Q12:I am eager to learn new things although they are unknown to me.	200	3.50	0.937
Employability (DV)	Q13:Everything I learn from the school of fine arts and design prepares me for the right kind of competencies and skills, employable for the marketplace.	200	3.39	1.04
	Q14:School of fine art and design encourages me to advance myself for future employability.	200	3.37	1.04
	Q15:I make myself employable by excelling myself with the right kind of new competencies or abilities, leveraging my fine arts and design.	200	3.31	1.02
	Q16:I am competent for the	200	3.62	0.987

	present job.			
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Table 3

Collinearity Statistics

Variable	VIF	Tolerance
Professional Ability	2.22	0.450
Ability-to-adapt	2.25	0.393
Ability-to-compete	2.45	0.407

VIF<10, Tolerance >0.1

As shown Table 3 all independent variables were tested for collinearity by VIF, derived from 2.22 professional ability, 2.55 ability to adapt, and 2.45 ability to compete. When VIF is less than 5, there is no multicollinearity problem.

Table 4

MLR results

Independent variables	Unstandardized		Standardized	t	Sig	VIF
	b	SE	β			
Constant	0.8161	0.2118	-			
Professional ability	0.4420	0.792	0.4416	5.58	0.645	2.22
Ability-to-adapt	0.2044	0.844	0.2050	2.42	0.577	2.25
Ability-to-compete	0.0853	0.803	0.0883	1.06	0.540	2.45

p-value<0.01, VIF<10, Tolerance >0.1

Table 4 shows that Professional ability, ability to adapt, and ability-to-compete variables were lower than p=0.05, which supported the above hypothesis—professional ability <0.01, indicating that professional ability has the most significant impact on employability. The SE standard coefficients of professional ability, ability-to-adapt, and ability-to-compete variables were SE=0.792, SE=0.844, and SE=0.803, respectively. There is a 79.2% change in

employability for every unit increase in professional ability. Likewise, there is an 84.4% change in employability for every unit's increased ability to adapt. Finally, there is an 85.3% or 80.3% in employability for every unit's increased ability to compete.

Table 5

Summary of the hypothesis testing

	Hypothesis	SE	P-values	Results
H1	H1o: Professional ability has no significant effect on <u>employability</u> . H1a: Professional ability has a significant impact on <u>employability</u>	.4420	<.01	Rejected: H1o
H2	H2o: Ability to adapt has no significant effect on <u>employability</u> . H2a: Ability-to adapt has a significant impact on <u>employability</u> .	.2044	.016	Rejected: H2o
H3	H3o: Ability to compete ability has no significant effect on <u>employability</u> . H3a: Ability to compete ability has a significant impact on <u>employability</u> .	.0853	.0290	Rejected: H3o

Note: P-value < 0.05

Qualitative Analysis

The researcher interviewed 12 key informants online, and their answers were coded, summarized, and analyzed to find out the key informants' common answers and typical viewpoints.

Interview Question 1 What does employability mean to you for fine art and design graduates?

Table 6*Interview Question 1*

Theme	Quoted Statement	Key informant
Career Choices and Opportunities	<p><i>“A more comprehensive range of career choices, more career opportunities, better positions, and more lucrative income”</i></p> <p><i>“It is a stepping stone for me to choose the job I want to engage in to increase competitiveness and improve employment success.”</i></p>	Interviewee no.8,10 Interviewee no.11,12
Skills and Job fits	<i>“Good employability can make me fit for my job and apply my skills to practice after being hired.”</i>	Interviewee no.3,5
Quality of Life	<i>“Employability, in a sense, is the ability to obtain the quality of life and higher wages.”</i>	Interviewee no .6,9

Three themes emerged: Theme 1: Career Choices and Opportunities, Theme 2: Skills and Job fit, and Theme 3: Quality of life. According to the content analysis inter-coding, career choices and opportunities are avenues for paving roadmaps for self-accomplishment. At the same time, skills and job fits were critical factors for employability; Lastly, the quality of life was factored with employability, whereby the obtainment of quality of life is associated with higher wages, which emotionally provide a sense of security and stability in the long run.

Interview Question 2: How do you prepare to ensure you are employable by the marketplace and organization before and after graduating from our fine art and design school?

Table 7*Interview Question 2*

Theme	Quoted Statement	Key informant
Expertise and work portfolio building	<p><i>“Create a portfolio to ensure the employer understands my expertise and work.”</i></p> <p><i>“Before graduation, I will try my best to work as an intern in different companies to improve my ability and make a clear plan for my future.”</i></p>	Interviewee no. 3,5 Interviewee no.10, 12
Diversified talents and skills	<i>“With their creativity and unique style, the market and companies will need more diversified talents,</i>	Interviewee no.4,6

	<p><i>and more skills will improve the possibility of employment.”</i></p> <p><i>“Constantly improve their quality, expand their horizons, improve their communication skills and emotional intelligence.”</i></p>	Interviewee no.9,10
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According to the above description, which represents most interviewees' descriptions of how they are hired, it is ensured that the employers know their professional design knowledge, learn more technical knowledge, and have good innovation ability and development ability.

Interview Question 3: What do you think our fine art and design school could do more or better to ensure the employability of our undergraduate students?

Table 7

Interview Question 3

Theme	Quoted Statement	Key informant
In-depth Professional and Internship Program	<p><i>“More in-depth professional learning and More internship opportunities in foreign enterprises are needed.</i></p> <p><i>“Offer more professional courses.”</i></p>	Interviewee no. 1,5,7
On-campus practices	<i>Strengthen on-campus practices</i>	Interviewee no.3,4,10

The above description represents most respondents' views on school employment. They believe that schools should let students get a more in-depth study of professional knowledge and design skills, cultivate students' innovation ability, and strengthen employment practice and employment courses.

Interview Question 4: From your experience, what essential competencies and skills do we need to develop in our undergraduate students of fine art and design?

Table 8

Interview Question 4

Theme	Quoted Statement	Key informant
Technical skills	<i>“Design software operations, such as PS, AI,3D, and MAX.”</i>	Interviewee no. 8,9
Non-Technical and Generic Skills	<i>“Develop better communication skills, and express and describe works well.”</i> <i>“Improve students' comprehensive quality.”</i> <i>“Improve the cultivation of innovative thinking.”</i>	Interviewee no.1,6,12

The above statements represent what abilities and skills most respondents think art and design students need to develop. Key informants expressed that they should cultivate professional design knowledge and communication ability, improve comprehensive quality, and improve students' innovative thinking.

The quantitative and qualitative data

Table 9 shows the comparative quantitative and qualitative data results for summarization, conclusion, and recommendations for the fine art and design school.

Table 9

The comparative quantitative and qualitative data

Quantitative Data	Qualitative Data			
Variables	Meanings of employability	Preparations before graduation	Activities arranged by the school	Essential competencies and skills
Professional Ability (P<0.01,R=H1a)	<i>Theme 1</i> Career choices and Opportunities	<i>Theme 1</i> Expertise and work portfolio building	<i>Theme 1</i> In-depth Professional and Internship Program	<i>Theme 1</i> Technical skills
Ability-to-adapt (P=0.016, R=H2a)	<i>Theme 2</i> Skills and Job fits	<i>Theme 2</i> Diversified talents and skills	<i>Theme 2</i> On-campus practices	<i>Theme 2</i> Non-technical and generic skills
Ability-to-compete (P=0.0290, R=H3a)	<i>Theme 3</i> Quality of Life			

Discussion and Conclusions

Based on the quantitative data, it statistically showed that professional ability significantly affected employability, followed by ability-to-adapt and ability-to-compete variables.

The qualitative data revealed three themes for interview questions number one, and two for questions number two, three, and four. Content analysis intercoding revealed that employable art and design professionals required the undergraduates to broaden career choices and opportunities as a factor for their quality of life in the future. After graduation, the graduates must continue preparing themselves to ensure that they are employable in the marketplace and potential employers. It was also noted that building a good portfolio to attract potential employers before graduation would enhance the qualifications, namely demonstrating unique creativity and style, communication skills, and emotional intelligence essential for employability.

Furthermore, the key informants also felt that fine arts and design schools could do more by ensuring undergraduate employability, namely, providing professional learning, internships in foreign companies, on-campus practice, and professional courses. Key informants believed that undergraduate art and design students also need comprehensive training starting at the freshly, learning how to operate specific software.

Lastly, professional ability was critical for art and design undergraduates' employability. As the analyzed data indicated, professional ability and ability-to-compete variables significantly affect employability. Schools should focus on cultivating students' professional

and competitive abilities. Reforming the teaching methods to student-centered and results-oriented would create a long-term sustainable development of students and their employability.

Recommendations for Organization Development Interventions

According to the analyzed data and survey results, the followings are the proposed Organization development interventions (ODIs)

Professional Ability

Art graduates of colleges and universities have uniquely demonstrated their distinctive characteristics, unlike non-art graduates. Nevertheless, there is a need to diversify the undergraduate's professional ability and knowledge; schools should set up professional courses to improve their professional design abilities. The rapid change and uncertainty of the knowledge-based economy society make the labor market pay more attention to the ability of employees to acquire diversified skills (Wang & Lee, 2019). As a result, college students must acquire the essential skills in advanced scientific research (Becker, 2020). Strengthening a professional foundation with an emphasis on technical knowledge improves the quality of work. Therefore, sound professional knowledge requires undergraduates to cultivate how they put theory into practice and be able to articulate their ideas clearly with confidence.

Ability to Adapt

Ability to adapt whether they are going to a new job or entering society from university, college students' identity is changing; from students to workers, the ability to adapt is very important. Graduate knowledge and skills are often not used, not enough. Undergraduate students majoring in art design need a strong ability of expression and self-understanding in their works or interpersonal communication, so emotional intelligence is crucial. We can improve students' ability to express and understand through some speech, graduation, and debate activities so that students can have good interpersonal relationships, improve their ability of self-expression, and correct ways to deal with problems. Students need to control their thoughts and behaviors consciously and purposefully—time management, stress management, and emotion management.

Ability to Compete

Competitiveness plays a critical role in one's employability and is the key to promoting employability. Creative thinking is also the core ability of an art design undergraduate; the school could consider organizing a visit to art and design exhibitions to inspire and improve innovative thinking, constantly accepting and absorbing new things and new ideas to improve own works. The undergraduate students of fine art and design should clearly understand

themselves and recognize their potential while advancing their abilities at any time. It is undeniable that practice makes perfect and improves one's learning and ability.

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