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碩士論文

企管碩士畢業生有自信成為全球經理人嗎：比較台灣的全球化企管碩士班、企管碩士班與其他商業研究所碩士班學生之差異

Are MBA Graduates Ready to be Global Managers: A Comparison Among Global MBA, MBA and Business-majored Students in Taiwan

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Are MBA Graduates Ready to be Global Managers: A Comparison Among Global MBA, MBA and Business-majored Students in Taiwan

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ABSTRACT

Many people perceive that having a MBA degree is as a passport to senior managerial roles. Having a MBA degree is recognized as a ‘ticket’ not only to increase salary, enhanced career process, advanced knowledge and skills, but sometimes as a prerequisite for joining upper managerial ranks. On the other hand, Global and multinational enterprises are developing knowledge networks comprised of workers from around the world who collaborate on product or service innovations, growth and structural cost reduction. At the core of the knowledge-based multinational enterprise is the global manager who has the ability to scan the environment, sense change, understand the firm's capabilities and put measurable and profitable plans in place. Therefore, some researchers studied on whether having a MBA will provide the competencies needed for managers in organizational settings or having a MBA will enhance performances as a manager. This study focused on whether the MBA graduates in Taiwan could possess the competencies which meeting the demand of global managers by self evaluation of graduates. Furthermore, Global MBA is a MBA program with whole English and cross-cultural environment in Taiwan. This study also probed whether the GMBA graduates could have more cross-cultural flexibility. The research method was used Factor Analysis both in Exploratory and Confirmatory, MONOVA and ANOVA analysis to prove the hypotheses that MBA graduates could possess more competencies of global managers than other business majors. Based on the survey from 222 available respondents of GMBA, MBA and other business-majored graduates, the output of the study indicated the competencies they possessed by self-evaluation, and MBA graduates have more characteristics of global managers comparing with business-majored graduates. Besides, GMBA graduates have more cross-cultural flexibility than non-MBA graduates. The reference of the training of MBA education with the globalized trend was provided.

Keywords: MBA Education, Global MBA Education, Competencies of Global Managers

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NCTU, Hsinchu, September 2010

Hsuan Yeh

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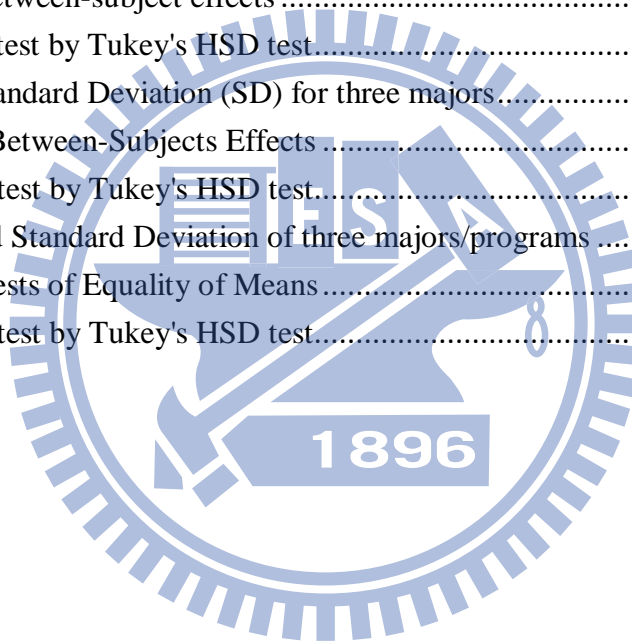
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Chapter 1 Introduction

1.1 Research Background and Motivation

1.1.1 The Background

MBA education has been developed for decades from former business theory-tended to later industry practice-tended. With the trend of globalization in business, MBA education has been improved to meet the demands of the business world. As one of the top schools of management in the world, Kellogg of Northwestern University (2001) stated that a broad and nuanced understanding of the world to succeed is needed in today's economy which is driven by increasingly complex and interdependent markets. According to the other top institute of management in the world, MBA program in Harvard Business School (2010), the inherently international experience is emphasized, and an intense period of personal and professional transformation prepares students for challenges in any functional area at anywhere in the world.

Over the last few decades, according to the World Bank, the pace of the global integration has become much faster and dramatic because of unprecedented advancements and revolutions in technology, communication, transportation and industry. Today's international organizations require global managers who understand and can respond to customers, governments and competitors alike. Large multinational enterprises are developing knowledge networks comprised of workers from around the world who collaborate on product or service innovations, growth and structural cost reduction. At the core of the knowledge-based multinational enterprise is the global manager who has the ability to scan the environment, sense change, understand the firm's capabilities and put measurable and profitable plans in place. All of the above requires a different form of human resource management and candidate selection. The market is now the world and managers within firms must have the competency to grapple with complex issues and possess the confidence to carry

out global initiatives (Stanek, 2000).

Given the relationship between management education and the business world, market forces such as globalization, technological change, and new workplace requirements may affect business education more than any other branch of academia (Friga, Bettis et al., 2003). Therefore, MBA education also needs to meet the change of globalization especially for those who prepare to be the management roles in the future. The Master of Business Administration, MBA, is a master's degree in business administration, which attracts people from a wide range of academic disciplines. Originated in the United States, MBA emerged from the late 19th century as the country industrialized and companies sought out scientific approaches to management (Baruch and Leeming, 2001). The core courses in the MBA program are designed to introduce students to various disciplines of business and management such as accounting, marketing, human resources, operations management, etc. The goals of MBA programs are to prepare their graduates for managerial roles; to help them gain a better understanding of the industrial and business world and its needs, to enrich their skills and to provide them with competencies and capabilities relevant to their careers (Baruch and Leeming, 2001). Therefore, holding a MBA degree is usually perceived as a passport into managerial roles.

In Taiwan, MBA attracts people from different undergraduate majors and the acceptance rate is low. The acceptance rate of MBA programs in 2007 were under 10% based on the report of Common Wealth Magazine (Wang, 2007). Moreover, the acceptance rate of departments/institutes of Business Administration and Business and Management in 2008 were under 4% in average.

Starting from 2005, Ministry of Education (MOE) encourages national universities to establish and assess professional business and management schools. The aims are to meet the demand of the development of professional business and management education domestically in the future; to improve professional capacity, expertise identification, professional ethics

and the ability of self-control of students with practical training; to combine the internship and practical teaching; and to improve the identification of professional knowledge and study experience internationally for the connection with the world. These programs, called Global MBA (GMBA) or international MBA (IMBA), offer the degree of Master of Business Administration. These programs focus on developing the global points of view for students and enforcing not only professional knowledge with intern systems and empirical study but also the international-qualified abilities to increasing the competitiveness in the global business. Through these programs, MOE not only expects to attract international students studying in Taiwan but also expects to develop students' ability to foreign language and global viewpoints. Compared with traditional MBA program, GMBA/IMBA could offer students a cross-cultural environment with international students worldwide and offers a fully accredited Masters of Business Administration degree teaching completely in English. Comparing with traditional MBA program in Taiwan, half of the GMBA/IMBA students and faculty are local Taiwan citizens and the other half are from diverse nationalities, representing a diverse mixture of people. Besides, unlike traditional MBA program in Taiwan, the admission requirement includes at least two or three years of working experiences, which makes GMBA/IMBA program much more practical because students can share their working experiences in class and combine what they learn with what they did. To sum up, GMBA/IMBA adds different values against Taiwan's traditional MBA programs.

1.1.2 Statement of The Problem and The Research Motivation

Because of the globalization of businesses, the demand of global managers is increasing. And MBA education should meet the demand of this trend as well. As Friga, Bettis et al. (2003) mentioned, business education must be affected by the trend of globalization. Ball and McCulloh (1993) did the survey from the CEOs of the largest American multinational firms studying the importance of international business education for their employees and the international business courses they wanted the employees they hired to have studied. In

Long's (2009) study, the gap between MBA education and business demands was explored. However, the demands of global managers were not included in her study. In Mellahi's (2000) study, the teaching of leadership was focused on UK MBA programs even though it was from an international perspective. Cabrera and Bowen (2005) discussed the professional management education which MBA education provided for the global management should be revised to have a true professional discipline considered by practitioners, educators, regulators and society. Khurana et al. (2005) discussed the profession of business management in America and the professional obligations of individuals.

In Taiwan, MOE has established a new MBA program with international students and whole English courses for meeting the internationalization of MBA education. This program, called GMBA/IMBA, has differences from traditional MBA education in Taiwan especially with cross-cultural environment; would GMBA/IMBA students have additional competence against the students of traditional MBA? Cant (2004) gave the advice for internationalizing the business curriculum, but it was focused on undergraduate students. Eileen (2005) did the research about cross-cultural competencies for U.S. business leaders, but it was only focused on business not education.

The motivation of this research is to probe whether GMBA/IMBA programs in Taiwan can make students more competitive on diverse cultural adjustment and whether MBA students, comparing to other business majors, in Taiwan can meet the demands of global business as the global managers.

1.2 Research Purpose

Based on the research background and motivation, this research will discuss whether students of MBA programs in Taiwan can match the requirement of global managers who are quite demanded in global businesses and whether students in the GMBA/IMBA programs in Taiwan can have better cross-cultural adjustment.

The research purpose in this study is as the following:

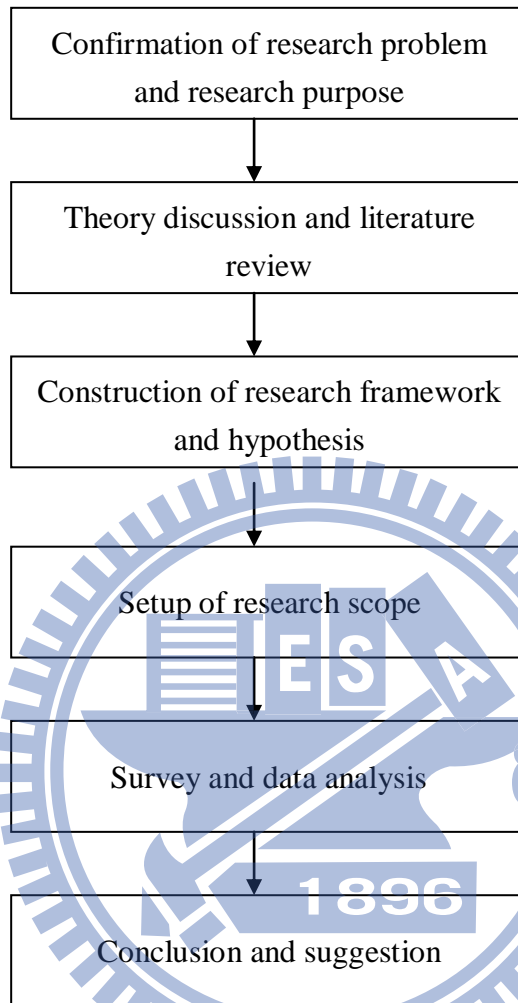
1. to discover whether the training of MBA programs meets the competencies of global managers, comparing with other business majors.

2. to discover whether the training of GMBA program makes students much more easily adapt the cross-cultural environment and customs.



1.3 Research Process

Figure 1 Research process



Chapter 2 Literature Review

2.1 MBA and GMBA/IMBA Education

2.1.1 Instruction of MBA Education

While Joseph Wharton, a prominent Philadelphia merchant, industrialist and philanthropist, established the first business school, the University of Pennsylvania's Wharton School of Commerce in 1881, it was started the professional business education in the United States (Brooks, 2006). The contemporary debate over what constitutes the appropriate balance in professional business education between theory and scholarship and practical application can be traced back to the two competing approaches of the Wharton School, focused on business theory and scholarship, and Harvard University, following an experiential model (Mintzberg, 2004). In 1900, Master's Degree in Business was first offered by the higher education institution, Dartmouth University (Friga, Bettis et al., 2003). Afterward, Harvard University established the first Master's of Business Administration, abbreviated as MBA, degree program in 1908 (Cudd and King, 1995). The growing association between academia and industry during the 1920s and 1930s caused the trend of a vocational business education model in many MBA programs (Bennis and O'Toole, 2005). However, the employers in the 1940s began to complain that the MBA curriculum was unable to catch up with rapid changes of business needs (Mintzberg, 2004). Because of the criticism from industry, the Mellon Foundation gave the Carnegie Institute of Technology, which would become Carnegie Mellon University, a huge endowment for a new business school to engage leading business minds in research to improve U.S. management capabilities (Mintzberg, 2004). After many years improvement, business schools modified their curricula by adding courses in organizational behavior, team building, and an entrepreneurial focus, although the overall curriculum's structure did not change substantially (Friga, Bettis et al., 2003). In 1988, the report of Porter and McKibbin (1988), as the watershed, was intended to provide information to business schools to meet the needs of diverse constituents in the 21st century (Porter and McKibbin,

1988). The study made several advices on professional business education such as a more integrated curriculum, improved relevance in faculty research agenda, an increased focus on soft skills like communication, interpersonal skills and ethics. This study participants, which involved over 60 academic institutions and 50 companies, made specific recommendations, a greater emphasis on international business issues and information technology as well as increased coverage of behaviorally oriented subject matter, for the core MBA curriculum (Porter and McKibbin, 1988). Besides, a greater collaboration between industry and academia on learning alliances and other partnerships was suggested as well (Muller and Porter, 1997). As Brooks (2006) stated: “The Porter and McKibbin’s (1988) study was the most recent comprehensive report on professional business education in the United States, and has continued to influence contemporary research on the MBA curriculum.” (p.22)

MBA degree nowadays is popular around the world. According to the statistics of the AACSB’s report in 2010, enrollment of MBA degree is higher than other business majors (see Table 1) (AACSB, 2010).

Table 1 MBA and specialized master’s degree enrollment and percentages (2008-2009)

MBA Degree Enrollment and Percentages (2008–2009)

| Program Level | U.S. | Percent | International | Percent |
|------------------------------------|-------------|----------------|----------------------|----------------|
| Total Enrollment | 151,215 | 62.9 | 89,200 | 37.1 |
| Number of schools reporting | 434 | - | 138 | - |

Specialized Master’s Degree Enrollment and Percentages (2008–2009)

| Program Level | U.S. | Percent | Internati onal | Percent |
|------------------------------------|-------------|----------------|---------------------------|----------------|
| Total Enrollment | 39,250 | 39.7 | 59,670 | 60.3 |
| Number of schools reporting | 281 | - | 105 | - |

Source: AACSB International (AACSB, 2010)

2.1.2 The Association to Advance Collegiate Schools of Business

The Association to Advance Collegiate Schools of Business, which is known as AACSB, was founded in 1916. The standards for business administration were first set in 1919. It is the oldest accrediting agency of business degree programs. The accreditation process is a voluntary review of educational institutions and their programs. The association regularly reviews accreditation standards for opportunities to improve their relevance and currency. It is a non-for-profit corporation of educational institutions, corporations and other organizations devoted to the promotion and improvement of higher education in business administration and accounting (AACSB, 2006). The AACSB, with membership represented in more than 70 countries (AACSB, 2010), plays a significant thought leadership role in the field of business and management education. The AACSB sponsored many programs and conferences with business schools, corporations and other stakeholders to explore the issues facing industry and society (AACSB, 2006); and the findings from those forums identified many issues such as the transition to a service and information economy, the impact of technology, international issues, entrepreneurial issues, diversity, societal values, and the accelerating pace of world change (Porter and McKibbin, 1988). The AACSB plays an important role in the strategic planning in business schools, as the issues of curriculum content and business school alliances within the context of accreditation must concerned the educational institutions (Bailey and Dangerfield, 2000; AACSB, 2002). The AACSB recently put more focus on skill development in its accreditation standards as a complement to its traditional emphasis on knowledge, and this change represented the growing importance to employers and employees of the capacity to measure skill capability for career success (Ryan, 1999). Besides, the AACSB reinforced its standards on teaching diversity, awareness of ethical and global issues, and team development (Ryan, 1999; Fugate and Jefferson, 2001). Furthermore, the AACSB recommended that its

member business schools organize new alliances with industry partners and other educational institutions to have the competitiveness with global business schools and non-traditional sources such as online programs, corporate universities and in-house training (AACSB, 2002).

Business schools, suggested by the AACSB, should create more innovative and flexible programs by breaking the boundaries between educational disciplines and seeking action learning and new technology-based pedagogies in management education (AACSB, 2002).

In Taiwan, there are 27 schools as the member of AACSB, and these are included five schools, Fu Jen Catholic University, National Chengchi University, National Chiao Tung University, National Sun Yat-sen University and National Taiwan University, having the accreditation of AACSB (AACSB, 2010).

2.1.3 MBA Education in Taiwan

Management education was established in Taiwan first by National Chengchi University (NCCU) in 1927. NCCU cooperated with University of Michigan in 1963 building the undergraduate schools and establishing graduate schools after two years. The main curriculum was based on the experience in America and modified by the domestic environment (Long, 2009). National Chiao Tung University originally established in Shanghai in 1896, and the University was moved to Taiwan by former Chiao Tung University faculty and alumni in 1958, established Institute of Management Science in 1970, with the objective of training management experts to meet both academic and practical needs. After the development for decades, the MBA degree in Taiwan is popular and has low acceptance. Taking the acceptance rate in 2008 for example, most of graduate schools have the rate below 5% in average as Table 2.

In Taiwan, the curriculums of MBA education in each school are alike. Some will require the prerequisite courses such as the following courses in National Chiao Tung University: Economics, Accounting, Statistics, Introduction to Management, and Introduction to

Computer / Information Science (Institute of Business and Management, 2007) or the

following courses in National Taiwan University: Economics or related courses, Accounting

Table 2 The acceptance rate of each graduate school in the departments/institutes of Business Administration and Management in 2008

| <i>University Name</i> | <i>Department & Institute/Group</i> | <i>Number of Candidates</i> | <i>2008</i> | |
|---------------------------------|--|-----------------------------|----------------------------|------------------------|
| | | | <i>Number of Admission</i> | <i>Acceptance Rate</i> |
| National Central University | Department of Business Administration | 1550 | 53 | 3.42 |
| Yuan Ze University | Department of Business Administration | 898 | 14 | 1.56 |
| National Sun Yat-sen University | Department of Business Management, Group 1 | 882 | 15 | 1.70 |
| National Taiwan University | Department of Business Administration, Group 1 | 864 | 19 | 2.20 |
| Tamkang University | Department of Business Administration | 854 | 14 | 1.64 |
| National Cheng-Kung University | Department of Business Administration, Group 2 | 807 | 13 | 1.61 |
| National Taipei University | Department of Business Administration, Group 1 | 794 | 40 | 5.04 |
| National Chung Hsing University | Department of Business Administration | 765 | 24 | 3.14 |
| Fu Jen Catholic University | Department of Business Administration, Group 1 | 756 | 13 | 1.72 |
| National Chung Cheng University | Department of Business Administration, Group 1 | 682 | 9 | 1.32 |
| Tunghai University | Department of Business Administration | 549 | 30 | 5.46 |
| National Chengchi University | Department of Business Administration, Group 3 | 525 | 20 | 3.81 |
| Soochow University | Department of Business Administration, Group A | 504 | 19 | 2.35 |

Table 2 The acceptance rate of each graduate school in the departments/institutes of Business Administration and Management in 2008 (Continue)

| <i>University Name</i> | <i>Department & Institute/Group</i> | <i>Number of Candidates</i> | <i>2008</i> | |
|--|--|-----------------------------|----------------------------|------------------------|
| | | | <i>Number of Admission</i> | <i>Acceptance Rate</i> |
| National Taipei University of Technology | Institute of Commerce Automation and Management, Group 1 | 431 | 16 | 3.71 |
| National Cheng Kung University | Department of Business Administration, Group 3 | 431 | 12 | 2.78 |
| National Chiao-Tung University | Institute of Business and Management | 788 | 32 | 4.06 |

Source: Website of Taso Knowledge Bank (TKB, 2008).

2.1.4 GMBA/IMBA Program in Taiwan

Ministry of Education (MOE) has established a new MBA program for meeting the internationalization of MBA education. This kind of program, called Global MBA (GMBA) or International MBA (IMBA), has cross-cultural environment because of the compound of not only Taiwanese students but also international ones, from five continents, and has whole courses in English. This is, in common, a two-year and full-time program, including a requirement of a summer internship, is exclusively designed for students who are interested in a career change or enhancing their professionals. The GMBA/IMBA program is to provide a solid practical foundation on three dimensions: Entrepreneurship, Innovation, and Real-World Practices. The core courses are included as master thesis, managerial economics, managerial accounting, information management, marketing management, organizational behavior, financial management, business statistics, globalization seminar, global supply chain management, entrepreneurship and venture capital, etc. The elective courses are similar with MBA programs. Besides, in this kind of program, the at-least two-year working experience is

required (GMBA, 2005; GMBA, 2009). For comparing the difference between GMBA/IMBA and MBA programs in Taiwan, two kinds of programs in National Chiao Tung University is taken for example as Table 3. The main differences between these two programs are the pre-requisitions of economics, accounting and statistics or related courses in MBA, the higher credit requirement in GMBA, internship requirement in GMBA, diverse nationalities of students in GMBA, 2-year working experience needed in GMBA, and the whole courses in English in GMBA (Institute of Business and Management, 2007; GMBA, 2009).

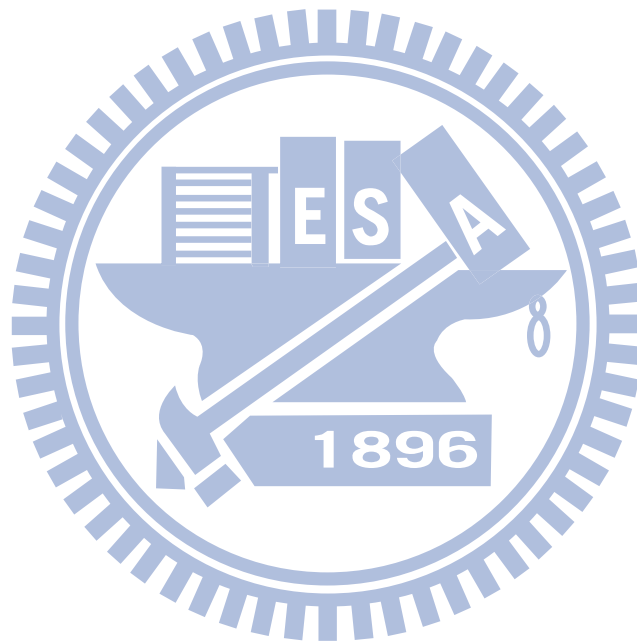


Table 3 The comparison of MBA program and GMBA program in NCTU

| | MBA program in NCTU | GMBA program in NCTU |
|--------------------------------|--|---|
| Study style | Full time/ part time | Full time |
| Study period | Full time: 1~4 years | 1.5~2 years |
| limitation | Part time: 1~5 years | |
| Pre-requisites | Economics Accounting Statistics | N/A |
| Thesis | Needed | Needed |
| Credit for graduation | 42 | 54 |
| Internship overseas | N/A | Needed |
| Nationality of students | Taiwan | Bolivia, Guatemala, Mongolia, Mexico, South Africa, South Korea, Taiwan, Thailand, Ukraine, USA, Vietnam |
| Working experience | N/A | At least 2 years |
| Language in class | Chinese | English |
| Required course | <ul style="list-style-type: none"> ● Financial management ● Strategic management ● Human resource management ● Marketing management ● Information management ● Operations management ● Seminar on business and management ● Lectures on business | <ul style="list-style-type: none"> ● Financial Management ● Global Technology Strategy ● Organizational Behavior ● Marketing management ● Information Management ● Business Statistics ● Financial Accounting ● Managerial Economics ● Global Supply Chain Management ● Entrepreneurship and Venture Capital ● Globalization seminar |

Source: website of Institute of Business and Management of National Chiao Tung University and website of Global MBA of National Chiao Tung University (Institute of Business and Management, 2007; GMBA, 2009)

2.2 The Demand of Global Managers

Today, organizations are on the increase challenged to coordinate business on a worldwide scale, integrating activities that take place in different countries (Galbraith, 2000). As one of American multinational CEOs, Edwin Artzt, Procter & Gamble's president, stated, every business essentially in the U.S. was touched in some way by global competition (Gamble, 1990). “Globalization-whether at the level of the industry, business, or individual leader-is all about overcoming national differences and embracing the best practices from around the world” (Morrison, 2000).

To this purpose, organizations need global managers who have the ability to organize functional domains on a global scale (Galbraith, 2000). Global managers need to understand the worldwide business environment from a global perspective, finding a balance between the demands of both global integration and national responsiveness (Bartlett and Ghoshal, 1992; Pucik and Saba, 1998). In the study of Gregersen et al. (1998), it stated that most companies lack an adequate number of globally competent executives. Based on the result of their three-year study with 130 executives in fifty firms across Europe, North America and Asia, they found that almost all companies assert that they need more global leaders with higher level and quality.

2.2.1 The Definition of Global Managers

Leaders today are no longer live in their own countries or work for their own countries. With the development of global market to the transnational businesses, leaders in these multinational businesses need to have connection with the world. By Cohen's (2008) definition, global managers refer to leaders who work either outside their country of origin or with others from outside their country of origin needs to demonstrate an effective blend of global competencies. These leaders have to manage multinational teams and have customers

from all over the globe.

Percy Barnevik, former CEO of Asea Brown Boveri, who defined global managers as managers that have exceptionally open minds (Taylor, 1991). They respect how things are different and can imagine why these things are different. Global managers are "incisive" as well as generous and patient (Bartlett and Ghoshal, 1995).

Other research studies have defined global managers as "global brains". Actually, global managers have the capacity to realize world trends as they affect business, governments, and standards of competition. They understand their own roots; they are sensitive to global issues and cultures, and they are adaptable to new things (Brake et al., 1995).

2.2.2 The Definition of Competency

The explanation from American Heritage (2000) identified the term *competency* as a specific range of skill, knowledge or ability. In Pritchard's (1999) study, *competencies* were described as the knowledge, skills, abilities, personal characteristics and other person-based factors that help distinguish outstanding performance from average performance. In Stephenson's (2007) study, *competency* was the capacity to function in a particular manner by being adequately or well qualified with a specific range of skills or knowledge.

2.2.3 The Competencies of Global Managers

There is increasing evidence that large scale globalization is rendering traditional ways of doing business largely irrelevant. It is a growing need for managers to become global managers with a global perspective. For a company to become more global, its leaders must develop competencies that go beyond what is familiar in the home country (Yamaguchi, 1998). In Staneck's (2000) study, it stated: "the market is now the world and managers within firms must have the competency to grapple with complex issues and possess the confidence to carry out global initiatives." (p.232) Kendia and Mukherji (1999) suggest that a global perspective

consists of a global mindset supported by appropriate skills and knowledge.

Mainly, there are two different approaches of the competencies of leaders who effectively direct operations that span a world of diverse cultures, capabilities, and customers (Morrison, 2000). The first approach is company-specific competency models. Morrison (2000) stated that the multinational companies as diverse as IBM, AIG, Citibank, Black & Decker and Deloitte & Touche have identified company-specific leadership attributes that apply around the world by their long-term human resource management teams. However, there are two problems: (1) the number of competencies indentified. For example, Chase Manhattan Bank tracked almost 250 competencies while IBM's leadership model contains eleven; (2) the identification of characteristic that are not mutually exclusive and competencies that can be assigned to multiple characteristics. The employees had poor acceptance of some leadership models because of the complex combination and internal inconsistency. Besides, Morrison (2000) also mentioned that some senior managers, with political pressure, would influence the content of company-specific models and have an interest in defending and perpetuating their own leadership approaches. Therefore, the second approach, academic global leadership competency models, will be mainly discussed as the following.

Moran and Riesenberger (1994) surveyed 49 senior U.S. managers who were business school's international advisory committee. They identified 12 different competencies, associated with implementing global strategies, which were organized around four characteristics: attitudes, leadership, interaction, and cultural understanding. The three global leadership competencies included the ability to (1) facilitate organizational change, (2) create learning systems, and (3) motivate employees to excellence (Morrison, 2000).

Rhinesmith (1996) structured the competencies of global leaders into three main responsibilities: (1) strategy and structure, (2) corporate culture, and (3) people. There were two characteristics, knowledgeable and analytical, two skills, manage both in complexity and

competition, two actions, drive and balance, and two mindsets, embrace both a global picture and a balanced picture, within the responsibilities of strategy and structure.

Brake (1997) developed the “global leadership triad,” a model of global leadership. The primary characteristics are: (1) relationship management, which has five components of change agency, community building, conflict management and negotiation, cross-country communication and influencing; (2) business acumen, which includes competencies of depth of field (an ability to switch perspective from global to local), entrepreneurial spirit, professional expertise, stakeholder orientation and total organizational astuteness; (3) personal effectiveness, which includes accountability, curiosity and learning, improvisation, maturity and thinking agility.

In Black and Gregersen’s (1998) research, global managers must have: (1) unbridled inquisitiveness; (2) personal character, emotional connection and integrity; (3) duality, capacity for managing uncertainty and unique ability to balance tensions. The attribute pertaining to inquisitiveness is one of the striking differences between managers with national characteristic and global managers. In their study, leaders have intelligence but are not all necessarily inquisitive. Inquisitiveness supports behavior or values that include adventure, curiosity, and open-mindedness. The emotional connection is a function with three steps. Having a sincere interest in and concern for others is the first process. Second, do an effort to really listen to people. Having an understanding of different viewpoints is the final one. Integrity is described in terms of ethical behavior and loyalty to the company’s values and policy. In their study, global managers were most effective when they consistently maintained the highest ethical standards in personal and company matters. A successfully global manager has a capacity for managing in changing conditions. Besides, global managers must balance various tensions while they encounter the pressures for both globalization and localization. Finally, global managers need to be more savvy in both business and organizationally. Global business savvy makes managers to explore worldwide market opportunities and global

organizational savvy makes managers have intimate knowledge of their firms' capabilities and their ability to assemble resources to apprehend market opportunities.

In Black and Gregersen's (1999) research, global managers must have the following competencies: (1) drive to communicate (extroverted): A good global managers do not give up having conversation with people while the situation is embarrassed; (2) broad-based sociability: A successful global managers establish social network with local residents no matter shopkeepers or government officials; (3) cultural flexibility: A good global manager is willing to experiment with different customs and being open to local market trends; (4) cosmopolitan orientation: A good manager respects diverse viewpoints and understand that different cultural norms have value and meaning to those who practice them; and (5) collaborative negotiation style: a good global managers can understand that different cultures can hold basically different expectations of the conduct of negotiation and try to find best solution for both side.

According to Adler and Bartholomew (1992), global managers need to know the worldwide business environment from a global perspective, finding a balance between the simultaneous demands of global integration and national responsiveness (Bartlett and Ghoshal, 1992; Pucik and Saba, 1998). Adler and Bartholomew (1992) suggest that global managers must learn about many foreign cultures' perspectives, tastes, trends, technologies, and approaches to conducting business. Global managers need to be skillful at working with people from many cultures simultaneously. In terms of cross-cultural skills, global managers are expected to tread smoothly and expertly within and between cultures and countries on a daily basis, whereas expatriate mangers focus on becoming an expert on one specific culture. Global managers are expected to overcome an ethnocentric mindset and develop an openness to and understanding of other perspectives, selectively incorporating foreign values and practices into the global operations (Adler and Bartholomew, 1992).

In Sheridan's (2005) research, intercultural competency is concerned as the critical need

for global managers. The International Labor Organization in U.S. (2004) found that 70% of global business ventures worldwide failed due to intercultural differences. Therefore, Sheridan developed the 7 “C’s” of the cross-cultural adjustment (intercultural leadership competence): (1) capability: intercultural savvy team members; (2) care: concern beyond bottom line; (3) connection: engaged connection with diverse cultures; (4) conscientiousness: self-awareness of own culture background and bias; (5) context: situational perspective with no judgment; (6) contrasts: cultural differences in leading and motivating followers; (7) cultural immersion: lived experience in other cultures.

In the study of Cohen (2008), five characteristics of global managers were concerned: (1) global business acumen, which includes the ability to comprehend the business environment in its totality, entrepreneurial skills, financial skills, profit and customer awareness and domain, industry and business knowledge; (2) leadership characteristics, which includes mental and emotional behaviors, self-assurance, energy, enthusiasm, being learning-focused, displaying empathy, common set of core values, integrity, excellence, respect, perseverance and ability to remain authentic; (3) world view, which includes global environment awareness, cultural adaptation, social, political and economic trends, other factors influenced world view responses such as experience with foreign countries, organization size, etc.; (4) people leadership, which includes communication skills, ability to motivate and inspire people, human resource skills, networking and development; (5) business leadership, which includes strategic decision-making, efficient resource allocation, effective time management, problem-solving ability, ease in managing complexities and ability to stay flexible.

From the early academic researches until now, there are some similar competencies of global managers in each study. To sum up, according to Cohen’s (2008) study, the combination of each academic approach is as the following in Table 4:

Table 4 Combination of the competencies from different research

| <i>The main competencies</i> | <i>Detail</i> |
|-----------------------------------|--|
| Global business acumen | <ol style="list-style-type: none"> 1. ability to comprehend the business environment in its totality: <ol style="list-style-type: none"> 1.1 entrepreneurial skills 1.2 financial skills 1.3 profit and customer awareness (stakeholder orientation) 1.4 domain, industry and business knowledge 1.5 depth of field (ability to switch perspective from global to local) 1.6 professional expertise |
| Leadership characteristics | <ol style="list-style-type: none"> 1. mental and emotional behaviors <ol style="list-style-type: none"> 1. self-assurance (self awareness) 2. being learning-focused (desire to learning) 3. extraverted 4. inquisitiveness (curiosity) 5. emotional connection (cosmopolitan orientation) (displaying empathy) (seek to understand others) 2. common set of core values <ol style="list-style-type: none"> 1. Integrity (accountability) (ability to remain authentic) 2. perseverance 3. enjoy differences |
| World view | <ol style="list-style-type: none"> 1. global environment awareness 2. cultural adaptation (cultural flexibility) (cross-cultural competence) 3. social, political and economic trends 4. experience in foreign countries (culture) |
| People leadership | <ol style="list-style-type: none"> 1. communication skills (cross-country communication) 2. ability to motivate and inspire people (influencing) 3. human resource skills 4. networking (community building) (broad-based sociability) 5. unique ability to balance tensions |
| Business leadership | <ol style="list-style-type: none"> 1. strategic decision-making 2. efficient resource allocation 3. effective time management 4. problem-solving ability 5. ease in managing complexities (managing uncertainty) 6. ability to stay flexible 7. collaborative negotiation style (conflict management & negotiation) |

2.3 MBA Education for Global Managers

Many people perceive that having a MBA degree is as a passport to senior managerial roles (Lucker, Bowers et al., 1989; Carnall, 1992; Baruch and Peiperl, 2000). Prospective students are typically considered acquiring managerial competencies quickly and efficiently and improving career prospects (Baruch and Peiperl, 2000). Carnall (1992) indicated that having a MBA degree is recognized as a 'ticket' not only to increase salary, enhanced career process, advanced knowledge and skills, but sometimes as a prerequisite for joining upper managerial ranks. Therefore, some researchers studied on whether having a MBA will provide the competencies needed for managers in organizational settings or having a MBA will enhance performances as a manager (Baruch and Peiperl, 2000; Baruch and Leeming, 2001).

In the previous part, the competencies of global managers are concluded and summarized into five characteristics. The first one is the competency of global business acumen, which is the ability to comprehend the business environment in its totality. Rhinesmith (1996) suggested that global managers need to have both knowledgeable and analytical characteristics, and the mindsets to embrace both a global picture and a balanced picture as what Brake (1997) stated in the part of business acumen, which mentioned about the ability to switch perspective from global to local as the depth of field. Brake (1997) also suggested global managers should have entrepreneurial spirit, professional expertise, stakeholder orientation as well as Cohen (2008) referred to profit and customer awareness, and total organizational astuteness. Cohen (2008) considered global managers should have domain, industry and business knowledge, and financial skills are requested. To sum up, a MBA graduate is assumed to have the competencies of global business acumen. Therefore, the hypothesis is proposed as the following:

H1: MBA students have more global business acumen than non-MBA students.

The second is the competency of leadership characteristics, which includes the mental and emotional behaviors and the common set of core values. Moran and Riesenberger (1994) stated that global managers should have the attitudes of facilitating organizational change, and creating learning systems. In Brake's (1997) study, personal effectiveness is important for global managers, such as accountability, curiosity and learning, and improvisation. Black and Gregersen (1998) suggested that the unbridled inquisitiveness was important as well as personal characters as integrity and emotional connection, which was the same as the characters of cosmopolitan orientation in their later study. Black and Gregersen (1999) pointed out the drive to communicate, the same as extroverted attitude, was important for global managers. Cohen (2008) emphasized on mental and emotional behaviors, self-assurance, and so on. To sum up, a MBA graduate is assumed to have the competencies of leadership characteristics after the training of MBA programs. Therefore, the hypothesis is proposed as the following:

H2: MBA students have more leadership characteristics than non-MBA students.

The third is the competency of world view, which is the global perspective. According to Moran and Riesenberger (1994), cultural understanding was one of the important characteristics of global managers. Brake (1997) also mentioned about cross-country communication in the part of relationship management. Black and Gregersen (1999) suggested that cultural flexibility was one of keys to become a global manager. Cohen (2008), furthermore, composed the characteristic of world view with not only cultural adaptation but also experiences with foreign countries, global environment awareness and world trends. To sum up, a MBA is assumed to have the competencies of world view after the training of MBA programs. Therefore, the hypothesis is proposed as the following:

H3-1: MBA students have more world view than non-MBA students.

Furthermore, GMBA/IMBA students differ from MBA students with cross-cultural environment, internship training, whole English courses and diverse nationalities of students. Therefore, the hypothesis is proposed as the following:

H3-2: GMBA/IMBA students have more cross-cultural adjustment than non-GMBA students.

The fourth is the competency of people leadership skills, which is the competency to work with people. In Rhinesmith's (1996) study, the action of drive and balance was mentioned. Brake (1997) suggested the relationship management included community building, cross-country communication, and influencing, which was the same as the ability to motivate and inspire people in Cohen's (2008) study. Black and Gregersen (1998) mentioned the unique ability to balance tensions in the part of Duality. To sum up, a MBA is assumed to have the competencies of people leadership after the training of MBA programs. Therefore, the hypothesis is proposed as the following:

H4: MBA students have more people leadership skills than non-MBA students.

The final one is the competency of business leadership skills, which is the competency to work within the organization. Rhinesmith (1996) mentioned about the corporate culture. Brake (1997) suggested the conflict management and negotiation, which was similar with the collaborative negotiation style in Black and Gregersen's (1999) study. Black and Gregersen (1998) mentioned the capacity for managing uncertainty as well as the ease in managing complexities in Cohen's (2008) study. Besides, Cohen (2008) also suggested several characteristics such as strategic decision-making, efficient resource allocation, and so on. To sum up, a MBA graduate is assumed to have the competencies of business leadership after the training of MBA programs. Therefore, the hypothesis is proposed as the following:

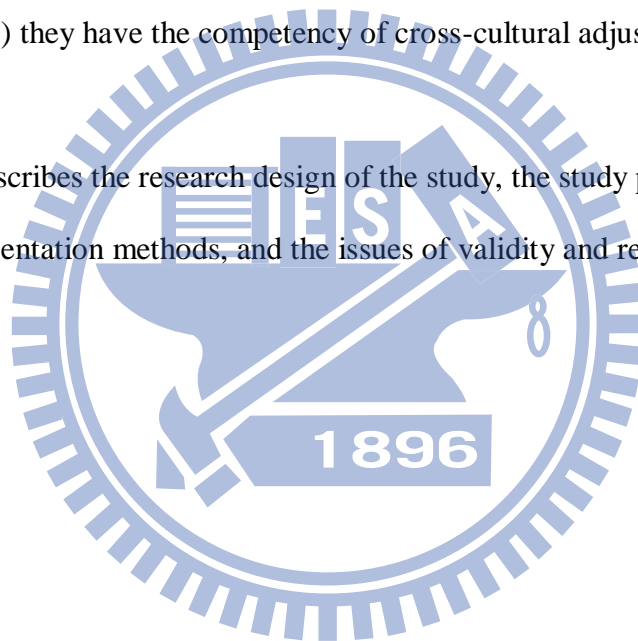
H5: MBA students have more business leadership skills than non-MBA students.

Chapter 3 Research Methodology

3.1 Introduction

The purpose of this quantitative study is to identify that a sample of MBA students, a sample of GMBA/IMBA students, and a sample of other business-majored students considered as: (1) they have the competency of global business acumen as a global manager; (2) they have the competency of leadership characteristics as a global manager; (3) they have the competency of world view as a global manager; (4) they have the competency of personal leadership as a global manager; (5) they have the competency of business leadership as a global manager; (6) they have the competency of cross-cultural adjustment as a global manager.

This chapter describes the research design of the study, the study participants, the data collection and presentation methods, and the issues of validity and reliability in the study.



3.2 Research Design

This quantitative research is to collect quantitative data, which makes the researcher determine the relationship between different majors and the competencies of global managers and the statistical difference among three majors, which are MBA students, GMBA/IMBA students, and other business majors as the independent variables. According to the framework of research, there are five characteristics of the competencies of global managers: global business acumen, leadership characteristics, world view, personal leadership, and business leadership. Among each characteristic, there are correlated competencies such as the entrepreneurial skills and the financial skills for the global business acumen, and the resource allocation and problem-solving ability for the business leadership, etc. as the dependent variables in a population. This research employs the questionnaire which developed by the researcher and it is a quantitative method of research. Quantitative research methods are considered acceptable when the researcher is attempting to identify relationships or specific factors that affects situational outcomes (Creswell, 2003). The results are analyzed using accepted statistical procedure to compare the results.

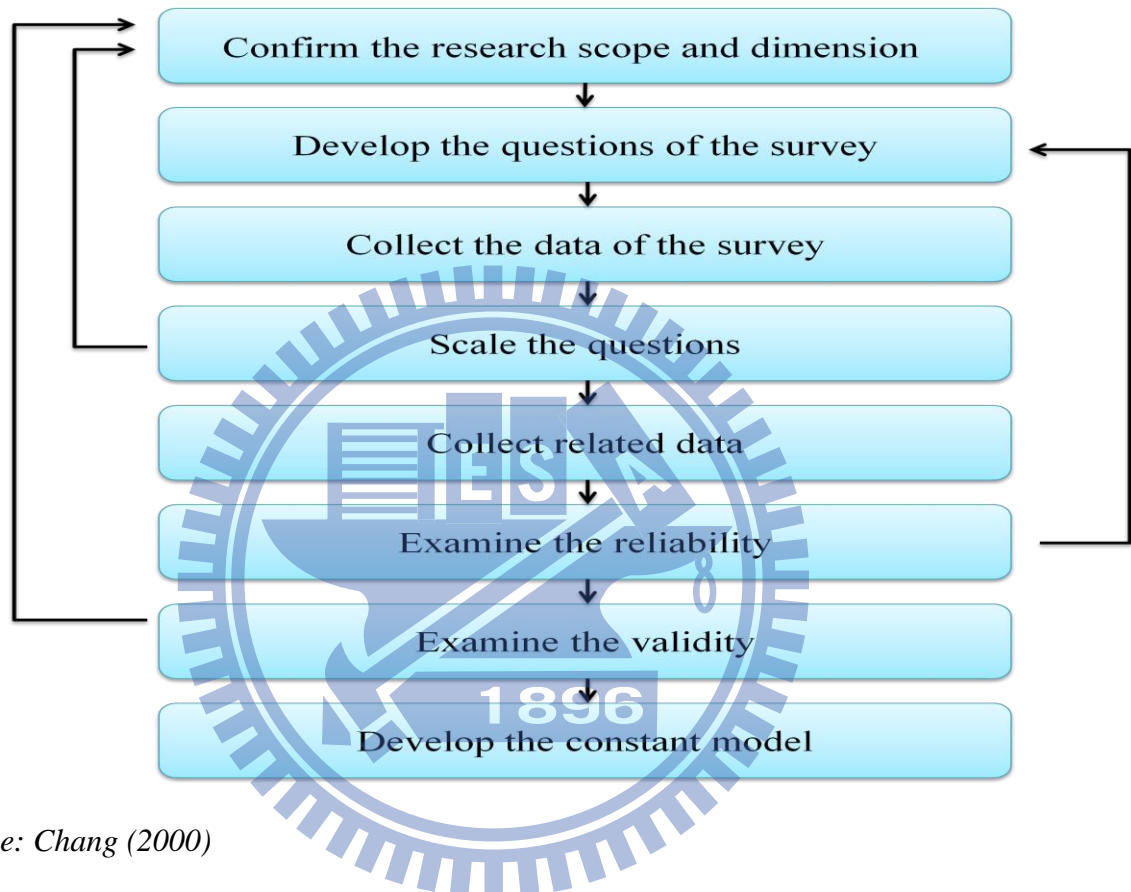
3.2.1 Sampling Design

The main subjects of this research are MBA students and GMBA/IMBA students in Taiwan, and other business-majored students as the comparison. In Taiwan, however, there are 105 universities in Taiwan so far (Ministry of Education, 2010). Therefore, business departments of seven universities (see Appendix 1) were chosen to send the e-mail with the link of the online survey based on their membership or the accreditation of AACSB, and also based on their academic reputation in Taiwan. Besides, all of these schools have established Global MBA or International MBA in their business departments. There are totally forty-seven graduate schools were chosen.

3.2.2 Questionnaire Design

The questionnaire is used for research analysis in this study. The developing procedure of the questionnaire is referred to the research method which Chang (2002) suggested as the following (see figure 2):

Figure 2 The procedure of developing the survey



Source: Chang (2000)

According to Chang (1997), the research scope and dimension could be confirmed by the literature review. In this research, therefore, it is concluded the related studies and used Cohen's (2008) study as the base to construct the proper variables and research dimensions. The survey questions could be developed by the literature review, empirical study, and group-focused interview (Chang, 1997). Thus, the related studies were referred and developed the questionnaire according to the literature review. Besides, Chang (1997) mentioned that the reliability could be examined by Cronbach's α value; or the confirmation of dimensions and deletion of questions could be examined by the factor analysis. After collecting the data,

therefore, the quality of the survey is improved by deleting or modifying the questions through the analysis of reliability and validity. In this study, after examining the reliability and validity, the quality of the survey is proved without deleting or modifying any question.

Because the participants are from Taiwan and international countries, the survey question is created both in English and Chinese and list side by side. There are two parts of the survey. The first part is the questions designed by the different variables. Each question is developed by clear and easily-understood words for respondents. There are totally thirty questions in the first parts, which including five characteristics of competencies: global business acumen, leadership characteristics, world view, personal leadership, and business leadership, according to Cohen's (2008) construct of the competencies of global managers. (See detail in Table 5).

Table 5 Related studies and corresponded variables in questionnaire

| <i>Author</i> | <i>Year</i> | <i>Statement of competencies of global managers</i> | <i>Variables/factors in Questionnaire</i> |
|------------------------|-------------|--|--|
| Moran and Riesenberger | 1994 | <ol style="list-style-type: none"> 1. Attitudes <ul style="list-style-type: none"> -facilitate organizational change -create learning systems -motivate employees to excellence 2. Leadership 3. Interaction 4. Cultural understanding | <ul style="list-style-type: none"> Q2-2. Being learning-focused Q4-1. Ability to motivate people Q5-5. Ability to stay flexible Q4-2. Communication skills Q3-2. Cultural adaptation (cultural flexibility) Q2. Leadership characteristics |
| Rhinesmith | 1996 | <ol style="list-style-type: none"> 1. Strategy and structure <ul style="list-style-type: none"> -characteristics: knowledgeable and analytical -skills: manage both in complexity and competition -actions: drive and balance -mindsets: embrace both a global picture and a balanced picture 2. Corporate culture 3. People | <ul style="list-style-type: none"> Q1-5. Professional expertise Q5-1. Ease in managing complexities Q4-4. Unique ability to balance tensions Q2-1. Inquisitiveness Q1-6. Depth of field Q4. Personal leadership Q5. Business leadership |

Table 5 Related studies and corresponded variables in questionnaire (Continue)

| <i>Author</i> | <i>Year</i> | <i>Statement of competencies of global managers</i> | <i>Variables/factors in Questionnaire</i> |
|-------------------|-------------|--|--|
| Brake | 1997 | <ol style="list-style-type: none"> 1. Relationship management <ul style="list-style-type: none"> -community building -conflict management and negotiation -cross-country communication -influencing 2. Business acumen <ul style="list-style-type: none"> -depth of field (ability to switch perspective from global to local) -entrepreneurial spirit -professional expertise -stakeholder orientation -total organizational astuteness 3. Personal effectiveness <ul style="list-style-type: none"> -accountability -curiosity and learning -improvisation -maturity -thinking agility | <p>Q4-3. Networking</p> <p>Q5-4. Collaborative negotiation style</p> <p>Q3-2. Cultural flexibility</p> <p>Q4-1. Ability to motivate people</p> <p>Q1. Global business acumen</p> <p>Q2. Leadership characteristics</p> |
| Black & Gregersen | 1998 | <ol style="list-style-type: none"> 1. Unbridled inquisitiveness 2. Personal Character <ul style="list-style-type: none"> -emotional connection -integrity 3. Duality <ul style="list-style-type: none"> -capacity for managing uncertainty -unique ability to balance tensions | <p>Q1-1. Inquisitiveness</p> <p>Q2-3. Integrity</p> <p>Q2-8. Emotional connection</p> <p>Q4-4. Unique ability to balance tensions</p> <p>Q5-5. Ability to stay flexible</p> |

Table 5 Related studies and corresponded variables in questionnaire (Continue)

| <i>Author</i> | <i>Year</i> | <i>Statement of competencies of global managers</i> | <i>Variables/factors in Questionnaire</i> |
|-------------------|-------------|--|--|
| Black & Gregersen | 1999 | <ol style="list-style-type: none"> 1. Drive to communicate (extroverted) <ul style="list-style-type: none"> - employees who were both enthusiastic and extroverted in conversation, and not afraid to try out their fractured French or talk with someone whose English was weak 2. Broad-based sociability <ul style="list-style-type: none"> -successful global managers establish social ties to the local residents, from shopkeepers to government officials. There is no better source for insights into a local market and no better way to adjust to strange surroundings 3. Cultural flexibility <ul style="list-style-type: none"> - the expats who add the most value to their companies-by staying for the duration and being open to local market trends - are those who willingly experiment with different customs 4. Cosmopolitan orientation <ul style="list-style-type: none"> - Companies that send the right people abroad have identified individuals who respect diverse viewpoints 5. Collaborative negotiation style <ul style="list-style-type: none"> -Different cultures can hold radically different expectations about the way negotiations should be conducted. Thus a collaborative negotiation style, which can be important enough in business at home, becomes absolutely critical abroad | <p>Q2-5. extroverted</p> <p>Q4-3. Broad-based sociability</p> <p>Q3-2. Cultural flexibility</p> <p>Q2-7. Emotional connection</p> <p>Q5-4. Collaborative negotiation style</p> |

Table 5 Related studies and corresponded variables in questionnaire (Continue)

| <i>Author</i> | <i>Year</i> | <i>Statement of competencies of global managers</i> | <i>Variables/factors in Questionnaire</i> |
|---------------|-------------|--|---|
| Ed Cohen | 2008 | <ol style="list-style-type: none"> 1. Global business acumen <ul style="list-style-type: none"> -ability to comprehend the business environment in its totality: --entrepreneurial skills --financial skills --profit and customer awareness --domain, industry and business knowledge 2. Leadership characteristics <ul style="list-style-type: none"> -Mental and emotional behaviors --self-assurance --being learning-focused --displaying empathy --integrity --excellence --perseverance -ability to remain authentic 3. World view <ul style="list-style-type: none"> -global environment awareness -cultural adaptation -social, political and economic trends -experience with foreign countries 4. People leadership <ul style="list-style-type: none"> -communication skills -ability to motivate and inspire people -human resource skills -networking -development 5. Business leadership <ul style="list-style-type: none"> -strategic decision-making -efficient resource allocation -effective time management -problem-solving ability -ease in managing complexities -ability to stay flexible | <p>Q1. Global business acumen</p> <p>Q2. Leadership characteristics</p> <p>Q3. World view</p> <p>Q4. Personal leadership</p> <p>Q5. Business leadership</p> |

The 5-point Likert item, strongly disagree, disagree, neutral, agree, and strongly agree, is taken, and the score is from 1 to 5. The questions and corresponded variables are as the following:

Q1. Global Business Acumen (according to related studies from Rhinesmith (1996), Brake (1997), Cohan (2008)):

1. I have developed the skills of entrepreneurship. (*entrepreneurship skills*)
2. I can read the financial statements (such as income statement, cash flow and balance sheet) of a company. (*financial skills*)
3. I have developed the basic knowledge of different industries. (*domain, industry and business knowledge*)
4. I know the importance of the company profit and customer. (*profit and customer awareness*)
5. I have developed professional knowledge/expertise. (*professional expertise*)
6. I have confident to hold both global and local perspective. (*depth of field*)

Q2. Leadership Characteristics (according to related studies from Riesenberger (1994), Brake (1997), Gregersen (1998), Black and Gregersen (1999), and Cohan (2008)):

1. I become more curious in life. (*inquisitiveness*)
2. The training of my program inspires me to keep learning. (*being learning-focused*)
3. I know the importance of honesty and reliability. (*integrity*)
4. The training of my program let me know the importance of keeping moving toward my goals without quitting. (*perseverance*)
5. I become a more outgoing person. (*extraverted*)
6. I feel comfortable facing changes in life. (*enjoy difference*)
7. I try to understand other people's viewpoints. (*emotional connection*)
8. I will live up to my personal standards. (*self-assurance*)

Q3. World View (according to related studies from Riesenberger (1994), Brake (1997), Black and Gregersen (1999), and Cohen (2008)):

1. I know the global environment, especially in business world. (*global environment awareness*)
2. I become easier to adapt diverse cultures. (*cultural flexibility*)
3. My program encourages me to experiment with different customs. (*experience in foreign countries/culture*)
4. I always notice the news of world trends. (social, political and economic trends)

Q4. Personal Leadership (according to Rhinesmith's (1996), Brake (1997), Black and Gregersen (1998), and Cohen (2008)):

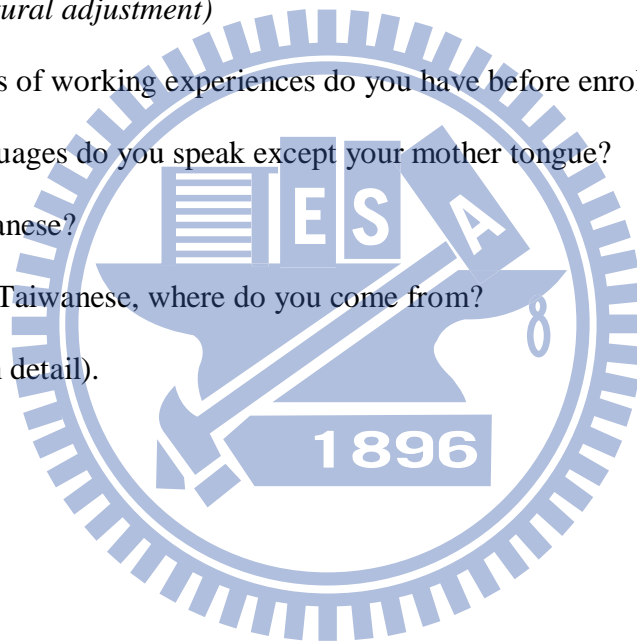
1. I am more willing to inspire people. (*ability to motivate and inspire people*)
2. I have improved my communication skills. (*communication skills*)
3. I know how to make friends and build relationships with others efficiently. (*networking*)
4. I become more capable of coping with stress. (*unique ability to balance tensions*)
5. I try to listen to people sincerely. (*human resource skills*)

Q5. Business Leadership (according to Rhinesmith (1996), Brake (1997), Black and Gregersen (1998), Black and Gregersen's (1999), and Cohen (2008)):

1. I am able to manage multiple tasks at the same time. (*ease in managing complexities*)
2. I know how to manage my time more effectively. (*effective time management*)
3. I know how to allocate resources more efficiently. (*efficient resource allocation*)
4. I try to find a win-win solution while negotiation. (*collaborative negotiation style*)
5. I can handle the change in my work or study with flexibility. (*ability to stay flexible*)
6. I know how to make decisions strategically. (*strategic decision-making*)
7. I know how to solve a problem systematically. (*problem-solving ability*)

The second is questions about participants' background and in-class situations. The questions are as the following:

1. Gender.
 2. Age.
 3. Your major/program.
 4. How many courses do you usually have to do a project with students/people from different countries in your program/department per semester? (*cross-cultural adjustment*)
 5. How many times do you usually join activities with international classmates/students per month? (*cross-cultural adjustment*)
 6. How many years of working experiences do you have before enrolling into this school?
 7. How many languages do you speak except your mother tongue?
 8. Are you a Taiwanese?
 9. If you are not a Taiwanese, where do you come from?
- (see Appendix 2 in detail).



3.3 Data Collection

3.3.1 Pilot Study

Because the survey is made by the researcher, the primary examination is taken for verifying the accuracy of question design.

Ten people (6 male and 4 female) who were Global MBA students in National Chiao Tung University participated the pilot study. Six of them were from Taiwan, one from South Africa, one from Ukraine, one from United States, and one from Guatemala. They got the e-mail with the website-link of the survey and were asked to provide the feedback on June 22th in 2010.

All the feedback was collected before June 23th in 2010. According to the feedbacks, there were some ambiguous choices or conflict of the design of survey. Therefore, the questionnaire was modified for clearly understanding and answering. For example, in the demography part, the last two questions asked about the nationality. The first one asked if the respondents were a Taiwanese or not. If the respondents chose “No,” then they should move to the final question: “where do you come from?” In original design, however, two questions were the required questions. No matter the respondents answer “Yes” or “No” in the first question, they have to answer the second one. The result would be ambiguous. Therefore, the final question was changed into optional question. Besides, one response was as the following:

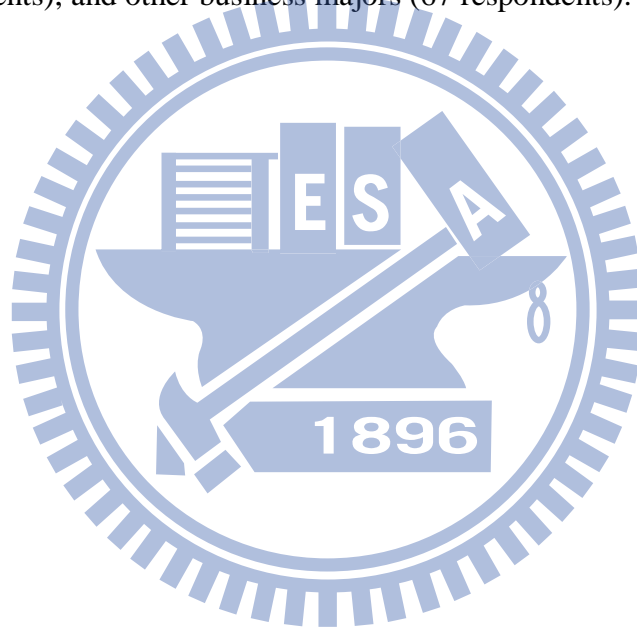
..... I noticed that even though you asked if I was Taiwanese or not, the questions seemed to be targeted toward Taiwanese students; for example, “how many projects do you work with foreigners per semester?” and “how many times / month do you socialize with foreigners per month?” I am a foreigner so this is a strange question to ask.....

Therefore, the word “foreigners” was replaced with “international students” in those two questions.

3.3.2 Formal Study

This survey was delivered online with the website called mySurvey. Forty-seven graduate schools of seven national universities in Taiwan were contacted for sending the link of the

survey. All of these graduate schools belong to business departments. The Appendix 1 lists these graduate schools in detail. The business departments of seven universities are informed by sending the e-mail on June 23th in 2010. The phone contact was made after sending the e-mail of the link of the survey online. After one week on July 1st in 2010, the reminder of e-mail was sent for raising the response rate of the survey. The online survey ran for a period of 30 days until July 24th in 2010. There were totally 311 respondents who completed the online survey. However, there were only 222 responses available in this study because the study sampling was focused on only three majors/programs: GMBA/IMBA (74 respondents), MBA (81 respondents), and other business majors (67 respondents).



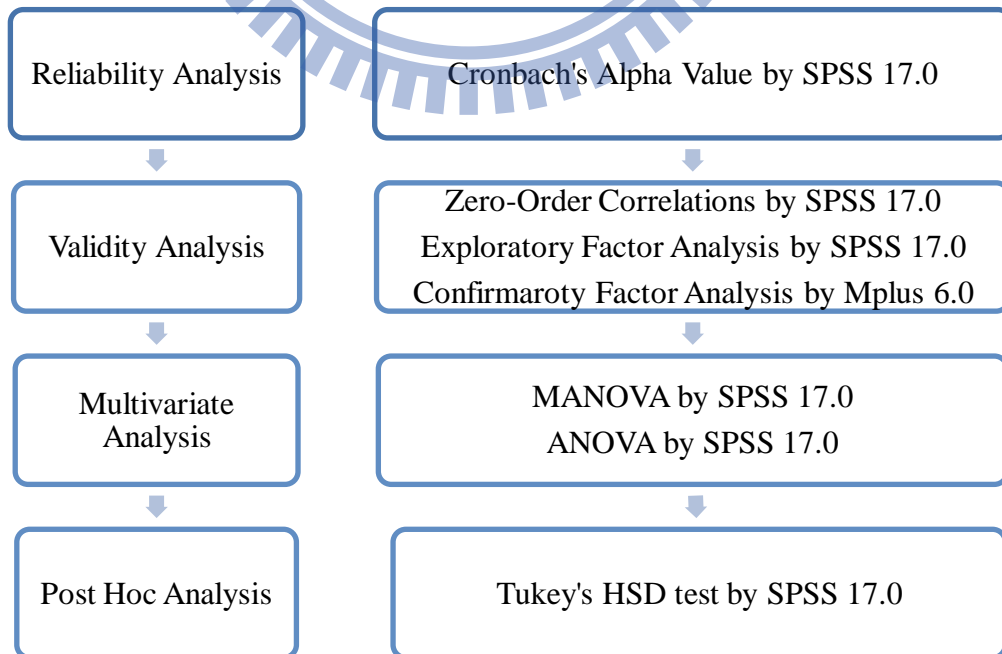
3.4 Data Analysis Procedure

First, the quality of the measurement scales should be examined. Therefore, the internal consistency reliability assessment would be conducted by the reliability analysis. The construct validity of the measurement scales for the elements of five characteristics of global managers should also be examined. Thus, Confirmatory Factor Analysis would be used.

Multivariate analysis of variance (MANOVA) would be used to compare the five characteristics across the three different majors of graduates. When significant differences revealed in the MANOVA results, a post hoc analysis was used by Tukey's HSD (Honestly significant Difference) test which would compare the means of each characteristic to the means of each other characteristic. Meanwhile, the test would apply the set of all pair-wise comparisons of means to identify the differences.

This research uses the statistic-analysis software SPSS 17.0 (Statistical Products and Services Solution) and Mplus 6.0 to analyze the data. Mplus is used for Confirmatory Factor Analysis of validity. SPSS is used for reliability analysis, descriptive analysis, and MANOVA.

Figure 3 The flow of statistic method used in the study



3.4.1 Reliability & Validity

Nunnally (1978) stated that “internal consistency reliability is an indicator of how well the different items measure the same issue” (p.21). Cronbach’s alpha value (α) is used to determine the internal consistency. Litwin (1995) and Nunnally (1978) proposed that an alpha value (α) of .70 is sufficient to display a rational level of internal consistency. Therefore, this research used an alpha value (α) of .70 as the standard to determine the internal consistency.

Exploratory Factor Analysis (EFA) is used to find underlying factors that are common to variables. To uncover the underlying structure of variables, the results of EFA is adopted to determine the number of factors. According to Kaiser (1960), factors should be chosen with eigenvalues greater than 1. Besides, the visual inspection of the Scree Plot, factors as the X axis and the corresponding eigenvalues as the Y axis, should be done (Cattell, 1966).

Furthermore, the criteria of variance explained should be concerned as well.

The measurement of each variable in this research is based on the literature review. Therefore, Confirmatory Factor Analysis (CFA) is used to verify the conformation between survey items and the research construct. According to Hu and Bentler (1999), Tucker–Lewis Index (TLI), the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean squared residual (SRMR) indicated the goodness-of-fit indices used to assess model fit. Values of .95 or greater for the TLI and CFI, .06 or less for the RMSEA, and .08 or less for the SRMR suggest good model fit. Value of .90 for CFI suggests acceptable model fit.

Chapter 4 Results

4.1 Descriptive Statistics Result of the Sample

Major

33.3% (74 respondents) of the respondents majored in GMBA/IMBA, 36.5% (81) majored in MBA, and 30.2% (67) majored in other business majors.

Gender

49.5% (110 respondents) were male and 50.5% (112) were female.

Age

There were 53.6% (119 respondents) of the respondents at the age between 20 to 29 years old; the majority was 42% (50) of MBA students and 33.6% (40) of other business-majored students. 34.2% (76) at the age between 30 to 39 years old; the majority was 50% (38) of GMBA/IMBA students. 11.7% (26) at the age between 40-49 years old, and only 0.5% (1) under 20 years old.

Nationality

69.4% (154 respondents) were Taiwanese, and the rest of them were 22 respondents from South-eastern Asia, 15 from South America, 10 from North America, 5 from Western Asia, 4 from Eastern Europe, 4 from Western Europe, 4 from Oceania, 2 from Africa, 1 from Southern Europe, and 1 from Eastern Asia.

Working experience

46.4% (103 respondents) of respondents had working experiences more than 5 years before enrolling their graduate schools; the majority was 40.8% (42) GMBA/IMBA students. 19.8% (44) of respondents had no working experience; the majority was 59.1% (26) of MBA students. 18% (40) of respondents had working experiences less than 2 years; the majority was 45% (18) of other business-majored students. 15.8% (35) of respondents had working experiences during 2 to 4 years; the majority was 45.7% (16) of GMBA/IMBA students.

Language speaking except the mother tongue

Except the mother tongue, 37.8% (84 respondents) can speak only one foreign language, 36% (80) can speak more than 3 languages, and 26.1% (58) can speak 2 languages; the majority was 36.3% (29) of GMBA/IMBA students.

Taking courses with students from different countries

While asking how many courses usually had to do a project with students from different countries in their major per semester, 45.9% (102 respondents) had more than 3 courses; the majority was 51% (52) of GMBA/IMBA students. 41% (91) had less than 1 course; the majority was 51.6% (47) of MBA students and 44% (40) of other business-majored students. 13.1% (29) had 2 to 3 courses; the majority was 62.1% (18) of GMBA/IMBA students.

Joining activities with international students per month

While asking how many times usually joining activities with international students per month, 44.6% (99 respondents) was less than once; the majority was 47.5% (47) of MBA students. 32.4% (72) was more than 3 times; the majority was 52.8% (38) of GMBA/IMBA students. 23% was once or twice; the majority was 41.2% (21) of other business-majored students.

4.2 Reliability Analysis

According to 3.4.1, this research, by calculating Cronbach's alpha value, used an alpha value (α) of 0.70 as the standard to determine the internal consistency.

Table 6 shows the number of respondents, the Cronbach's alpha score and the measurement items that belong to each measurement scale. Five characteristics all exceed the minimum alpha value 0.7.

Table 7 presents the means, standard deviations, and correlations among the variables in this study. Working experiences, of course, is significantly correlated with age ($r=.50, p<.01$). Doing a project with international students has high correlation with joining activities with international students ($r=.78, p<.01$). This is reasonable because the respondents should have international classmates so that the chance to do a project or to join the activities together is higher. Meanwhile, doing a project with international students has significant correlation with the language ability as well as joining activities with international students ($r=.58, r=.61, p<.01$). As the table shows, five characteristics of global managers are highly correlated among each other at the .01 level (2-tailed), which from .78 to .90. Therefore, significant and high-correlated inter-relationship exists among five characteristics.

4.3 Exploratory Factor Analysis

Because of the over-highly correlation among five characteristics, Exploratory Factor Analysis (EFA) was adopted for examining the number of factors. According to Kaiser (1960), factors should be chosen with eigenvalues greater than 1. The results showed that the initial eigenvalue of factor 1 was 19.09, which was far higher than factor 2 with eigenvalue 1.33, factor 3 with eigenvalue 1.21, factor 4 with eigenvalue .91, and factor 5 with eigenvalue .73. Though the eigenvalues of three factors were higher than 1, factor 1 had big difference from others. Therefore, other effects should be concerned as well. Total variance explained by factor 1 was 63.62%, which was relatively high comparing with 4.45% of factor 2, 4.04% of factor 3, 3.02% of factor 4, and 2.45% of factor 5. Furthermore, the visual inspection of the

Scree Plot, factors as the X axis and the corresponding eigenvalues as the Y axis, should be done (Cattell, 1966). The Scree Plot was referred as well in Figure 5. Cattell (1966) suggested to find the place where the smooth decrease of eigenvalues appears to level off to the right of the plot. "Scree" is the geological term referring to the debris which collects on the lower part of a rocky slope. According to this criterion, one factor would probably retained. Besides, according to the CFA's comparison in Table 8, one-factor model was better in SRMR than five-factor model and better in CFI and RMSEA than two and three-factor models as the good fit (Hu & Bentler, 1999). The communality for a given variable can be interpreted as the proportion of variation in that variable explained by the factor. The result of communalities for one-factor model showed that, within 30 variables, variation was explained by one-factor model higher than .60 with 24 variables. Therefore, unexpectedly, one factor model was re-conducted after the analysis. In other words, five characteristics of global managers were combined into one characteristic.

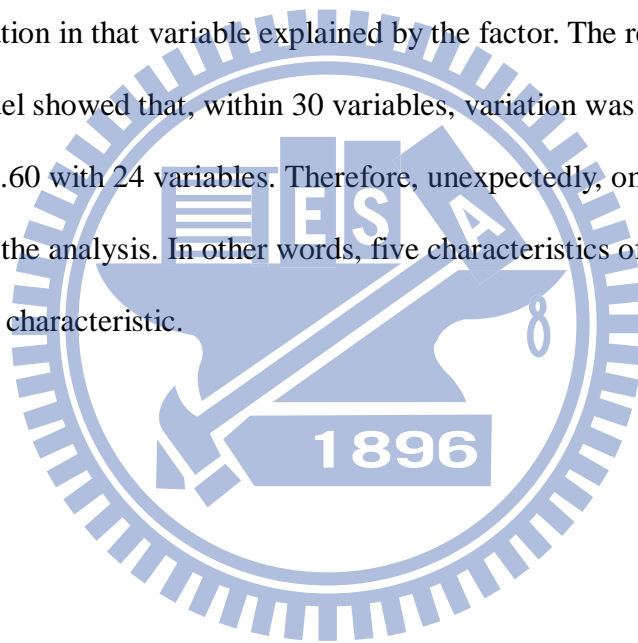
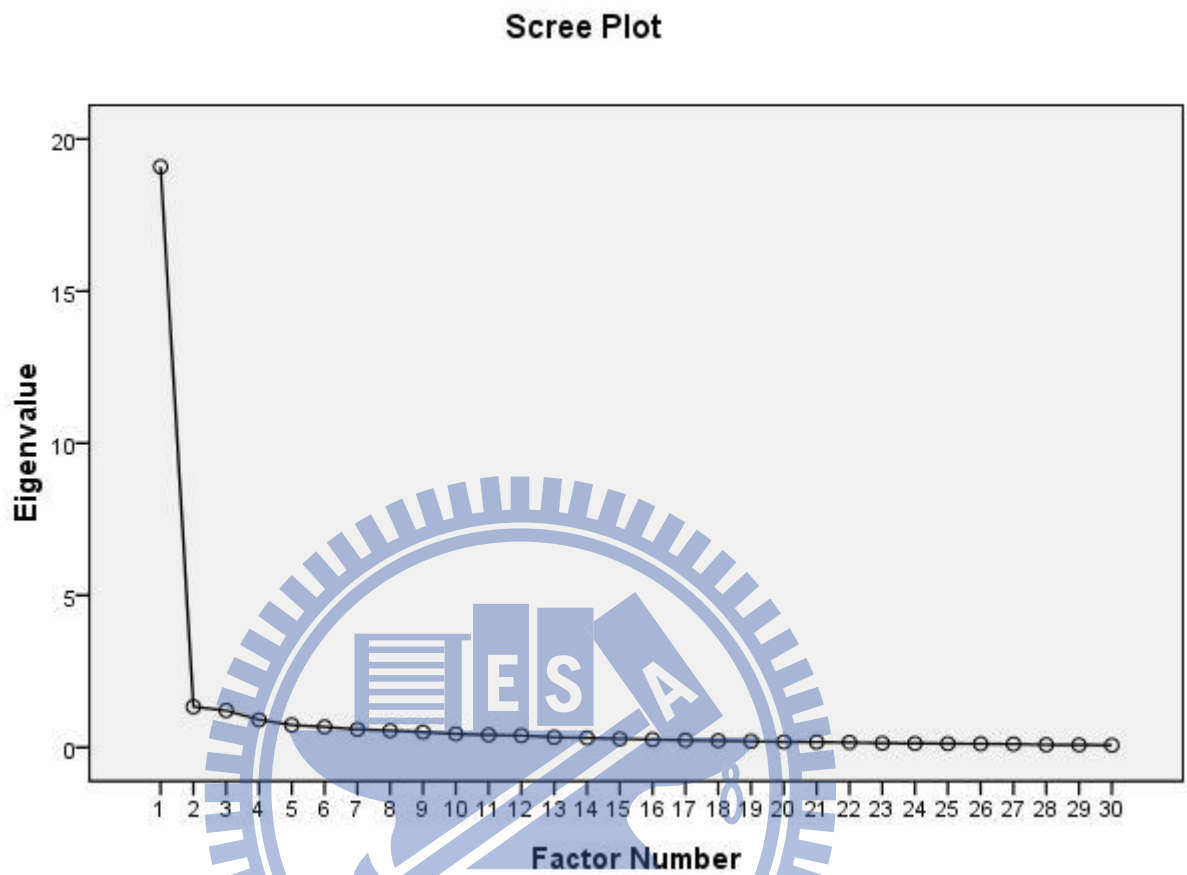


Figure 4 Scree Plot



One-factor model was used in CFA. The criterion results were as the same as in Table 8. The factor loadings were from .52 to .91, which showed the highly inner construct.

4.4 Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) was adopted in this study by using the Mplus Version 6 program's maximum likelihood procedure. Tucker–Lewis Index (TLI), the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean squared residual (SRMR) indicated the goodness-of-fit indices used to assess model fit. Values of .95 or greater for the TLI and CFI, .06 or less for the RMSEA, and .08 or less for the SRMR suggest good model fit (Hu & Bentler, 1999). Because the scale was conducted based on five domains of global managers' competency, a five-factor model was conducted ($X^2[400,222]= 1445.577$, SRMR=.122, CFI=.857, RMSEA=.109). A series of alternative models were compared to assess whether the measures represented significant constructs. Table 8 showed the results. In order to examine if five-factor model would be good model fit, three-factor model and two-factor model were conducted as well. Three-factor model with leadership characteristics, personal leadership, and business leadership collapsed as one scale had significantly poorer fit than the five-factor model. Two-factor model with business acumen and world view collapsed into one scale and with leadership characteristics, personal leadership, and business leadership collapsed into one scale had significantly poorer fit than the five-factor model as well. Based on the EFA results, one-factor model with all five characteristics collapsed as one scale had poorer fit than the five-factor model except the standardized root mean squared residual (SRMR) which had better fit than the five-factor model. After the comparison of the difference of Chi-square values ($p=.05$), each model was significantly different from Model 1. For choosing the best result, Model 1, which was the five-factor model, was adopted for CFA analysis. Figure 2 showed the standardized path estimates. Global business acumen, leadership characteristics, world view, personal leadership, and business leadership had significantly correlated with each other; the factor loadings were from .866 to .970. Global business acumen had significantly correlated with corresponded items; the factor loadings were between .738 and .866. Leadership characteristics had

significant correlation with corresponded items; the factor loadings were between .734 and .902. World view had significant correlation with corresponded items; the factor loading were between .850 and .910. Personal leadership had also significantly correlated with corresponded items; the factor loadings were between .869 and .908. Business leadership had high correlation with the corresponded items; the factor loadings were between .856 and .930.

Based on the results of the measurement analyses, the measurement items listed in Table 6 appear to be reliable and valid indicators for each of the five characteristics of global managers.



Table 6 Chronbach's alpha value of Global manager's characteristics

| <i>Global manager's characteristics</i> | <i>N*</i> | <i>Cronbach's alpha</i> | <i>Items</i> |
|---|-----------|-------------------------|--|
| Business Acumen | 222 | .870 | Entrepreneurial skills Financial skills Domain, industry and busienss knowledge Profit and customer's awareness Professional expertise Depth of field |
| Leadership characteristics | 222 | 0.935 | Inquisitiveness Being learning-focused Integrity Perseverance Extraverted Enjoy differences Emotional connection Self-assurance |
| World view | 222 | 0.905 | Global environment awareness experience in foreign countries Culture flexibility Social, political and economic trends |
| Personal leadership | 222 | 0.932 | Ability to motivate and inspire people Communication skills Networking Unique ability to balance tensions Human resource skills |
| Business leadership | 222 | 0.961 | Ease to manage complexities Effective time management Efficient resource allocation Collaborative negotiation style Ability to stay flexible Strategic decision making Problem-solving ability |

* Number of respondents

Table 7 Means, Standard Deviation, and Correlations among study variables

| | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|--|-------|------|----------|---------|----------|---------|---------|---------|---------|----------|---------|---------|---------|---------|------|
| 1. Gender | 1.50 | 0.50 | 1.00 | | | | | | | | | | | | |
| 2. Age | 2.57 | 0.70 | -0.31 ** | 1.00 | | | | | | | | | | | |
| 3. Your program/major | 1.97 | 0.80 | 0.18 ** | -0.06 | 1.00 | | | | | | | | | | |
| 4. Do a project with international students | 2.05 | 0.93 | -0.02 | 0.19 ** | -0.38 ** | 1.00 | | | | | | | | | |
| 5. Join activities with international students | 1.88 | 0.87 | -0.11 | 0.10 | -0.32 ** | 0.78 ** | -1.00 | | | | | | | | |
| 6. Working experiences | 2.89 | 1.20 | -0.12 | 0.50 ** | -0.20 ** | 0.31 ** | 0.35 ** | 1.00 | | | | | | | |
| 7. Languages-speaking | 1.98 | 0.86 | -0.04 | 0.19 ** | -0.03 | 0.58 ** | 0.61 ** | 0.19 ** | 1.00 | | | | | | |
| 8. Are you Taiwanese? | 1.31 | 0.46 | 0.13 | 0.06 | 0.01 | 0.61 ** | 0.58 ** | 0.10 | 0.40 ** | 1.00 | | | | | |
| 9. B_A*** | 19.78 | 4.78 | -0.19 ** | 0.13 | -0.43 ** | 0.01 | 0.06 | -0.02 | -0.10 | -0.07 | 1.00 | | | | |
| 10. L_C*** | 29.09 | 7.06 | -0.12 | 0.16 * | -0.33 ** | -0.14 * | -0.06 | -0.03 | -0.13 * | -0.20 ** | 0.80 ** | 1.00 | | | |
| 11. W_V*** | 14.45 | 3.76 | -0.18 ** | 0.21 ** | -0.43 ** | 0.09 | 0.14 * | 0.04 | 0.02 | -0.12 | 0.80 ** | 0.80 ** | 1.00 | | |
| 12. P_L*** | 18.05 | 4.61 | -0.15 * | 0.20 ** | -0.40 ** | 0.00 | 0.07 | 0.08 | -0.02 | -0.15 * | 0.77 ** | 0.89 ** | 0.83 ** | 1.00 | |
| 13. B_L*** | 25.25 | 6.98 | -0.18 ** | 0.21 ** | -0.40 ** | -0.06 | 0.00 | 0.03 | -0.07 | -0.20 ** | 0.79 ** | 0.89 ** | 0.78 ** | 0.90 ** | 1.00 |

*, Correlation is significant at the 0.05 level (2-tailed).

**, Correlation is significant at the 0.01 level (2-tailed).

***. B_A= Business Acumen includes entrepreneurial skills, financial skills, profit and customer awareness, domain, industry and business knowledge, depth of field, and professional expertise.

L_C= Leadership Characteristics includes self-assurance, inquisitiveness, emotional connection, integrity, perseverance, being learning-focused, extraverted, and enjoy difference.

W_V= World View includes global environment awareness, cultural flexibility, social, political and economic trends, and experience in foreign countries or culture.

P_L= Personal Leadership includes communication skills, networking, ability to motivate and inspire people, human resource skills, unique ability to balance tensions.

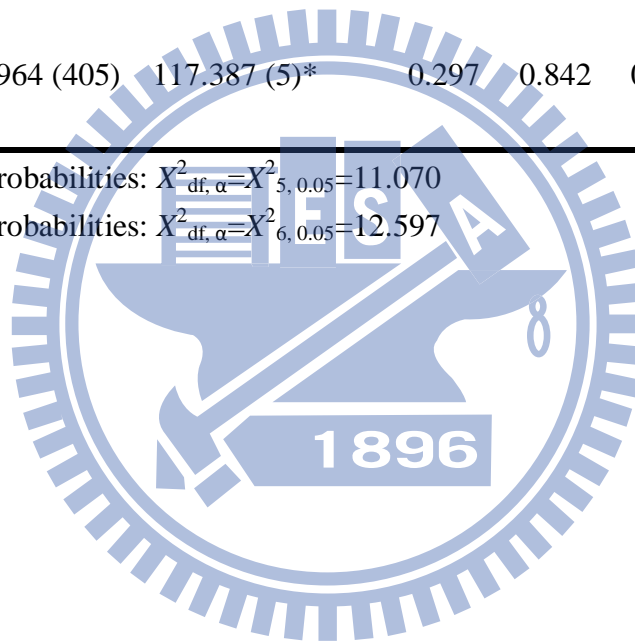
B_L= Business Leadership includes strategic decision-making, efficient resource allocation, effective time management, problem-solving ability, ease in managing complexities, ability to stay flexible, collaborative negotiation style.

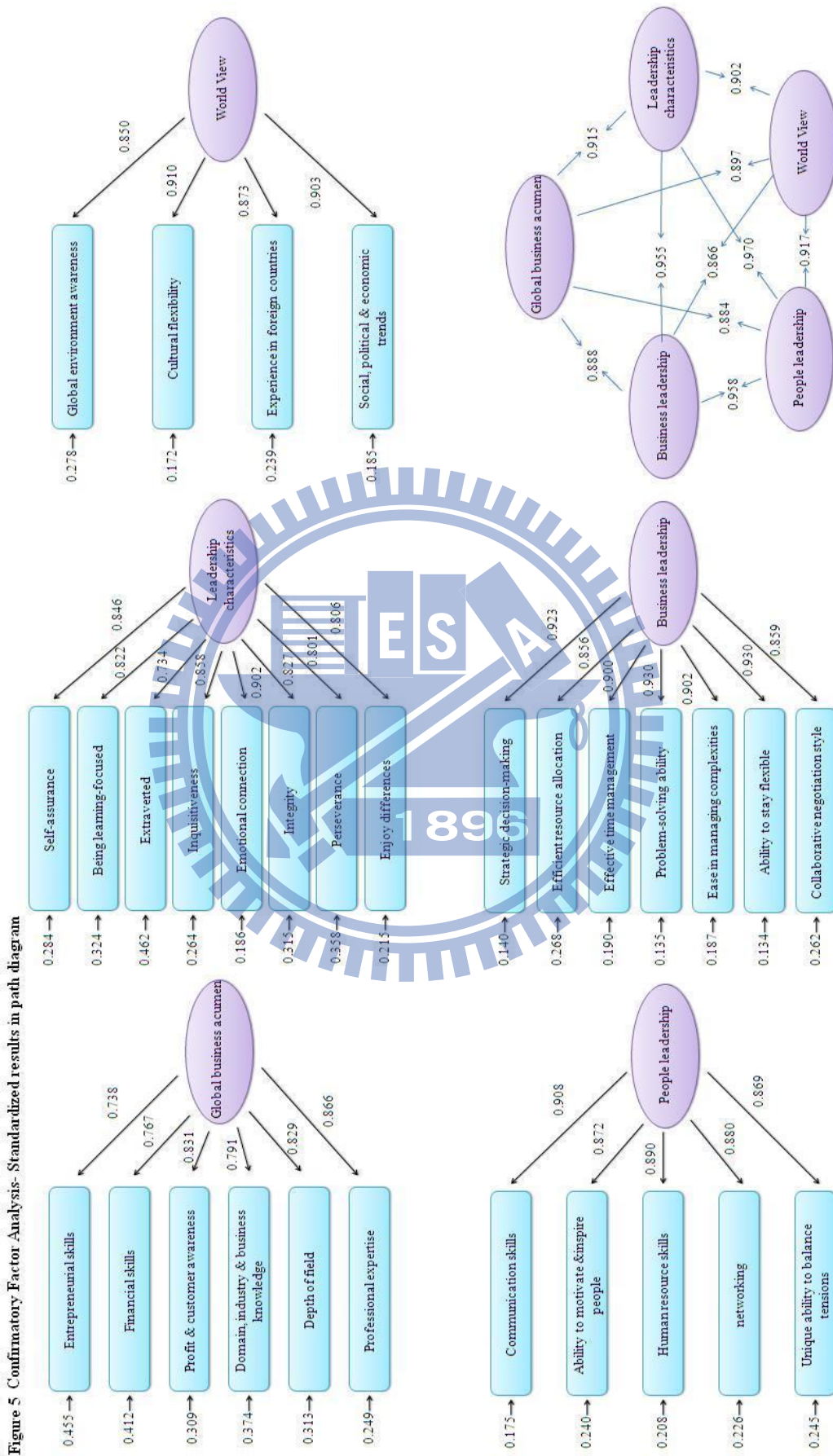
Table 8 Confirmatory Factor Analysis Comparisons

| <i>Models</i> | $X^2(df)$ | <i>Chi-square difference</i> $X^2(df)$ | <i>SRMR</i> | <i>CFI</i> | <i>RMSEA</i> | <i>Comparisons</i> |
|------------------------|----------------|---|-------------|-------------|--------------|--------------------------|
| Hu & Bentler (1999) | | | ≤ 0.08 | ≥ 0.95 | ≤ 0.06 | |
| 1. 5-factor | 1445.577 (400) | | 0.122 | 0.857 | 0.109 | |
| 2. 1-factor | 1765.404 (405) | 319.827 (5)* | 0.054 | 0.814 | 0.123 | Model 2 compared to 1 |
| 3. 2-factor | 1622.673 (406) | 177.096 (6)** | 0.243 | 0.834 | 0.116 | Model 3 compared to 1 |
| 4. 3-factor | 1562.964 (405) | 117.387 (5)* | 0.297 | 0.842 | 0.113 | Model 4 compared to 1 |

*. Chi-square probabilities: $X^2_{df, \alpha} = X^2_{5, 0.05} = 11.070$

** . Chi-square probabilities: $X^2_{df, \alpha} = X^2_{6, 0.05} = 12.597$





4.4 MANOVA Analysis and ANOVA Analysis

Multivariate Analysis of Variance (MANOVA) was used to compare simultaneously the five characteristics of global managers with majors/programs, GMBA/IMBA, MBA, other business majors, in business graduate schools. Table 9 lists means and standard deviations for the five characteristics of global managers compared with three majors. The means of GMBA and MBA in average were no significant difference, but the means of other business major were particularly lower than others.

Table 9 Means and Standard Deviations (SD) of three majors

| | <i>GMBA/IMBA</i> | | <i>MBA</i> | | <i>Other Business Major</i> | |
|-----------------------------|------------------|------|-------------|------|-----------------------------|------|
| | <i>N=74</i> | | <i>N=81</i> | | <i>N=67</i> | |
| | Mean | SD | Mean | SD | Mean | SD |
| Global Business Acumen* | 21.45 | 4.20 | 21.17 | 2.98 | 16.25 | 5.30 |
| Leadership Characteristics* | 30.36 | 5.26 | 31.78 | 3.60 | 24.45 | 9.39 |
| World View* | 15.58 | 2.62 | 15.91 | 2.07 | 11.43 | 4.61 |
| Personal Leadership* | 19.11 | 3.32 | 20.07 | 2.51 | 14.42 | 5.63 |
| Business Leadership* | 27.11 | 4.26 | 27.99 | 3.63 | 19.88 | 9.21 |

*. Global Business Acumen includes 6 elements. Leadership Characteristics includes 8 elements. World View includes 4 elements. Personal Leadership includes 5 elements. Business Leadership includes 7 elements.

The result of multivariate test significance showed that the relationship between majors/programs and five characteristics of global managers approached significance (F-Value=12.336, $p < .01$), which showed that the different majors or programs would make respondents the difference with the characteristics which the global managers should have. In Table 10, it showed that all the five characteristics had significantly difference from different majors/ programs. Global business acumen was significantly associated with different majors/programs (F-Value= 34.019, $p < .01$). Leadership characteristics was significantly associated with different majors/programs (F-Value= 26.528, $p < .01$). World view had the significant relationship with different majors/programs (F-Value= 42.756, $p < .01$). Personal leadership was significantly related with different majors/programs (F-Value= 41.785, $P < .01$).

Business leadership was also significantly related with different majors/programs (F-Value= 38.374, P<.01).

Table 10 Test of between-subject effects

| <i>Source</i> | <i>Dependent Variable</i> | <i>Type III</i> | | <i>Mean Square</i> | <i>F</i> | <i>Sig.</i> |
|---------------------------|----------------------------|-----------------------|-----------|--------------------|----------|-------------|
| | | <i>Sum of Squares</i> | <i>df</i> | | | |
| <i>Major/ Program</i> | Business Acumen | 1195.634 | 2 | 597.817 | 34.019 | <.001 |
| | Leadership Characteristics | 2149.298 | 2 | 1074.649 | 26.528 | <.001 |
| | World View | 878.099 | 2 | 439.049 | 42.756 | <.001 |
| | Personal Leadership | 1298.560 | 2 | 649.280 | 41.785 | <.001 |
| | Business Leadership | 2794.206 | 2 | 1397.103 | 38.374 | <.001 |
| <i>Error</i> | Business Acumen | 3848.551 | 219 | 17.573 | | |
| | Leadership Characteristics | 8871.716 | 219 | 40.510 | | |
| | WorldView | 2248.856 | 219 | 10.269 | | |
| | Personal Leadership | 3402.989 | 219 | 15.539 | | |
| | Business Leadership | 7973.168 | 219 | 36.407 | | |

In order to determine which majors/programs were reporting statistically significant differences, a post-hoc analysis was conducted. A Tukey's HSD (Honestly Significant Difference) test was used. This test is used for testing the significance of unplanned pair-wise comparisons of means with the results in Table 11. With the summarized results, it indicated that other business majors were significant lower sub-scores than the other two majors in all five sub-scales. Comparing with the significance, GMBA/IMBA had no significantly difference relationship with MBA. However, other business majors had not only significant relationship but also negative mean difference from five characteristics with other two. Besides, the difference was significant larger than the other two. For example, GMBA/IMBA had mean difference of -.88 on business leadership with MBA without significance (p=.64). However, GMBA/IMBA had mean difference of 7.22 on business leadership with other business majors significantly at the .05 level. On the characteristic of global business acumen,

other business majors had significant ($p < .05$) mean difference of -5.19 with GMBA/IMBA and of -4.91 with MBA; this difference supported Hypothesis 1, MBA students have more global business acumen than non-MBA students. On the characteristic of leadership characteristics, other business majors had significant ($p < .05$) mean difference of -5.91 with GMBA/IMBA and of -7.33 with MBA; this difference supported Hypothesis 2, MBA students have more leadership characteristics than non-MBA students. On the characteristic of world view, other business majors had significant ($p < .05$) mean difference of -4.14 with GMBA/IMBA and of -4.48 with MBA; it supported Hypothesis 3-1, MBA students have more world view than non-MBA students. On the characteristic of personal leadership, other business majors had significant ($p < .05$) mean difference of -4.69 with GMBA/IMBA and of -5.65 with MBA; it supported Hypothesis 4, MBA students have more personal leadership skills than non-MBA students. On the characteristic of business leadership, other business majors had significant ($p < .05$) mean difference of -7.22 with GMBA/IMBA and of -8.10 with MBA; the difference supported Hypothesis 5, MBA students have more business leadership skills than non-MBA students. To test Hypothesis 3-2, GMBA/IMBA students have more cross-cultural adjustment than non-GMBA students, more comparison have to be done. In Table 10, GMBA/IMBA had significantly ($p < .05$) mean difference with non-MBA on the characteristic of world view, which includes the variable of cross-culture flexibility. However, GMBA/IMBA had no significant ($p = .795$) difference with MBA on this part, and the mean was even negative as -.33.

Table 11 Post-hoc test by Tukey's HSD test

| (I) Your program/major | (J) Your program/major | *** | (I-J) Mean Diff. | Std. Error | Sig. |
|---------------------------|---------------------------|--------|---------------------|------------|------|
| 1** | 2** | BA | 0.27 | 0.67 | 0.91 |
| | | 3** | 5.19* | 0.71 | <.05 |
| | LC | -1.41 | 1.02 | 0.35 | |
| | | 5.91* | 1.07 | <.05 | |
| | WV | -0.33 | 0.52 | 0.80 | |
| | | 4.14* | 0.54 | <.05 | |
| | PL | -0.97 | 0.63 | 0.28 | |
| 4.69* | | 0.66 | <.05 | | |
| BL | -0.88 | 0.97 | 0.64 | | |
| | 7.22* | 1.02 | <.05 | | |
| 2 | 1 | BA | -0.27 | 0.67 | 0.91 |
| | | 3 | 4.91* | 0.69 | <.05 |
| | LC | 1.41 | 1.02 | 0.35 | |
| | | 7.33* | 1.05 | <.05 | |
| | WV | 0.33 | 0.52 | 0.80 | |
| | | 4.48* | 0.53 | <.05 | |
| | PL | 0.97 | 0.63 | 0.28 | |
| 5.65* | | 0.65 | <.05 | | |
| BL | 0.88 | 0.97 | 0.64 | | |
| | 8.10* | 1.00 | <.05 | | |
| 3 | 1 | BA | -5.19* | 0.71 | <.05 |
| | | 2 | -4.91* | 0.69 | <.05 |
| | LC | -5.91* | 1.07 | <.05 | |
| | | -7.33* | 1.05 | <.05 | |
| | WV | -4.14* | 0.54 | <.05 | |
| | | -4.48* | 0.53 | <.05 | |
| | PL | -4.69* | 0.66 | <.05 | |
| -5.65* | | 0.65 | <.05 | | |
| BL | -7.22* | 1.02 | <.05 | | |
| | -8.10* | 1.00 | <.05 | | |

*. The mean difference is significant at the .05 level.

**. 1= GMBA/IMBA, 2= MBA, 3= Other business major.

***. BA= Global business acumen, LC= Leadership characteristics, WV= World view, PL= Personal leadership, BL= Business leadership.

In Table 12, it was separated into two parts. In the first part, means of GMBA/IMBA were

obviously higher than other two kinds of majors. However, in the second part, means of MBA were slightly higher than other two kinds of majors. The MANOVA was used and the multivariate test performed the result that the majors or programs were related with four variables, cultural flexibility, experiencing in other countries or culture, doing project with international students, and joining activities with international classmates, with the significance (F-Value=17.238, P<.01).

Table 12 Mean, Standard Deviation (SD) for three majors

| | <i>GMBA</i> | | <i>MBA</i> | | <i>Other Business Major</i> | |
|--|-------------|------|------------|------|-----------------------------|------|
| | N=74 | | N=81 | | N=67 | |
| | Mean | SD | Mean | SD | Mean | SD |
| Q9 How many courses do you usually have to do a project with students/people from different countries in your program/department per semester? * | 2.65 | 0.58 | 1.72 | 0.90 | 1.79 | 0.98 |
| Q10 How many times do you usually join activities with international classmates/students per month? ** | 2.30 | 0.81 | 1.72 | 0.90 | 1.61 | 0.74 |
| 3-2 I become easier to adapt diverse cultures. | 4.07 | 0.78 | 4.22 | 0.55 | 2.96 | 1.35 |
| 3-3 My program encourages me to experiment with different customs. | 3.99 | 0.84 | 4.02 | 0.82 | 2.96 | 1.40 |

*. The options of the first question: 1=0-1, 2=2-3, 3=more than 3

**.. The options of the second question: 1=0, 2=1-2, 3=more than 3

In Table 13, it showed that majors/programs had significant difference with cultural flexibility (F=39.01, P<.01). Majors/programs had significant relationship with experiencing different countries/culture (F=24.23, P<.01). Majors/programs were associated with doing projects with international students with significant difference (F=28.77, P<.01). Majors/programs were associated with joining activities with international classmates with significant difference (F=14.72, P<.01).

Table 13 Tests of Between-Subjects Effects

| <i>Source</i> | <i>Dependent Variable</i> | <i>Type III</i> | | <i>Mean Square</i> | <i>F</i> | <i>Sig.</i> |
|---------------|---------------------------|-----------------------|-----------|--------------------|----------|-------------|
| | | <i>Sum of Squares</i> | <i>df</i> | | | |
| Major/Program | 3-2 | 67.52 | 2 | 33.76 | 39.01 | <.01 |
| | 3-3 | 51.75 | 2 | 25.87 | 24.23 | <.01 |
| | Q9 | 40.04 | 2 | 20.02 | 28.77 | <.01 |
| | Q10 | 19.87 | 2 | 9.93 | 14.72 | <.01 |
| Error | 3-2 | 189.52 | 219 | .86 | | |
| | 3-3 | 233.80 | 219 | 1.06 | | |
| | Q9 | 152.40 | 219 | .69 | | |
| | Q10 | 147.83 | 219 | .67 | | |

In Table 14, it was found that GMBA/IMBA had significant ($P < .05$) mean higher for four variables than other business majors. However, GMBA/IMBA had significant ($P < .05$) mean higher than MBA only for Q9, doing projects with international students, and Q10, joining activities with international classmates. About the cultural flexibility and experiencing foreign countries/culture, GMBA/IMBA had negative mean difference with MBA, which surprisingly had no significance. Though other business majors had almost significantly ($P < .05$) negative mean differences with other two kinds of majors, other business majors had one positive mean difference (.07) higher than MBA without significance. To sum up, most of results supported Hypothesis 3-2: GMBA/IMBA students have more cross-cultural adjustment than non-GMBA students.

In conclusion, six hypotheses were supported after statistical analysis.

Table 14 Post-hoc test by Tukey's HSD test

| <i>(I) Your</i> | <i>(J) Your</i> | | <i>(I-J)</i> | | | | |
|----------------------|----------------------|------------|-------------------|-------------------|-------------|------|------|
| <i>program/major</i> | <i>program/major</i> | *** | <i>Mean Diff.</i> | <i>Std. Error</i> | <i>Sig.</i> | | |
| 1** | 2** | 3-2 | -0.15 | 0.15 | 0.56 | | |
| | | 3** | 1.11* | 0.16 | <.05 | | |
| | 3** | 3-3 | -0.04 | 0.17 | 0.97 | | |
| | | | 1.03* | 0.17 | <.05 | | |
| | | Q9 | .93* | 0.13 | <.05 | | |
| | | | .86* | 0.14 | <.05 | | |
| | | Q10 | .58* | 0.13 | <.05 | | |
| | .69* | 0.14 | <.05 | | | | |
| 2 | 1 | 3-2 | 0.15 | 0.15 | 0.56 | | |
| | | 3 | 1.27* | 0.15 | <.05 | | |
| | 3 | 3-3 | 0.04 | 0.17 | 0.97 | | |
| | | | 1.07* | 0.17 | <.05 | | |
| | | Q9 | -.93* | 0.13 | <.05 | | |
| | | | -0.07 | 0.14 | 0.85 | | |
| | | Q10 | -.58* | 0.13 | <.05 | | |
| | | | 0.10 | 0.14 | 0.72 | | |
| | | 3 | 1 | 3-2 | -1.11* | 0.16 | <.05 |
| | | | | 2 | -1.27* | 0.15 | <.05 |
| 3 | 3-3 | | -1.03* | 0.17 | <.05 | | |
| | | | -1.07* | 0.17 | <.05 | | |
| | Q9 | | -.86* | 0.14 | <.05 | | |
| | | | 0.07 | 0.14 | 0.85 | | |
| | Q10 | | -.69* | 0.14 | <.05 | | |
| | -0.10 | 0.14 | 0.72 | | | | |

*. The mean difference is significant at the .05 level.

**. 1= GMBA/IMBA, 2= MBA, 3= Other business major.

According to EFA and CFA result, Analysis of Variance (ANOVA) was conducted for insurance of the significant difference among three majors/programs. In Table 15, it was obviously that the mean of other business major was lower than the others. Because the Test of Homogeneity of Variances was significant ($P < .05$), this would mean that it was not similar variances. However, the Welch and Brown-Forsythe statistics can still be used as the result in Table 16. The significance value is less than 0.05 and there were statistically significant differences between three majors/programs. The post-hoc test was conducted by Tukey's HSD test. As the result in Table 17, other business major was significantly lower than the others. However, GMBA and MBA had no significant differences between each other.

Table 15 Mean and Standard Deviation of three majors/programs

| <i>Major/Programs</i> | <i>N</i> | <i>Mean*</i> | <i>SD</i> |
|-----------------------|----------|--------------|-----------|
| GMBA/IMBA | 74 | 113.61 | 16.38 |
| MBA | 81 | 116.93 | 12.34 |
| Other Business Major | 67 | 86.43 | 32.68 |
| Total | 222 | 106.62 | 25.33 |

*The variable is conducted by the sum of thirty variables.

Table 16 Robust Tests of Equality of Means

| | <i>Statistic^a</i> | <i>df1</i> | <i>df2</i> | <i>Sig.</i> |
|----------------|------------------------------|------------|------------|-------------|
| Welch | 25.95 | 2 | 125.02 | <.01 |
| Brown-Forsythe | 38.70 | 2 | 116.14 | <.01 |

a. Asymptotically F distributed.

Table 17 Post-hoc test by Tukey's HSD test

| <i>(I) Your program/major**</i> | <i>(J) Your program/major</i> | <i>Mean Difference (I-J)</i> | <i>Std. Error</i> | <i>Sig.</i> |
|-------------------------------------|-----------------------------------|------------------------------|-------------------|-------------|
| 1 | 2 | -3.31 | 3.47 | .61 |
| | 3 | 27.17* | 3.64 | .00 |
| 2 | 1 | 3.31 | 3.47 | .61 |
| | 3 | 30.49* | 3.56 | .00 |
| 3 | 1 | -27.17* | 3.64 | .00 |
| | 2 | -30.49* | 3.56 | .00 |

*. The mean difference is significant at the .05 level.

** . 1= GMBA/IMBA, 2= MBA, 3= Other business major.



Chapter 5 Conclusion

5.1 Research Findings and Conclusions

This study attempted to determine whether the training of MBA graduates could meet the characteristics of global managers nowadays. Because of globalization in the industry and business world, it is not enough for managers working in domestic and cooperating with only domestic co-workers. It is an increasing need for managers to become global managers with a global perspective. For a company to become more global, its leaders must develop competencies that go beyond what is familiar in the home country (Yamaguchi, 1998). Thus, conducting a survey questionnaire with self-perceptual measures answered by graduates of business schools from seven universities with academic-famed, and AACSB accredited or members in Taiwan, the study probed for the training of different business majors with the competencies of global managers. Based on the statistic analyses, several key results were found as the following:

1. Comparing with other business-majored graduates, MBA graduates (includes GMBA/IMBA graduates) have more competency of global business acumen for global managers.
2. Comparing with other business-majored graduates, MBA graduates (includes GMBA/IMBA graduates) have more competency of leadership characteristics for global managers.
3. Comparing with other business-majored graduates, MBA graduates (includes GMBA/IMBA graduates) have more competency of world view for global managers.
4. Comparing with other business-majored graduates, MBA graduates (includes GMBA/IMBA graduates) have more competency of personal leadership for global managers.
5. Comparing with other business-majored graduates, MBA graduates (includes GMBA/IMBA graduates) have more competency of business leadership for global managers.

6. Comparing with other business-majored graduates, GMBA/IMBA graduates have more competency of cross-cultural adjustment for global managers. However, comparing with MBA graduates, GMBA/IMBA graduates have the same competencies of cultural flexibility and experience in foreign countries/culture for global managers. GMBA/IMBA graduates only have more experiences get along with international students.

Therefore, most of initial conjuncture was supported by the statistic result. The first summary result states that the different majors are, in fact, statistically different with the competency of global business acumen. Interestingly, there was no significant different between MBA graduates and GMBA/IMBA graduates, which could be explained that the training of MBA graduates and GMBA/IMBA graduates was almost the same. The design of courses was basically similar. Therefore, both of them should be trained to possess the ability to comprehend the business environment in its totality. On the other hand, other business-majored graduates did not be trained for this kind of competency. The second result shows that the different majors are statistically different with the competency of leadership characteristics. The MBA graduates and GMBA/IMBA graduates had no significant difference in the competency of leadership characteristics. Comparing with other business majors, MBA graduates which includes GMBA/IMBA was better in possessing the competency of leadership characteristics.

The result revealed that the mental and emotional behaviors such as self-assurance, extraversion, and inquisitiveness could be trained or inspired as well as the common set of core value such as integrity, perseverance and desire to learning. The third summary result shows the difference between MBA graduates and other business-majored graduates with the competency of world view. Though, surprisingly, GMBA/IMBA graduates had not significant difference from MBA graduates, both of them were trained to possess the ability to global environment awareness, cultural flexibility, social, political and economic trends, and experiencing other countries/culture well comparing with other business-majored graduates.

The fourth and fifth summary results show the difference between MBA graduates and other business-majored graduates with the competency of personal leadership and business leadership. Similarly as former results, GMBA/IMBA graduates had not significant difference from MBA graduates, but both of them were significantly different from other business-majored graduates. The result suggested that the leadership no matter in personal or in organization could be well-trained through related courses.

The final results suggest that GMBA/IMBA graduates had significantly better competency of cross-cultural adjustment than other business-majored graduates. Comparing to MBA graduates, however, only had partially significant results. Comparing with MBA graduates, GMBA/IMBA graduates have no significant difference with abilities of cultural flexibility and experience in foreign countries/culture for global managers. GMBA/IMBA graduates only have more experiences get along with international students. A possible explanation could be the different environment of study. GMBA/IMBA graduates were from various countries so that they had relatively more chances to co-work and get along with international students. Besides, the required course of internship overseas also increased the possibility to possess the ability to cross-cultural adjustment/ flexibility. However, both of GMBA/IMBA and MBA graduates could be trained the ability to global environment awareness and social, political and economic trends by similar courses.

For the overall global manger's competency, ANOVA results still suggested that GMBA/IMBA and MBA graduates had significantly higher difference from other business-majored graduates.

In summary, this is a study that attempts to measure and understand if MBA graduates could have competencies of global managers better than non-MBA graduates in Taiwan. While the trend of globalization is expanding into the whole world (Galbraith, 2000), MBA education should meet the empirical demand of the globalized enterprises. Therefore, except the training of becoming a managerial role for MBA graduates, MBA education in Taiwan

could provide graduates more cross-cultural environment which makes them adjust the global business world in the future.



5.2 Research Limitation

First, the dimension of variables was limited. This study used Cohen's (2008) study to the competencies of global managers as the foundation and combined with former studies.

However, there might be much more factors which might be considered as variables.

Second, the sample representation might not be completed. This research sent e-mail to each graduate school of business departments. It is not guaranteed that every student can get this survey. Furthermore, business schools in seven national universities in Taiwan were chosen. These seven universities were chosen by their academic fame in Taiwan and the membership or accreditation of AACSB. However, the criteria of choosing sample should create certain bias for the result. Therefore, the result of research could be influenced.

Third, the survey was conducted for MBA graduates by self evaluation. The questionnaire was self-perceptual design. The responses of evaluation might be influenced by self condition such as the self-confidence and individual ability to study. Therefore, the difference between self-examined and real-performed competencies should exist.

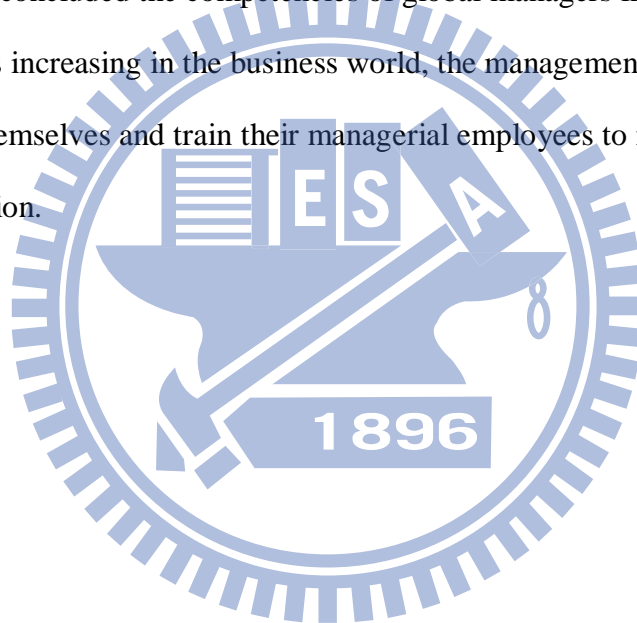
Furthermore, there should be other factors influencing the results. For example, working experience would influence the homogeneity of three majors/programs. Therefore, the exact years of working experiences of respondents should be required instead of the nominal scale for the answering options.

Finally, this study did the research only on what competencies MBA graduates had after the training from schools. The abilities of global managers could be examined by not only MBA graduates themselves. The evaluation from globalized enterprises would increase the representative of this study.

5.3 Implications

This study indicated that MBA graduates in Taiwan possess the competencies which global managers should have. These competencies include global business acumen, leadership characteristics, world view, personal leadership, and business leadership. While the world is changing with globalization, it is more important on the abilities with cross-cultural countries/culture. MBA education not only needs to develop a well-prepared managerial role in the business market but also has to improve the ability to meet the demands in this global market.

This study also concluded the competencies of global managers from academic studies. As the globalization is increasing in the business world, the management team of organizations should examine themselves and train their managerial employees to meet the demand of the trend of globalization.



5.4 Future Research

The competencies of global managers and the demand of global managers will be evolved with the change of business developing trend. The research of competencies of global managers was conducted mainly according to the American international businesses. However, the trend and style of economics and businesses nowadays is changing after decades. Therefore, the future research can do the research updating the global manager' competencies demanded in the new world businesses. Future research can also compare the MBA graduates from different MBA education in other countries and reveal the better training system to improve MBA education. Finally, future research can probe if MBA education could meet the demand of global managers in specific industries which may have different demand for their own managerial roles.



Reference

- Association to Advance Collegiate Schools of Business (2002). Management education at risk. A report from the management education task force. Tampa, FL.
- Association to Advance Collegiate Schools of Business (2006). "Eligibility procedures and accreditation standards for business accreditation." Retrieved July 19, 2010, from <http://www.aacsb.edu/accreditation/business/STANDARDS.pdf>.
- Association to Advance Collegiate Schools of Business (2010). "All Member Schools - ordered by country/region, state, name " Retrieved July 20, 2010, from <https://www.aacsb.net/eweb/DynamicPage.aspx?Site=AACSB&WebKey=CADEF77A-6573-49BB-9BA2-CE21EC93841E>.
- Association to Advance Collegiate Schools of Business (2010). Business School Data Trends and 2010 List of Accredited Schools. Tampa, Florida.
- Adler, N. J. and Bartholomew, S. (1992). "Managing globally competent people." *Academy of Management Executive*, 6(3): 52-65.
- Bailey, J. J. and Dangerfield, B. (2000). "Applying the distinction between market-oriented and customer-led strategic perspectives to business school strategy." *Journal of Education for Business*, 75(3): 183-187.
- Bartlett, C. A. and Ghoshal, S. (1992). "What is a global manager?" *Harvard Business Review*, 70(September/October): 132-150.
- Baruch, Y. and Leeming, A. (2001). "The Added Value of MBA Studies." *Personnel Review*, 30(5): 589-601.
- Baruch, Y. and Peiperl, M. (2000). "The impact of an MBA on graduate careers." *Human Resource Management Journal*, 10(2): 69-90.
- Bennis, W. G. and O'Toole, J. (2005). "How business schools lost their way." *Harvard Business Review*, 83(5): 96-104.
- Brooks, L. M. (2006). Corporate and academic views on the importance of an MBA graduate skill set and the effectiveness of the U.S. master's of business administration curriculum in developing those skills. Lincoln, University of Nebraska. **PhD**.
- Carnall, C. A. (1992). *MBA futures*. Basingstoke, Macmillan.
- Cattell, R. B. (1966). "The scree test for the number of factors." *Multivariate Behavioral Research*, 1: 245-276.
- Chang, S. H. (1997). *Research Method*. Taichung, Taiwan, Tsang Hai.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed method approaches*. Thousand Oaks, CA, Sage.
- Cudd, M. and King, J. O. (1995). "Assessment of the nature and status of the MBA restructuring trend." *Journal of Education for Business*, 71(1): 44-48.
- Friga, P. N., Bettis, R. A., et al. (2003). "Changes in graduate management education and new business school strategies for the 21st Century." *Academy of Management Learning*

- and *Education*, 2(3): 233-249.
- Friga, P. N., Bettis, R. A., et al. (2003). "Changes in graduate management education and new business school strategies for the twenty-first century." *Academy of Management Learning & Education*, 2(3): 233-249.
- Fugate, D. L. and Jefferson, R. W. (2001). "Preparing for globalization: Do we need structural change for our academic programs?" *Journal of Education for Business*, 76(3): 160-166.
- Galbraith, J. R. (2000). *Designing the global corporation*. San Francisco, CA, Jossey-Bass.
- Gamble, P. (1990). Annual Report: 5.
- Global MBA, N. C. T. U. (2009). "Global MBA of National Chiao Tung University." Retrieved May 10, 2010, from <http://gmba.nctu.edu.tw/def/index.php>.
- Global MBA, N. T. U. (2005). "Global MBA of Nationa Taiwan University." Retrieved July 19, 2010, from <http://www.mba.ntu.edu.tw/>.
- Harvard University (2010). "The HBS advantage." Retrieved August 30th, 2010, from <http://www.hbs.edu/mba/hbsadvantage/>.
- Hu, L. and Bentler, P. M. (1999). "Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives." *Structural Equation Modeling*, 6: 1-55.
- Institute of Business and Management, N. C. T. U. (2007). "MBA Curriculum Structure " Retrieved July 19, 2010, from http://web2.cc.nctu.edu.tw/~ibm/mba_course_e.html.
- Kaiser, H. F. (1960). "The application of electronic computer to factor analysis." *Educational Psychology Measurement*, 20: 141-151.
- Kedia, B. L. and Mukherji, A. (1999). "Global managers: Developing a mindset for global competitiveness." *Journal of World Business*, 34(3): 230-251.
- Kellogg Business School (2001). "Global Perspective." Retrieved August 30th, 2010, from http://www.kellogg.northwestern.edu/About/Global_Perspective.aspx.
- Khurana, R., Nohria, N., et al. (2005). "Is Business Management a Profession?" *Working Knowledge of Harvard Business School*.
- Litwin, M. S. (1995). *How to measure survey reliability and validity*. Thousand Oaks, CA, Sage.
- Long, W. J. (2009). Exploring the gap between the MBA education and the business demands. Graduate School of Business Administration. Chung Li, Taiwan, Chung Yuan University. MBA.
- Lucker, A., Bowers, M. R., et al. (1989). "Factors influencing pursuit of the MBA degree; a student and employer perspective." *Journal of Marketing for Higher Education*, 2(2): 87-96.
- Margaret, M. N. (2007). "Assessing college students' satisfaction with their academic majors." *Journal of Career Assessment*, 15(4): 446-462.
- Mellahi, K. (2000). "The teaching of leadership on UK MBA programmes: A critical analysis

- from an international perspective." *The Journal of Management Development*, 19(3/4).
- Ministry of Education, M. O. E. (2010). "Department of Statistics." Retrieved July 28, 2010, from http://www.edu.tw/statistics/content.aspx?site_content_sn=8956.
- Mintzberg, H. (2004). *Managers, Not MBA's*. San Francisco, Berrett-Koehler.
- Morrison, A. J. (2000). "Developing a global leadership model." *Human Resource Management*, 39(2,3): 117.
- Muller, H. J. and Porter, J. (1997). "The invasion of the mind snatchers: The business of business education." *Journal of Education for Business*, 72(3): 164-169.
- Nunnally, J. (1978). *Psychometric theory*. New York.
- Porter, L. W. and McKibbin, L. E. (1988). *Management education and development: drift or thrust into the 21st century*. New York, McGraw-Hill.
- Pritchard, K. H. (1999). "Competency-based leadership for the 21st century." Retrieved July 17, 2010, from <http://www.au.af.mil/au/awc/awcgate/milreview/pritchard.htm>.
- Pucik, V. and Saba, T. (1998). "Selecting and developing the global versus the expatriate manager: a review of the state-of-the-art." *Human Resource Planning*, 21(4): 40-53.
- Ryan, C. (1999). "Trends in business curricula: The view from AACSB." *Business Communication Quarterly*, 62(1): 91-95.
- Stanek, M. B. (2000). "The need for global managers: a business necessity." *Management Decision*, 38(4): 232-242.
- Stephenson, P. M. (2007). Market entry mode and competency building of Western oil companies in the Russian up stream oil and gas industry. H. Wayne Huizenga School of Business and Entrepreneurship. Florida, Nova Southeastern University. **D.B.A.**
- Stewart, A. R. (2005). Comprehensive paper presented in partial fulfillment of the requirement for the degree doctor of philosophy Quantitative research inquiry, Capella University.
- Taylor, W. (1991). "The logic of global business: an interview with ABB's Percy Barnevik." *Harvard Business Review*, 69: 90-106.
- TKB, T. K. B. (2008). "Acceptance rate of graduate schools in business administration and management." Retrieved July 2, 2010, from http://www.daso.com.tw/exam_web/hotdepartment/default.html.
- Wang, H.-C. (2007). Popularity survey of MBA in Taiwan. Common Wealth Magazine. Taiwan: 238-242.
- Yamaguchi, T. (1988). "The challenge of internationalization: Japan's kokusaika." *Academy of Management Executive*, 2(1): 33-36.
- Yamaguchi, T. (1998). "The challenge of internationalization: Japan's kokusaika." *Academy of Management Executive*, 2(1): 33-36.

Appendix 1 Departments of Business and Management as the Sampling

| <i>University</i> | <i>AACSB Member*</i> <i>Accredited**</i> | <i>College</i> | <i>Department/Program</i> |
|---|---|--|--|
| National Chiao Tung University | ** | | Department of Management Science, Institute of Business and Management, Institute of Finance, Institute of Law, Global MBA, EMBA |
| National Taiwan University | ** | College of Management | Department of Business Administration, Department of Finance, Department of International Business, Department of Information Management, Global MBA, Department of Accounting, EMBA |
| National Sun Yat-sen University | ** | College of Management | Department of Business management, International Business MBA, Department of Finance, Department of Information Management |
| National Chengchi University | ** | College of Commerce | Department of Business Administration, Department of Management Information Systems |
| National Central University | * | School of Management | Department of Information Management, Department of Business Administration, Department of Finance, Graduate Institute of Industrial Economics, Graduate Institute of Human Resource Management, Graduate Institute of Industrial Management |
| National Cheng Kung University | * | College of Management | Department of Industrial and Information Management, Department of Transportation and Communication, Department of Business Administration, Department of International Business, Department of Accounting and statistics, Institute of Information Management, Institute of Finance and Banking , Institute of Telecommunications Management, EMBA, International MBA, Advanced MBA |
| National Tsing Hua University | * | College of Technology Management | Institute of Technology Management, Institute of Service Science, Institute of Quantitative Finance, Institute of Finance, EMBA, International MBA |

Appendix 2 The survey questionnaire



Greetings,

My name is Susan Yeh, the student of Global MBA in National Chiao Tung University. I am currently conducting a graduation project for a master in College of Business and Management and Business and this questionnaire is in partial fulfillment of it.

The purpose of this questionnaire is to study the relationship between graduate schools and the global businesses. Your individual response will be kept strictly confidential and will only be used for the purpose of academic research only. Thank you very much for your time and cooperation. We greatly appreciate your help in assisting us with this research.

Please forward this questionnaire to other graduate students if possible.

If you have any question, please contact us by e-mail: susanyyeh@hotmail.com or by cell phone: 0968865526. Thank you!

Yours Sincerely,

Pei-Hwa Chen

Professor of Department of Management Science of National Chiao Tung University

Hsuan Yeh

Student of Global MBA of National Chiao Tung University

您好，

本人為國立交通大學企業管理碩士學程之研究生，正在進行畢業論文之研究。這是一份學術問卷，旨在研究商管學院碩士與全球企業之間的關係。您的寶貴意見將對本研究有重大貢獻，懇請您撥冗填答。此調查結果僅供學術研究之用，絕不作其他用途，請放心填寫。

若您不排斥，希望您能將這份問卷轉發給在學之研究生，以利研究之進行。

若有任何問題請與我連繫：電子郵件：susanyyeh@hotmail.com 手機:0968865526

謝謝您！

指導教授 國立交通大學管理科學系 陳佩樺

研究生 國立交通大學企業管理碩士學程 葉璇 敬上

| Part A - The training of your program | | | | | |
|--|------------------------|---------------|--------------|------------|---------------------|
| Q1. The following is about your global business acumen AFTER THE TRAINING OF YOUR PROGRAM: | | | | | |
| 以下是有關您在科系/系所訓練後的全球企業洞察力： | | | | | |
| 7. I have developed the skills of entrepreneurship. 我培養了創業的技能 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 8. I can read the financial statements (such as income statement, cash flow and balance sheet) of a company. 我可以看懂企業的財務報表 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 9. I have developed the basic knowledge of different industries. 我具備各種產業的基本知識 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 10. I know the importance of the company profit and customer. 我了解客戶與公司利益的重要性 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 11. I have developed professional knowledge/expertise. 我培養了專業知識/技術 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 12. I have confident to hold both global and local perspective. 我能夠將視野從全球拉近至本土、從本土放大到全球 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |

| Q2. The following is about the competency of leadership characteristics AFTER THE TRAINING OF YOUR PROGRAM: 以下是有關您在科系/系所訓練後的領導特質能力： | | | | | |
|---|---------------------------|---------------|--------------|------------|------------------------|
| 1. I become more curious in life. 我比以前更充滿好奇心 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly Agree |
| 2. The training of my program inspires me to keep learning. 系所的訓練激發我要不斷學習 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 3. I know the importance of honesty and reliability. 我了解誠實與可靠的重要性 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 4. The training of my program let me know the importance of keeping moving toward my goals without quitting. 我知道堅持目標且不放棄的重要 性 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 5. I become a more outgoing person. 我變得比較外向 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 6. I feel comfortable facing changes in life. 我可以坦然面對生命中的改變 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 7. I try to understand other people's viewpoints. 我試著去了解別人的觀點 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 8. I will live up to my personal standards. 我會遵守個人的原則標準 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |

Q3. The following is about the competency of world view AFTER THE TRAINING OF YOUR PROGRAM:

以下是有關您在科系/系所訓練後的世界觀能力：

| | | | | | |
|--|------------------------|---------------|--------------|------------|---------------------|
| 1. I know the global environment, especially in business world. 我了解全球商業環境 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 2. I become easier to adapt diverse cultures. 我變得比較容易接受多樣的文化 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 3. My program encourages me to experiment with different customs. 我們的訓練鼓勵我們去嘗試不同的文化習俗 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 4. I always notice the news of world trends. 我總是會注意世界脈動的新聞 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |

Q4. The following is about the competency of people leadership AFTER THE TRAINING OF YOUR PROGRAM:

以下是有關您在科系/系所訓練後的個人領導力：

| | | | | | |
|--|------------------------|---------------|--------------|------------|---------------------|
| 1. I am more willing to inspire people. 我變得更願意去激勵別人 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 2. I have improved my communication skills. 我的溝通技巧有進步 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 3. I know how to make friends and build relationships with others efficiently. 我學會如何結交朋友並且有效地建立關係 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 4. I become more capable of coping with stress. 我有能力處理緊繃的壓力 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 5. I try to listen to people sincerely. 我會真誠地聆聽別人說話 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |

Q5. The following is about the competency of business leadership AFTER THE TRAINING OF YOUR PROGRAM :

以下是有關您在科系/系所訓練後的企業領導力：

| | | | | | |
|--|------------------------|---------------|--------------|------------|---------------------|
| 1. I am able to manage multiple tasks at the same time. 我可以同時處理許多不同的任務 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 2. I know how to manage my time more effectively. 我知道如何更有效地運用時間 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 3. I know how to allocate resources more efficiently. 我知道如何更有效地運用資源 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 4. I try to find a win-win solution while negotiation. 我盡可能在協商討論時，尋求雙贏的解決方案 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 5. I can handle the change in my work or study with flexibility. 我可以靈活應對工作或學習上的改變 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 6. I know how to make decisions strategically. 我知道如何有策略地作決定 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |
| 7. I know how to solve a problem systematically. 我知道如何有系統地解決問題 | 1 Strongly disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly agree |

PART B

This part is about individual background.

1. Gender性別:

1. Male男 2. Female女.....

2. Age年齡:

1. less than 20 years.....
2. 20-29 years.....
3. 30-39 years.....
4. 40-49 years
5. 50-59 years

3. Your program:

1. Global MBA/ International MBA國際企業管理碩士學程
2. MBA (Except GMBA/IMBA)企業管理碩士
3. Other Business Commerce (Finance, Insurance, Accounting, Statistic, Risk Management, Intellectual Property, etc.) 其他商學類 (如財務、保險、會計、統計、風險管理、智慧財產權.....等等)
4. Other Social Sciences社會科學類
5. Art and Literature藝術與文學類
6. Engineering/ Technology工程/科技類
7. Natural Sciences 自然科學類
8. Others其他 _____

4. How many courses do you usually have to do a project with students/people from different countries in your program/department per semester

在一個學期內，您通常有幾門課程需要與外國學生一起討論報告或專題？

1. 0-1
2. 2-3
3. more than 3 超過3門課

5. How many times do you usually join activities with international classmates/students per month?

您平均一個月內會參加幾次外國學生的活動或聚會？

1. 0
2. 1-2
3. More than 3 超過3次

6. How many years of working experiences do you have before enrolling into this school?

您在進入這個學校前，有幾年的工作經驗？

1. No working experience 無工作經驗
2. Under 2 years 少於2年
3. 2~4 years 2~4年
4. More than 5 years 超過5年

7. How many languages do you speak except your mother tongue?

除了您的母語，您會說幾種語言？

1. 1
2. 2
3. More than 3

8. Are you a Taiwanese?

請問您是台灣人嗎？

1. Yes 是
2. No 否

9. If you are not a Taiwanese, where do you come from?

若不是台灣人，請問您來自哪裡？

1. North America 北美洲
2. South America 南美洲
3. Eastern Europe 東歐
4. Western Europe 西歐
5. Northern Europe 北歐
6. Southern Europe 南歐
7. Oceania 太平洋群島、紐澳
8. Africa 非洲
9. Eastern Asia 東亞
10. South-eastern Asia 東南亞
11. South-central Asia 中南亞
12. Western Asia 西亞

