

Human Resource Development
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Why an MBA?

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This thesis is dedicated to all the children in the world who suffer from reasons beyond their control.

May all the children in the world be provided with plenty of opportunities to have education and guidance to be able to cultivate their future which is full of possibilities and prosperity without any fear, violence or limitation.

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Summary

In this study we have mainly investigated the effectiveness of Master of Business Administration (MBA) on job related income in Japan and compared it with that of the US. In addition, we have also examined impact of MBA intervention on other job outcomes such as employability, job satisfaction, confidence in knowledge and skills, career growth and status. We have collected and used a total of 86 survey questionnaire responses (36 MBA holders and 50 people without MBA) from Japan, the US and some other countries. In addition, we have collected responses from 22 people in supervisory roles at work about their view on differences in performance between MBA holders and people without MBA at work. They provided us with their perspectives on financial benefit, business related knowledge and career growth.

Our interest in the effectiveness of MBA stems from the fact that despite many severe criticisms on its quality and ability to prepare individuals for a successful career, it has kept attracting people worldwide. In the past 30 years, many researchers have studied the impact of MBA on financial benefit with positive empirical evidence in the US and Europe, but there were very few studies conducted in the Japanese business context. In addition to financial benefit, employability and career growth were also focus of many other studies. However, very few studies were conducted to measure the impact of MBA on other job related outcomes such as job satisfaction, confidence in knowledge and skills, and status related decision making autonomy and therefore, in addition to financial benefit, we have also decided to focus on those too.

We started with the hypotheses that MBA has positive impact on all the job related outcome variables discussed above. After statistically controlling for the influence of other independent variables such as brand of MBA, gender, country, work experience, previous education and previous business education, results from the linear regression analysis showed that MBA had negative impact on employability and only MBA from the top 100 business school had positive impact on financial benefit and employability in Japan. Moreover, in the US only top 100 MBA positively influenced financial benefit and employability. In addition to financial benefit and employability, top 100 MBA had positive impact on status for the total sample including Japan and the US. Questionnaire responses from the superiors were qualitatively analyzed and they supported MBA's impact on financial benefit and showed MBA's minimal impact on business related knowledge or career growth.

It is important to recognize the fact that this study has several limitations due to sample size and validity and reliability of the research instrument. In future studies, we will scan the literature and develop a list of most important job related tangible and intangible outcomes and use this list to determine major dependent variables. In addition to MBA, other possible independent variables to improve validity will be considered. The model will be elaborated by introducing important mediating variables. The role of individual difference in moderating the relationship between MBA and job outcomes will be the focus in the future study.

Summary in Japanese

要旨

経営学修士号（MBA: Master of Business Administration）に対して批判と支持が交錯しているにもかかわらず世界中では多くの人々が経営学修士号を目指している。この経営学修士号の賛否を明らかにするために、アメリカとヨーロッパでは経営学修士号の仕事に齎す効果についての研究が多く存在している。その結果、これらの地域においては一般に個人の収入に利益を齎すということが分かった。一方、日本における経営学修士号の効果を検証した研究の数は少ない。また、その研究対象の多くは、雇用能力やキャリア成長であり、実際に注目されるべき職業に対する満足度、知識や能力に対する自信や地位における経営学修士号の効果について検証した研究は殆ど存在しない。

このような背景から、本プロジェクトにおいては日本社会における経営学修士号の収入への効果を研究し、アメリカにおけるその効果との違いを検証した。さらに、従来の雇用能力やキャリア成長に関してだけでなく、職業に対する満足度、知識と能力に対する自信や、地位における経営学修士号の効果を日本、アメリカとその他の国を対象に検証した。ここでは、合計86名（経営学修士号保持者：36名、経営学修士号非保持者：50名）から調査票を回収し、さらに、上司として職業に従事する22名からの調査票についても回収した。これにより、収入、ビジネスに関する知識、そしてキャリア成長における経営学修士号保持者と経営学修士号非保持者間の相違について客観的意見を求めた。

ここで、経営学修士号が個人の仕事による収入、雇用能力、職業に対する満足度、知識と能力に対する自信、キャリア成長、そして地位に対して利益を齎すと仮定し、日本、アメリカおよび全体の標本について重回帰分析を行った。独立変数としては、経営学修士号を取得した大学、性別、就業している国、職歴、学歴、そして過去における経営学履修経験を考慮にいたした分析を行った。日本では経営学修士号は雇用能力に対して負の影響があり、世界ランキングで100以上の経営学修士号には収入と雇用能力に対して正の影響があることが分かった。さらにアメリカでは、トップ100の経営学修士号だけが明らかに収入と雇用能力に正の影響を与えていることがわかった。また、経営学修士号保持者には、どこの国でも収入と雇用能力だけでなく地位に対しても正の影響があることも分かった。経営学修士号保持者の上司へのアンケートの分析の結果、上司は経営学修士号保持者の収入への正の影響をサポートし、業務の知識やキャリアの成長に対しては影響がないことを示した。

本プロジェクトでは標本数の問題から結果の信憑性と研究手段の信頼性において制限があった。将来の研究では、個人の性格の相違に焦点を当て、経営学修士号と仕事における個人の利益との因果関係を調べる。その際には、本研究の制限を最小限に留めるため、個人の利益を表すための従属変数や独立変数の決定に十分な注意を払うことと、アンケート項目数を増やし内容の十分な吟味を行う。また、標本の規模を拡大することで結果の信憑性を高めていきたい。

なお、この論文はオランダのトゥエンテ大学、行動科学と応用科学、人材開発専攻における修士課程の一環として実施したプロジェクトの成果であり、アメリカのテキサス大学ダラス校マネジメントスクールならびに東京の株式会社みのり経営研究所との共同研究の一環として行われた。

Chapter1 Introduction

1.1. Introduction

MBA (Master of Business Administration), after its introduction in 1900s, has been one of the fastest growing and popular streams of study. There are ongoing discussions in the popular press and in scholarly journals about its usefulness and value to students, business and society. The main reason for this interest comes from the fact that today more than 200,000 MBA degrees are awarded world wide every year (Lorenzi, 2004), and only in the US alone, about 121,000 MBAs were awarded in 2002 (Ewers, 2005). Moreover, MBA represented 24 percent of all master's degrees awarded in the USA in 1998 (Lorenzi, 2004) and now it has become one of the most popular graduate degrees in the world (Lorenzi, 2004). Many of business and political leaders, both successful and ineffective, are the products of business schools. For example, Jeff Immelt, the ninth CEO of GE, Frank Lorenzo, CEO of Continental Airlines, James Robinson, CEO of American Express and George W. Bush, the current President of the United States hold MBA degrees from reputed business schools and their effectiveness in their roles is not only affecting the organizations they are in but also the society as a whole.

In a 2003 report, Ministry of Education, Culture, Sports, Science and Technology of Japan noted that in 1999, 456,984 master's degrees were awarded in the US, in that, 164,373 were for Law, Business some other combined, 47,467 were in Liberal Arts including Literatures and Humanities and Fine Arts, 14,451 in Science, and 45,490 in Engineering. MBA is not an inexpensive program of study. In the US students spend anywhere between \$78,000 at Harvard or Dartmouth to less than \$15,000 for a two year MBA program, this includes only the tuition and fees (*Business Week*, 2005). In the UK, for a two-year MBA program, students spend between £27,000 and £41,400 this includes program tuition, fees and living expense (Coomber, 2005). When we add one's opportunity cost to the above amounts, it will turnout to be a significant investment.

The focus of this study is on the influence of MBA education on financial benefit in Japanese business context, Japan being a newly emerging MBA market and also very few studies have focused on the impact of MBA education in Japan. There are several empirical studies on the impact of MBA in the US, the place where MBA education originally started and evolved to the current state, showing a positive causal relationship between MBA and job related income. Even though there are many studies on the impact of MBA on financial benefit, employability, career growth and career change, there are very few studies on the impact of MBA on other possible job related outcomes such as job satisfaction, confidence in business related knowledge and skills and status related to decision making autonomy. Therefore, in addition to financial benefit, we have also studied other job related outcomes such as job satisfaction, confidence in business related knowledge and status (decision making autonomy and independence). In this study, in addition to the outcome variables described above, we have included

employability and career growth because we think they were also important job outcomes which could be influenced by MBA.

1.2. History and evolution of MBA

On January 19th 1900, Dartmouth College Trustees authorized establishment of the Amos Tuck School of Administration and Finance. This was the beginning of graduate education in business (Friga, Bettis & Sullivan, 2003). At Amos Tuck School, initially the graduate degree was called MCS (Master of Commercial Science) and in 1953 its name was changed to MBA. An undergraduate business school was established even before Amos Tuck School at Dartmouth. In 1881 University of Pennsylvania founded the Wharton School for undergraduates, world's first collegiate business school. Harvard University started its business school only during 1908 and it is the first programme called which called the degree MBA (Mintzberg, 2005). These pioneering schools and their followers modelled their MBA curriculum after the standard American two-year graduate program and most students enrolled straight after a first degree. Some had work experience and some did not. This model was rapidly accepted and adopted quickly throughout the US and other countries. In the first 50 years of MBA education, most professors in business schools were practicing or retired managers from nearby corporations and their focus in the class was mainly on sharing their experience from the workplace and programs were highly practice oriented (Friga, Bettis, & Sullivan, 2003). During this time, students in the US generally attended a business school close to their home and workplace (Schlossman, Sedlac, & Wechsler, 1998) and studying and understanding local business issues were a priority.

MBA education went well till early 1950s until several reports on graduate education criticized it for lack research focus and academic rigor (Schlossman, Sedlac, & Wechsler, 1998). Two critical reports, by the Carnegie and Ford Foundations, were published during this period condemning American graduate business education as little more than trade schools filled with second-rate students taught by second-rate professors who did not have any theoretical or research background in the fields in which they were teaching (Leavitt, 2004). By 1958, business schools responded quickly by changing their curriculum and emphasizing faculty research in line with engineering and science schools (Schlossman, Sedlac, & Wechsler, 1998). This move resulted in raising student admission and faculty hiring standards.

During 1970s, Carnegie Commission recommended drastic changes in higher education (Rowley, Lujan, & Dolence, 1998; Wheeler, 1998). One of their concerns was students' lack of preparation for entrepreneurial careers (Schlossman, Sedlac, & Wechsler, 1998). Business schools responded to this quickly and started to modifying class contents to include more subjects to develop soft skills such as organizational behaviour, leadership and entrepreneurship in their curriculum. Although business schools have gone through changes in their focus and curriculum, teaching methods and overall structure of MBA programs changed little and business schools generally maintained research based

approach (Friga, Bettis, & Sullivan, 2003). Business school ranking systems was introduced by the media in 1988 (Schmotter, 1998; Segev, Raveh, & Farjoun, 1999). It pushed business schools to make more changes and make difference from other business schools (Friga, Bettis, & Sullivan, 2003). Also due to extensive media coverage the popularity of MBA rose in the US during 1980s, this has also triggered business schools' efforts to look for new markets in outside the US (Friga, Bettis, & Sullivan, 2003). The overall result of these changes is now famous sought after US style MBA program that is being increasingly adopted worldwide.

According to the Association to Advance Collegiate Schools of Business¹ (AACSB), within the past 100 years, hundreds of universities worldwide started offering MBA degrees, in the US alone there are about 450 AACSB accredited business schools. Countries like Japan and Germany are relatively latecomers to the field. All over the world, the population of MBA candidates grew in a great deal. By the fall 2000, in the USA alone, out of 1400 accredited colleges and universities, there are 900 universities offering a master's degree in business (Leonhardt, 2000). According to a report published in *Economist* (2004), in the past 10 to 15 years, business education boomed in Europe, a places where it hardly existed before 1980s, though some of the top-ranked business schools such as London Business School in the UK and INSEAD in France and Singapore started MBA already in 1960s. Business education has widely spread in the UK, throughout Asia and continental Europe from the early 1980s to late 1990s (Pfeffer & Fong, 2002). In the UK, enrolment on MBA courses grew by 35% between 1995 and 2000 (Pfeffer & Fong, 2002). According to Prof. Sugita of Konan University, Japan, China started MBA education in 1991 with 9 universities and the number of university providing MBA became 65 in 2002. He reported that the number of application for MBA in China grew from 23,000 in 1992 to more than 50,000 in 2002 while it was possible to admit only 8,000 of them. Among these universities, about 20 have MBA programs with American partners, and more than 40 run by Chinese universities alone (Roberts & Li, 2002; *Economist*, 2004). In Russia and central and Eastern Europe, more than 1,000 new business schools were started from 1990 to 1997 (Bollag, 1997). Even though MBA was popular among Japanese business circles, the government allowed Japanese universities to have accredited business schools only in April, 2000 (MBA MART, 2005). There are about 10 to 15 accredited business schools in Japan and some foreign universities also provide MBA programs, which are not accredited by the Japanese government.

Regular full time MBA programs are one of the many graduate level programs offered by business schools. Many schools offer part-time MBA programs, online MBA programs and executive MBA programs, mostly offered in the weekends. The entrance requirements vary with the type of program and the prestige of the school. The ones offering executive education to experienced managers are some times willing to consider candidates without the typical academic prerequisites.

¹ A not-for-profit corporation of educational institutions, corporations and other organizations devoted to the promotion and improvement of higher education in business administration and management (AACSB International Web site, 2005)

MBA has become overly popular in the last four decades and applications were piling up in college admission's offices in the US (Byrne, 1993). Taking it for granted, business schools routinely increased tuition and fees and those universities which did not have an MBA program, even created one for the extra revenue (Byrne, 1993). While, according to William Broesamle, president of the Graduate Management Admissions Council (GMAC), the number of people who want to enter a business school and are willing to take Graduate Management Admission Test² (GMAT) has been falling since 1991 and there would be 20% decline in interest in MBA programs in a two-year period, and it is said that the promise of a business school education has relevance today as ever. Although the MBA growth was slow in 1990s, it still remains as modern-day symbol of business success (Byrne, 1993).

1.3. Expectations of MBA seekers

GMAC found in their study in 2003 that the major motivation to enter a business school is to remain competitive in the business world. They want to develop management knowledge and technical skills, improve long-term income and get financial stability and gain the professional credentials needed for career advancement. The research also shows that people who apply for a business school generally believe that a MBA is what they need to achieve their career goals, and that they are able to finance a degree or will reap a return on their investment even if financing the degree is difficult. People who apply for MBA program have a tendency to be confident, realistic and ready for a challenge. It also reports that when students feel increase in earning power, preparation to get a good job, personal improvement, earning of the credentials they wanted, and development of management knowledge and skill, they will rate the value of their MBA high.

1.4. MBA today: relevance in the business world?

While it is controversial whether it is worthwhile to attend a business school, a large number of MBA graduates from top universities in the USA describe studying for an MBA as very useful (Byrne, 1993). They will meet new people, share experiences, and discover new horizons and careers they never knew existed. MBA also gives them confidence and maturity they never had before (Byrne, 1993). According to Robert K. Jaedicke, a former dean of Stanford University's Business School, MBA has been seen as a passport to be successful in the business world in the USA (Byrne, 1993). It made many of those who did not have an MBA feel disadvantaged at work and feel they needed some business education to be successful in the business world. However, this "passport" has also become frustrating dead end for many people because they put too much hope, expectations and dreams on a piece of certificate. On one hand, MBA is required for advancement in many business positions (Senechal, 2004). For example, investment banking and management firms hire a large number of MBA graduates every year to put them into "associate" level. Those without an MBA, in this case, will not easily get promoted. Senechal (2004), an editor of Vault Career Library, writes that "*at major*

² Standardized assessment test that helps business schools assess the qualifications of applicants for advanced study in business and management (GMAC Web site, 2005)

consumer products companies like Procter & Gamble, Kraft and Colgate Palmolive, MBA graduates are hired as 'assistant brand managers' into the brand management department; those without an MBA are generally not eligible for the department." On the other hand, Arnoud De Meyer (2002), the associate dean of the MBA program at INSEAD, the European Institute of Business Administration in Fontainebleau in France, says that *"The MBA is not a magic wand that transforms inexperienced and immature undergraduates into licensed managers"* and continues that *"I have never met a company recruiter who hired MBAs. They hire people with high potential"* (Mintzberg, 2005). Moreover, there is such argument that there have been fewer job opportunities for business school graduates recent years and their declining salaries (Connolly, 2003). Pfeffer and Fong (2002) say that *"When we examine the actual effects of business schools on the two outcomes of most relevance and importance, the careers of their graduates and the knowledge they produce, the picture is reasonably bleak. There is little evidence that mastery of the knowledge acquired in business schools enhances people's careers, or that even attaining the MBA credential itself has much effect on graduates' salaries or career attainment."* The purpose of earning an MBA degree itself has come into question.

Back in 1960s, Peter Drucker observed that the corporation was the first social institution to learn how to bring together a diversity of knowledge in a common effort to pursue a coordinated series of goals (Porter & McKibbin, 1988). After four decades since the statement was made, we are facing this perspective to be growing bigger and bigger. All kinds of business require employees to have both deep knowledge in business expertise and practical skills in order to apply these knowledge to satisfy the demands of the fast growing society (Porter & McKibbin, 1988).

It is important to mention that what business schools have been doing was not wrong, but it is no longer enough (Tyson, 2005). They must move their focus toward furnishing students with skills and attributes to become future executives. MBA education must become more action-oriented, and at the same time it must find ways to nurture integrity, judgment, intuition, and other essential leadership attributes (Tyson, 2005). Above all, business schools must train their students the power to think, decide, and act efficiently and innovatively in an unpredictable global business environment while the reality of workplace is now much more diverse than ever (Tyson, 2005). In this situation, they emphasize increasing focus on helping students learn how to learn and there is significantly more utilization of team problem solving in business schools. The beauty of what is happening in business schools today is that they are trying to clearly reflect what is going on in today's real business world and put much greater emphasis on team problem solving (Lewicki, 2005), which can be crucial to any business issues.

Despite many criticisms from variety of people and organizations, people still attend a business school from around the world wanting to learn effective management, marketing, leadership etc. This fact shows the value in business education and it will grow even more in this global economy (Lorenzi, 2004).

1.5. Still, why an MBA?

We have scanned the scientific and popular literature on business education to get a convincing answer to the above question, why an MBA? We were also interested to find answers to many more related questions such as whether MBA is equally effective in other countries and cultures other than the US. In Japan, it is popular and prestigious to obtain an MBA degree from a famous US or European business school and most Japanese MBA students are sponsored by companies and used as a formal training program for their high potential employees. Although there is much research on effectiveness of MBA programs based on salary increase and career development after obtaining an MBA in the US, the UK and Europe, there is very little research available in Japanese business context (Baruch & Leeming, 2001; Baruch, Bell & Gray, 2005; Pfeffer & Fong, 2002; Connolly, 2003).

Most previous research on the effectiveness of MBA is about financial benefit (Connolly, 2003). Most of these publications argue based on empirical evidence that people earn more job related income after completing an MBA degree (Connolly, 2003). None of this research is successful in unequivocally proving the causal connection between MBA and financial benefit. This is mainly because of methodological difficulties and also difficulties in separating effects like in general only highly motivated people pursue higher education. Highly motivated people could end up in high job related income even without an MBA (Pfeffer & Fong, 2002). Considering the preliminary nature of our study, we did not have the resources to overcome this methodological difficulty to clearly study the causal relationship between MBA and financial benefit. Instead we have studied financial benefit as the main dependent variable in the conventional way.

Most researchers studying effectiveness of MBA focused on, other than financial benefits, employability, potential for career growth and business related knowledge and skills (Baruch & Leeming, 2001; Baruch, Bell & Gray, 2005; Pfeffer & Fong, 2002). None of these studies attempted to compare job related outcomes between MBA holders and people without MBA in Japan and the US. Also no studies dealt with impact of MBA on important job related outcomes like job satisfaction, decision making autonomy and feeling of independence at work (Baruch & Leeming, 2001; Baruch, Bell & Gray, 2005; Pfeffer & Fong, 2002). In a very recent paper, Wolniak and Pascarella (2005) showed the importance of college major on job satisfaction. Also very few studies have investigated the relationship between MBA and confidence in business related knowledge and skills at work (Baruch & Leeming, 2001; Baruch, Bell & Gray, 2005; Pfeffer & Fong, 2002).

In this study, in addition to financial benefit, we evaluate job related outcomes such as employability, job satisfaction, confidence in business related knowledge, status related to decision making autonomy at work between MBA holders and people without MBA. We will also examine the differences in the outcomes between Japan and the US.

We believe that this study will be beneficial for potential MBA students, employers including sponsoring organizations and business schools. It will enhance our understanding of the role of MBA and how an MBA will contribute to an individual's career development. We hope that this study will help those who are planning to attend a business school, one of the most important decisions for their self-development. It will also help those who are involved in MBA education, professors, deans and other policy makers to improve their programs. And above all, our research will help the society as a whole by helping improve educational policy decision making process.

Chapter 2 Conceptual Framework and Research Questions

2.1. Introduction

In chapter 1 we have introduced the history and evolution of MBA education. Based on the available literature, we have shown in chapter 1 that MBA has become one of the most popular fields of study. It is important to note that potential MBA degree seekers could have a wide variety of backgrounds with respect to age, education, duration and type of work experience, gender, ethnicity and academic/scholarly orientation (knowledge). Also there are many different types MBA programs such as full-time, part-time, executive, distance learning etc. Above all the different universities and business schools offer programs with differences in content and the way it is taught. Fig.2.1 summarizes general attributes of MBA seekers, MBA programs and MBA providers. In Fig.2.1, the attributes listed under tangible are the ones easily amenable measurement and quantification. The ones listed under intangible are difficult to quantify and measure. From Fig.2.1, it is also clear that there could be several permutations and combinations with respect to the background of MBA seekers, types of MBA programs and the attributes of MBA providers. In other words, practically, MBA graduates would rarely represent a homogeneous population. Likewise their expectations from an MBA degree could also be very much different from one another. Fig.2.2 lists potential benefits for different stakeholders involved in MBA intervention. Please note that, for the sake of simplicity, we have not included government and other social actors in our stakeholder list. Among the stakeholders, MBA seekers and organizations employing MBA graduates are considered consumers of MBA programs and the business schools, program providers, are considered as the service providers.

We have grouped potential benefits for the stakeholders into two groups, direct and indirect. In this case direct benefits are defined as those benefits which could be realized with fewer contingencies but indirect benefits are relatively more dependent on several contingent factors. For example let us take career growth, one of the individual indirect benefits. Realization of improved career growth depends on many factors including prevailing economic conditions, employer policies, industry etc. However, if we consider knowledge or network, two of the individual direct benefits, one would expect that most MBA graduates will come out of the program with improved knowledge and network irrespective of the nature of external contingencies. The purpose of this study is to understand to what extent MBA intervention help individuals achieve some of the expected benefits. In order to study this, we have developed an integrated causal framework connecting MBA intervention to outcomes concerning individuals.

Figure 2.1 Characteristics of Individual (MBA-seeker), Program (MBA-program) and the Business School (MBA-provider)

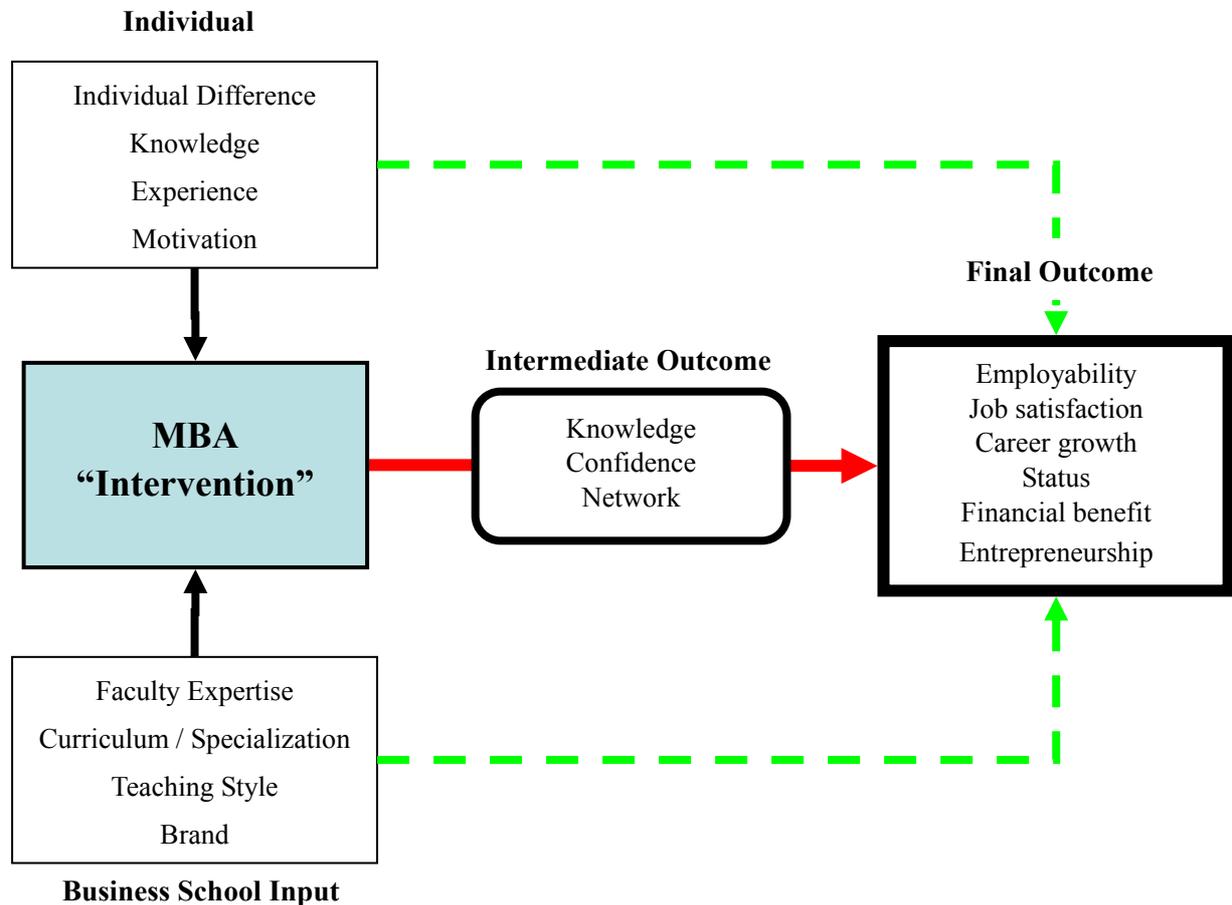
	Tangible	Intangible
Individual	Age Education Gender Experience (Duration) Experience (position/responsibility) Experience (industry type) Ethnicity / Nationality	Individual Difference Knowledge Experience Motivation
Program	Full-time Part-time Executive In-company Distance Learning Global (geographically distributed) Specializations	Curriculum Structure Teaching Style
Business School	Size Age Faculty Expertise Location	Brand

Figure 2.2 Potential Benefits for the Stakeholders: Individuals (MBA-seeker), Employers (MBA-user) and Business Schools (MBA-provider)

	Direct	Indirect	
Individual	Knowledge Network	Higher Salary Career Growth Career Change Employability Status	Consumer
Employers	Business / Management Knowledge Connection with the B. School	Higher Org. Performance Higher Revenue / Profit	
Business School	Revenue Research Contribution	Teaching Experience Brand Building Opportunity	Service Provider

Fig. 2.3 gives a framework showing the causal relationship between MBA intervention and outcomes for individuals. There is only one independent variable, that being MBA intervention. There could be as many independent variables as one could define. We have listed three intermediate outcome variables and six final outcome variables. Other variables listed under individual input and business school input could act as moderating and/or mediating variables. From Fig. 2.3, we can clearly see that there are several factors influencing the final outcomes of MBA intervention. In addition to new knowledge and skills, one will gain confidence in knowledge and skills as they experience education in a business school as intermediate outcomes. Opportunity to network is also an essential factor of intermediate outcome in this study. We can see that the brand of the business school can be a factor which may contribute to the final outcomes. When considering the process of MBA intervention there are at least three different kinds of interactions involved. These are namely the student-teacher, student-student and student-course content interaction. The effectiveness and quality of these interactions depend on the knowledge, experience and motivation of individuals, teachers and fellow students. As far as the motivation, knowledge in the subject matter and expertise in teaching are concerned, in addition to individual teacher's personality and personal preferences, policy of the business school with respect to performance evaluation and reward system is a major contributing factor. Another factor which will have a great impact on the MBA intervention is the teaching philosophy of the business school, some schools are heavily case based and some others follow a mixed approach of other methods such as lecture, game and simulation.

Figure 2.3 Model showing the relationship between MBA intervention, intermediate outcome and final outcome



2.2. Research Questions

The key research questions of this study are:

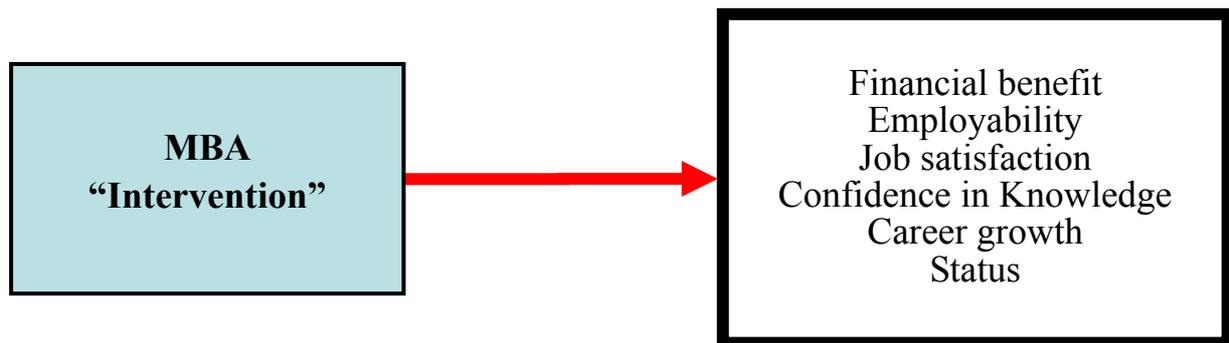
How does an MBA degree impact one's job related income in Japan?

Is it different from that of the US?

In addition, what influence an MBA degree has on one's career with respect to employability, job satisfaction, confidence in business related knowledge and skills, career growth and status?

Based on our research question we have decided to trim down our model (given in Fig.2.3) to a simple one representing our research question. It is shown in Fig.2.4.

Figure 2.4 Simplified causal model



2.3. Hypotheses

Based on the model given in Fig.2.4, we have developed hypotheses on the effectiveness of MBA for the selected variables such as financial benefit, employability, job satisfaction, confidence in knowledge and skills, career growth and status.

2.3.1. Financial benefit

According to the Corporate Recruiters Survey by GMAC (2005), the estimated average starting annual salary for MBA graduates in 2005 is US \$78,040 in the USA and the estimated starting annual salary for MBA graduates in 2002 was US \$72,021, US \$73,859 in 2003, US \$77,066 in 2004.

The survey reports that in 2005 the estimated total compensation package for a MBA recruit is US \$96,657 including annual salary and additional compensation. 84% of the respondents companies offer a benefit package as a part of their additional compensation, 61% of the companies offer a moving allowance and 56% offer a performance based bonus.

The estimated starting salary for MBA differs significantly depending on the size of organizations. In 2005, it estimated as US \$73,191 in organizations with fewer than 500 employees, US \$79,546 in organizations with 500-9,999 employees and US \$80,499 in organizations with more than 10,000 employees. The report notes that the effective salary difference between small and large organizations may not be significant when the total compensation is considered.

According to the *U.S. News & World Report* issued in April 2005, the actual average starting salary of MBA graduates is US \$77,000 in the US and people at pre-business school stage earn US \$50,000 (Ewers, 2005). It shows US \$27,000 difference between MBA graduates and people without MBA in their starting salaries. We can see that the actual amount is almost similar to the estimated average starting annual salary stated above, which shows relevancy between the estimation and the actual situation. In addition, *Business Week* (2002) found salary improvements of MBA graduates after they

complete an MBA program (Baruch, Bell & Gray, 2005). In addition, many other research findings also support the fact that MBA intervention increases salary of the graduates. (*Business Week*, 2002; Hegarty, 1996; Schofield, 1996). MBA not only helps improve income of those graduated from the leading US business schools but also gives significant income improvement on graduates from lower prestige business schools (Baruch & Peiperl, 2000). Forrester (1986) research, using data from London Business School graduates, showed clear increase in income between post-MBA and pre-MBA in the ranging of 24 to 45%. In summary, there is enough evidence to support that MBA graduates from a number of business schools improve their income after the program (*Business Week*, 2002; Hegarty, 1996; Judge et al., 1995; Schofield, 1996).

There are several research findings in the areas of vocational behavior, economics and education showing the direct relationship between higher education and financial benefit (Grubb, 1992; Rumberger & Thomas, 1993; Thomas, 2000 & 2003). Some other studies directly point to the relevance of majoring in quantitative subjects like business and engineering in gaining higher income jobs (Rumberger & Thomas, 1993; Thomas, 2000, 2003).

There are also other research findings indicating the irrelevance of MBA intervention on salaries. A study, conducted with the graduates of University of California, Berkeley and schools in the Midwest in the US, found very little relationship between MBA and current salaries for people from upper middle class or higher socioeconomic backgrounds (Dreher, Dougherty, & Whitely, 1985; Pfeffer, 1977). At the same time Pfeffer (1977) found a positive relationship between starting salary and MBA intervention irrespective of socioeconomic origin. But noted a positive relationship was found with current salary only in the case of those who are not coming from upper-middle and upper class backgrounds (Pfeffer, 1977). Dreher, Thomas & Whitely (1985) tested the generalizability of findings reported by Pfeffer (1977) and found that MBA graduates receive higher starting salary irrespective of socioeconomic origin (Dreher, Thomas & Whitely, 1985).

Hypothesis 1 - Financial benefit:

MBA degree will help graduates earn higher salary compared to people without an MBA.

2.3.2. Employability

A degree in any subject is a signal to the prospective employer that the holder can perform a certain job better than others who do not possess a similar qualification. In fact one could argue that a degree is only a noisy signal to the prospective employers because the ability of an individual to perform depends, in addition to the education, on many other moderating factors such as intelligence, self-efficacy, etc. However, it is a general belief that a degree will improve the employability of graduates holding that degree.

Even though, as noted before in chapter 1, the number of business schools offering MBA degree was

rapidly growing in the last 20 years, the demand for MBA graduates are falling (Pfeffer & Fong, 2002). The *Economist* (1996) reported that “In Britain, the demand for MBA graduates has fallen by a fifth since 1991.” An article published in the *Economist* (1996) also mentioned that more MBA graduates and about the same or lower demand would minimize the advantage MBA graduates enjoyed with respect to ease of finding a job. Furthermore jobs in business management are not restricted to only those who graduated from business schools unlike other professions such as law, medicine, accounting, architecture and some types of engineering (Pfeffer & Fong, 2002). Anybody who wishes to work, for example, as a business consultant to enter the profession even without any business credentials (Pfeffer & Fong, 2002). Moreover there are a large number of successful companies in the world without many MBA graduates working for them (Ewers, 2005).

However, many researchers argue that better job opportunity is one of most important reasons why people go for an MBA degree (Baruch, Bell & Gray, 2005). Hawksley states that “the most recognized reason to pursue an MBA is to improve job opportunities” (Hawksley, 1996). A survey conducted in the US and the UK in the late 1990s concluded that there was a significant improvement in MBA graduates’ ability to have better career growth and higher position in the corporate hierarchy (Baruch & Peiperl, 2000; Dreher & Chargois, 1998; Judge et al., 1995; Schofield, 1996).

Hypothesis 2– Employability:

It is easier for MBA graduates to find a suitable job or to change their employer than those who do not have an MBA.

2.3.3. Job satisfaction

In this study job satisfaction is defined based on employees’ satisfaction with income, position and the job as a whole. It has been argued earlier that people with MBA degree generally enjoyed higher employability and in later sections we will discuss the possibility of higher income and career growth. Job satisfaction is determined by the fit among personal characteristics, ones knowledge and experience and the job itself. Sociologists and other researchers argue that job satisfaction is both a cause and an effect (Wolniak & Pascarella, 2005; Kalleberg, 1977; Locke, 1976). That means job satisfaction is an outcome as well as a determinant. As an outcome, it is directly determined by the job-related income and indirectly by education and previous experience (Agho, Mueller, & Price, 1993; Glenn & Weaver, 1982; Locke, 1976; Ross & Reskin, 1992). There are several findings in education and economics literature relating education to income (Grubb, 1992; Rumberger & Thomas, 1993; Thomas, 2000, 2003). Also there are findings pointing to the fact that individuals with a degree in relatively quantitative subjects like Science, Engineering and Business enjoyed greater job-related income (Grubb, 1992; Rumberger & Thomas 1993; Thomas, 2000 & 2003). From above arguments we could reasonably think that higher income earning potential of MBA graduates might lead to higher job satisfaction.

Another component of job satisfaction is the person-job fit (Erdogan & Bauer, 2005). Many researchers have noted that personality and education will play a major role in it (Elton & Smart, 1988; Fricko & Beehr, 1992; Smart, Elton, & McLaughlin, 1986). These researchers have used Holland's theory of vocational behaviour to relate education to vocational preferences (Elton & Smart, 1988; Fricko & Beehr, 1992; Smart, Elton, & McLaughlin, 1986; Holland, 1985 & 1997). Many researchers have also noted that over time consistent educational and work experience would lead to favourable job related outcomes (Barak & Rabbi, 1982; Gottfredson, 1977; Nafziger, Holland, Helms, & McPartland, 1974; Oleski & Subich, 1996). Overall, MBA education will lead to higher levels of job satisfaction due to higher income and higher degree of person-job fit.

Hypothesis 3– Job satisfaction:

MBA holders are more satisfied with their jobs in terms of position, income and job as a whole than people without MBA.

2.3.4. Confidence in knowledge and skill

In general one would gain confidence in ones own knowledge and skills through formal education, self-learning and on the job experiential learning. Confidence is also improved when one sees positive results of his own actions. Education in general and MBA education particular is one way of achieving business related knowledge and skills. Management literature is full of discussions on how effective MBA intervention in improving knowledge and skills of graduates (Gordon & Howell, 1959; Pfeffer & Fong, 2002; Mintzberg, 2005). According to Gordon and Howell, one of the major problems of American business schools in the 1950s was that they did not emphasize problem-solving skills and students were "trained" for their first jobs rather than "educated" for their whole career (Gordon & Howell, 1959). Prompted by these criticisms business schools in the US had initiated a strong move towards research based curriculum and were successful in doing so by heavily investing in research and faculty training through doctoral education. This research based tradition is still continuing for the last 30 to 40 years. However, many scholars now feel that the business schools have moved too far to the other extreme of the continuum and now slowly losing its relevancy to the business world (Mintzberg, 2005, Pfeffer & Fong, 2002). According to Charan and Colvin MBA gives people more confidence to make decisions but does not really give people the competence to deal with the messy reality in which decisions are executed (Charan & Colvin, 1999). Mintzberg and Lample noted that business schools tend to give students the confidence to make decisions, but not the competence to deal with the messy reality in which decisions are executed (Mintzberg & Lample, 2001).

Byrne notes that, besides all the criticisms, business schools are experiencing a vast change in their programs in order to meet the expectations from the real business world. For example, they started to add more courses on leadership and teamwork skills (Byrne, 1993). There was also a greater emphasis on globalization and quality management (Byrne, 1993). These skills should occupy important part of business education because it shapes and directs the sense making process of members in an

organization (Bailey & Ford, 1996). According to Byrne, MBA education not only prepares graduates for challenging business jobs but also it will prepare them for entrepreneurial ventures (Byrne, 1993). Business schools have been successful to teach business as they recognize that the world is becoming more diverse, dynamic, and complex and they are able to teach business to students based on these timely issues (Lorenzi, 2004).

Tyson, the dean of London Business School in the UK, in a recent paper, comment on the educational value of MBA (Tyson, 2005). According to her, “skills are practiced ability and they can be acquired through the repeated application of knowledge” (Tyson, 2005). She is pointing to the fact that the knowledge gained during the MBA intervention combined with actually using it in the business world will help graduates develop necessary business related skills. Tyson also noted that "business has always been action-oriented, and skills have always been fundamental to effective management". In addition she notes that "knowledge is executive base camp".

Jerry Jurgensen, chief executive officer of nationwide has said the following in a recent interview on Mintzberg's *Managers Not MBAs* book (Mintzberg, 2005): "I admit I have a bias. I have an MBA, and I believe that it helped me. It gave me the opportunity to look at a lot of cases, to determine what I believe, and to argue my point of view with others. That was extremely useful. There was great value in the process of studying the successes and failures of past businesses. Finally, it was most helpful to have faculty test and probe the quality of my analysis and reasoning" (Lewicki, 2005).

In order to respond to the rapid changes in the world from 1960s up to 2000s, business schools began to strengthen their strategies by changing programs beyond traditional methods of MBA education. Tyson notes, most business schools now offer advanced courses on, in addition to the basic functional subjects, organizational psychology (Tyson, 2005). It allows students to have opportunities to learn more about employees and organizational environment issues (Tyson, 2005). Going through such MBA programs, students can prepare themselves and increase their confidence in knowledge and skills for the actual business world (Baruch, Bell, & Gray, 2005).

Hypothesis 4 – Confidence in knowledge and skills:

The knowledge and skills people gain from MBA program give them more confidence at work than those who do not have an MBA degree.

2.3.5. Career growth

In this study we have adapted Greenhouse’s definition of career as a string of work related roles and activities that span the course of ones work life (Greenhouse, 1987). Career growth is any movement upward or lateral which gives the individual a sense of achievement could be considered as contributing to career growth. Also the traditional view of viewing career growth and success based on relatively objective measures like salary and position are changing and giving way to more

revolutionary concepts like boundaryless careers (Sullivan, 1999; Arnold, 2001). It is a well established fact that education in general and graduate and professional education in particular will help people with upward or lateral mobility (Baruch, Bell, & Gray, 2005). Business education is no exception (Baruch, Bell, & Gray, 2005). In the past many people attended an MBA program at a top ranked business schools and experienced positive impact on their careers (Baruch, Bell, & Gray, 2005). Even today, many graduates from a variety of MBA programs have been experiencing positive impact at work (Altman & Simpson, 2002; Baruch & Peiperl, 2000; Dreher & Chargois, 1998). However, recently many scholars started questioning the extent of correlation between graduate business education and career success (Pfeffer & Fong, 2002).

According to GMAC survey in 2004, part-time and executive program students are so called “career enhancers”. They earn MBA degree to cultivate their current career (GMAC, 2005). Full-time students tend to be “career switchers” and earn MBA degree to change their career directions. The survey shows that the career switchers expect more benefits from gaining MBA degree, and career enhancers experience benefit from gaining MBA degree sooner. In terms of career change comparing to pre-MBA and post-MBA, 54% of the respondents of GMAC survey are changing industries and 46% are remaining in their current industry. In a GMAC report the following five reasons were given as the most important motivators for potential MBA seekers (GMAC, 2005):

1. to enhance their career by increasing chances of promotion where they currently work and also by allowing them to remain competitive
2. to use MBA to help them switch from their current operational area to a specific new one, 3. to pursue the goal of starting their own business
3. to make a transition from a non-business undergraduate degree
4. to prepare to seek international employment

Even though the above motivators may be applicable to all MBA seekers, the relative importance may vary amongst full-time students, part-time and executive students. For example, full-time students give more importance to a changing career direction (GMAC, 2005)

MBA is not a passport to the CEO’s office straight from the business school (Lewicki, 2005). Lewicki stresses the importance of enriching MBA education with on the job experiential learning in attaining higher position and career growth. Thorough multiple jobs and assignments, one can contextualizes the theoretical learning from the business school in the business (Lewicki, 2005).

Hypothesis 5 – Career growth:

MBA graduates have better opportunities for career growth through changing field of work or getting promotion than people without MBA.

2.3.6. Status

The term status means different things to different people. In this study we define status as one's ability within his/her organization to be independent and participate in the decision making process. MBA degree is a signal, to the organization and to the supervisors and managers using MBA graduates, indicating the capability of an individual to effectively perform business related tasks. There are not many reports in the literature looking at the influence of MBA intervention on status in general and decision making autonomy in particular.

Also status could be influenced by the position of the employee in the social network. Research by Dreher and others note that MBA intervention will give an excellent opportunity to increase social capital through networking (Dreher, Dougherty & Whitely, 1985). Social capital will help job seekers get obtain jobs with higher degree of freedom and independence. Also it has been noted that MBA graduates in general show a high need for achievement and autonomy and also organizations show a willingness to hire MBAs into jobs needing high degrees of autonomy and independence (Harrell & Alpert, 1979). Another interesting aspect of authority and independence comes from the fact that a majority of MBAs work for large corporations and they will provide ample opportunities to MBAs to be roles of autonomy (Harrell & Alpert, 1979). Autonomy and opportunity to participate in decision making will give employees a feeling of self-worth and higher status. Following this line of thinking we have postulated the following hypothesis:

Hypothesis 6– Status: MBA graduates will have more opportunities to gains jobs with higher status than people without an MBA degree.

Chapter 3 Research Method

3.1. Introduction

The purpose of this study is to understand the effectiveness of MBA “intervention” with respect to its tangible and intangible benefits to people who had undergone an MBA study program compared to people without an MBA degree. One could define a number of qualitative and quantitative measures to study the effectiveness of an educational intervention like that of an MBA. Therefore our approach is, this study being preliminary in nature, to keep the scope, initially, of this study as broad as possible. In this chapter we will describe the characteristics of the sample and our research approach.

3.2. Research Methodology

Effectiveness of MBA intervention on financial benefit and other MBA outcomes such as employability, job satisfaction, confidence in knowledge and skills, career growth and status was evaluated using questionnaires specifically developed for this purpose. The questionnaires were sent out to three groups of subjects. These are a group consisting of people with MBA, a group consisting of people without an MBA and the third group consisting of supervisors who could tell us their opinion about the performance of employees with and without an MBA degree.

3.2.1. Control variables

As explained in chapter 2 that there are several factors which will influence job related outcomes other than MBA intervention. Therefore in addition to the main independent variable, MBA, we have included other independent variables such as country of work, gender, year of work experience, educational background, previous business education, current position, current work hour, and current organizational size as control variables in this study. In a recent study, on the impact of HRD programs on job related outcomes, it was noted that independent variables such as gender, family background, age, work experience, level of initial education, variables relating to career motivation, economic sector and level of competencies acquired through education influence job related outcomes (Witziers, 2003). Even though all the above factors might be important to be considered in this study, lack of time and resources forced us to limit the control variables to gender, country of work place, educational background, size of the organization and total work experience.

Gender was incorporated as one of control variables. Several researchers report that individual’s work experiences and career outcomes are influenced by gender (Witziers, 2003; Coleman, 1990; Olson & Frieze, 1989; Olson, Frieze & Detlefsen, 1987). Cox and Harquail (1991) also found that men and women with similar work experience and career path experience different career growth outcomes in terms of income, promotions and position in organizational hierarchy. Considering these research findings, we found it important to include gender as a control variable to improve the external validity of our findings.

Educational background and previous business education are also included as control variables for the following reasons. The relationship, for example, between college major and job satisfaction has been explicitly examined in some studies such as the ones by Elton & Smart (1988), Fricko & Beehr (1992), and Smart, Elton & McLaughlin (1986). There are also several findings pointing to the fact that good education and stable work experience would lead to positive vocational outcomes (Barak & Rabbi, 1982; Gottfredson, 1977; Nafziger, Holland, Helms, & McPartland, 1974; Oleski & Subich, 1996). In a recent study Witziers (2003) emphasized the relationship between job related outcomes and competencies acquired through education.

Factors such as current position, total years of work experience and size of the organization are also included as control variables. Recent studies show that current position and total years of work experience influence job outcomes such as income (Witziers, 2001 & 2003). Some other studies pointed to the relationship between the size of the organization and job related income (e.g. Meesters, 1992). Gabbay (1999) showed clearly the positive relationship between work experience and job related income for Dutch managers working in large corporations. All these findings clearly lead to the strong influence of work experience on job related income. According to human capital theory (Mincer, 1974), workers gain knowledge and skills through on the job experience and because of that age or tenure could be an indicator of skill level (Brown, 1989; Acemoglu & Pischke, 1998 & 1999). These studies also indicated the positive relationship between worker's experience and productivity, thus higher job related income (Brown, 1989; Acemoglu & Pischke, 1998 & 1999).

We have also considered country of work place as one of the necessary control variables because we did not restrict respondents from a single country or region and it was important for us to know the country or region of respondents' work place to eliminate the influence of country of work on the impact of MBA intervention. In addition, we were also interested in generalizing our findings by using respondents from various countries and regions. Another reason was that one of our initial research objectives was to compare effectiveness of MBA intervention between countries or regions to have further insights into the impact of MBA intervention. Age is not included as a control variable since age and total years of work experience have strong correlation ($r = .947, p < .001$), making it redundant as a control variable.

While none of our hypotheses included brand, impact of business school brand was additionally evaluated in order to thoroughly understand the moderating effect of business school brand on the causal relationship between MBA and the dependent variables. We have operationalized "brand" based on *Financial Times*' top 100 full-time global MBA programs published in 2005. MBA holders were asked the name of the business school they completed MBA from in our questionnaire. It is well accepted fact that a degree from a reputed educational institution will give a strong positive signal to outside world about the degree holder's knowledge, skills and ability especially in countries like Japan

and the US. According to a GMAC survey (2005), reputation of a business school was an important consideration in student's decision in selecting the business school. According to Byrne (1993), brand of the business school can affect graduates ability to find jobs in big corporations. Also we know from other studies (Meesters, 1992; Witziers, 2003) that big corporations pay higher than smaller ones. Pfeffer and Fong (2002) also noted the importance of school brand in obtaining high paying jobs.

It should be noted that there are other factors, such as individual difference, motivation to learn and perform and position in the social network, which would influence job related outcomes. In this study we have not included them due to lack of time and resources. It is planned to incorporate them in future studies.

3.2.2. Scales

The independent (and control) variables are categorized and coded to the followings:

MBA: 1 = MBA holder, 0 = People without MBA

MBA brand: 1=MBA from the top 100 business schools, 0= MBA from other business schools and people without MBA

Country: 1 = Japan, 2 = the US, 3 = Other

Gender: 1 = Male, 2 = Female

Educational background: 1 = Bachelor's degree, 2 = Master's degree, 3 = Doctor's degree

Previous business education: 1 = Business, 0 = others

Current work hour: 1 = Full-time, 0 = Part-time

Position: 1 = Regular Employee, 2 = Manager, 3 = Junior Manager, 4 = Senior Manager
5 = General Manager, 6 = Director, 7 = Vice President, 8 = CEO

Year of work experience (years): 1 = 1-5, 2 = 6-10, 3 = 11-15, 4 = Above 15

Organizational size (number of staff): 1 = 1-10, 2 = 11-100, 3 = 101-1,000, 4 = 1,001-10,000
5 Above 10,000

A five-point Likert scale ranging from 1 to 5, 1 being strongly disagree to 5 being strongly agree was employed to examine employability, job satisfaction, confidence in knowledge and skills, career growth and status. Current annual gross income represents financial benefit. Financial benefit was coded as shown follows:

1 = Under 400, 2 = 400-699, 3 = 700-999, 4 = 1,000-1,199

5 = 1,200-1,399, 6= 1,400-1,599, 7 = 1,600-1,799, 8 = More than 1,800 (x100 US\$)

In order to control for all the independent (control) variables other than MBA intervention, linear regression analysis was employed. According to SPSS 12.0 for Windows, "linear regression is used to model the value of a dependent scale variable based on its linear relationship to one or more predictors." Despite the fact that the scales are ordinal, we employed linear regression analysis because it is a commonly accepted practice in social science research.

3.3. Description of the Sample

We have collected self reported questionnaire responses from two different sample groups. They are namely, working people with MBA degree and people without MBA degree. The sample consists of individuals with 1 to 25 years of work experience and most of them are either working in Japan or in the US. We have also collected data from people with or without MBA degree but in a supervisory role. This group was asked about their impression on the performance of people with and without an MBA degree. Questionnaires were randomly distributed to all three groups, people with MBA, without MBA and people in supervisory roles in organizations. We have contacted about 100 people in Japan, 600 in the US and 50 people in other countries, in total approximately 750 including all the three groups. The questionnaires were sent out by email and were asked to send the completed responses back to a specific email address. In the email that we had sent out, it was clearly mentioned that no information related to the personal identity of the respondents will neither be extracted from the email response nor be kept in our computer after this study. Data was gathered in a period of about 3 months starting from the beginning of July to early October, 2005. 108 completed responses were returned; 36 from MBA holders, 50 from people without MBA, and 22 from superiors. The response rate was approximately 15 %. Descriptions of the respondents for MBA holders and people without MBA are explained below with the Tables from 3.1.A to 3.1.J and for superiors are explained with the Table 3.1.K to 3.1.N.

MBA holders and people without MBA

Country of work place

Majority of the respondents are working either in Japan or the US. As far as the rest, 2 responses in the MBA category (MBA) are from Germany, one from Italy, one from UAE and one from India. In the group of people without MBA (No MBA), number of respondents from China, Brazil and the UK were 5, 2 and 1 respectively. The country of work place does not represent the nationality of the respondents. The details are in Table 3.1.A.

Table 3.1.A

	Japan	US	Other	Total
MBA	11 (31%)	20 (56%)	5 (14%)	36 (100%)
No MBA	17 (34%)	25 (50%)	8 (16%)	50 (100%)
Total	28 (33%)	45 (52%)	13 (15%)	86 (100%)

Gender

67% of respondents with MBA degree are male and 33% are female while gender distribution is about 1:1 for people without MBA. Total gender distribution is almost half with less than 10% difference. The details are in Table 3.1.B.

Table 3.1.B

	Male	Female	Total
MBA holder	24 (67%)	12 (33%)	36 (100%)
No MBA	24 (48%)	26 (52%)	50 (100%)
Total	48 (56%)	38 (44%)	86 (100%)

Age

The average age of MBA holders is 34.4 and that of people without MBA is 29.4. The total average age of all the respondents is 31.5. There are respondents in their late 40s and 50s, however respondents they are included under the category of "Above 40" because above 45 years of age are relatively few. The details are in Table 3.1.C.

Table 3.1.C

	21-25	26-30	31-35	36-40	Above 40	Total
MBA	1 (3%)	11 (31%)	9 (25%)	8 (22%)	7 (19%)	36 (100%)
No MBA	13 (27%)	23 (47%)	7 (14%)	2 (4%)	4 (8%)	49 (100%)
Total	14 (16%)	35 (41%)	15 (18%)	11 (13%)	10 (12%)	85 (100%)

Number of years of total work experience

The average number of years of work experience of MBA holders is 10.0 and that of people without MBA is 6.3. The average year of total work experience of all the respondents is 7.8. The details are in Table 3.1.D.

Table 3.1.D

	1-5	6-10	11-15	Above 15	Total
MBA	9 (26%)	10 (29%)	11 (31%)	5 (14%)	35 (100%)
No MBA	28 (56%)	14 (28%)	5 (10%)	3 (6%)	50 (100)
Total	17 (20)	28 (33)	14 (16)	8 (8)	86 (100)

Educational background

Educational background is defined as the highest formal degree received in the case of people without MBA and the highest degree received before attending the MBA program in the case of people with MBA. Both the groups have about the same proportion of people with Bachelor's degree, Master's degree and Doctor's degree. The majority of people without MBA have Bachelor's degree as the highest formal education and the majority of MBA holders pursued MBA education after finishing Bachelor education. The details are in Table3.1.E.

Table 3.1.E

	Bachelor	Master	Doctor	Total
MBA	31 (86)	4 (11)	1 (3)	36 (100)
No MBA	41 (82)	7 (14)	2 (4)	50 (100)
Total	72 (84)	11 (13)	3 (3)	86 (100)

Previous Business education

In the case of people without MBA, previous business education is defined as any formal business degree received and in the case of MBA holders any other formal business degree other than MBA. In both the groups, more than half the respondents majored in a subject other than Business. The details are in Table 3.1.F.

Table 3.1.F

	Business	Other	Total
MBA	10 (28)	26 (72)	36 (100)
No MBA	17 (34)	33 (66)	50 (100)
Total	27 (31)	59 (69)	86 (100)

Current position

While 60% of respondents with MBA have stated their position as regular employee, 87% of people without MBA reported their current position as regular employee. The highest position reported by people without MBA is senior manager and that for people with MBA is chief executive officer (CEO) although it is highly possible that positions are called differently in each organization. The details are in Table 3.1.G.

Table 3.1.G

	Regular employee	Manager	Junior manager	Senior manager	General manager	Director	Vice president	CEO	Total
MBA	21 (60%)	8 (23%)	2 (6%)	1 (3%)	2 (6%)	0 (0%)	0 (0%)	1 (3%)	35 (100%)
No MBA	40 (87%)	5 (11%)	0 (0%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	46 (100%)
Total	61 (75%)	13 (16%)	2 (2%)	2 (2%)	2 (2%)	0 (0%)	0 (0%)	1 (1%)	86 (100%)

Current work hour

Full-time is defined as more than 40 hours work per week and part-time is defined as less than 40 hours per week. 92% of both MBA and people without MBA are working full-time and 8% in the both groups are working part-time. The details are in Table 3.1.H.

Table 3.1.H

	Full-time	Part-time	Total
MBA	33 (92%)	3 (8%)	36 (100%)
No MBA	46 (92%)	4 (8%)	50 (100%)
Total	79 (92%)	7 (8%)	86 (100%)

Current organizational size

The answers were self reported by the respondents. Respondents were asked to select a size range where the respondents are currently working. The details are in Table 3.1.I.

Table 3.1.I

	1-10	11-100	101-1,000	1,001-10,000	Above 10,000	Total
MBA	5 (14%)	3 (8%)	7 (19%)	9 (25%)	12 (33%)	36 (100%)
No MBA	6 (12%)	5 (10%)	14 (28%)	8 (16%)	17 (34%)	50 (100%)
Total	11 (13%)	8 (9%)	21 (24%)	17 (20%)	29 (34%)	86 (100%)

MBA brand

Among the 36 MBA holders, 16 (46%) of them completed MBA from the top 100 full-time global MBA programs and 19 (54%) of them had MBA from other business school. There is one missing answer. The details are in Table 3.1.J.

Table 3.1.J

Top 100 MBA	Other MBA	Total
16 (46%)	19 (54%)	35 (100%)

Superiors*Country of work place*

More than half the superiors are in Japan and 32 % are in the US, one from the UK and also from India. The country of work place does not represent the nationality of the respondents. The details are in Table 3.1.J.

Table 3.1.K

Japan	US	Other	Total
13 (59%)	7 (32%)	2 (9%)	22 (100%)

Organizational size

The answers were self reported by the respondents. Respondents were asked to select a size range where the respondents are currently working. The details are in Table 3.1.K.

Table 3.1.L

1-10	11-100	101-1,000	1,001-10,000	Above 10,000	Total
0 (0%)	5 (23%)	2 (9%)	11 (50%)	4 (18%)	22 (100%)

Position

Half of the superiors are in managers and many are positioned in other roles than ones mentioned in our category. The details are in Table 3.1.L.

Table 3.1.M

Manager	Junior manager	Director	Vice president	CEO	Other	Total
12 (55%)	1 (5%)	0 (0%)	0 (0%)	1 (5%)	8 (36%)	22 (100%)

Number of MBA graduates

81% of superiors had from 1 to 10 MBA holders in the last 10 years, and 1 person answered 20 and another person answered 30. The average number of MBA holders is worked with them is 7. The details are in Table 3.1.M.

Table 3.1.N

1-5	6-10	11-15	Above 15	Total
10 (45%)	8 (36%)	2 (9%)	2 (9%)	22 (100%)

3.4. Data collection

The time spent for data collection was about 3 months from the beginning of July to early October, 2005 and data was gathered by email. We have contacted most of the Japanese respondents through Minori Management Research Institute in Tokyo, Japan. We contacted MBA holders and people without MBA from their contacts in various organizations in Japan. People in the both groups should be currently working and people without MBA should have at least a Bachelor's degree and some work experience. In early July, we started to distribute the questionnaires by email directly to possible

respondents. A brief description of this study including the purpose, organizations involved in this study, anonymity issue and return email address were stated at the beginning of the questionnaire sheets.

In early September, 2005, in addition to some earlier contacts in the US, we have distributed the questionnaires to current part-time MBA students of a large south western state university in the US. We have expected most of the part-time MBA students would be in the sample group of people without MBA since most of them were working full-time and had at least a Bachelor's degree. Since we asked many of our contacts to distribute the survey, we were not able to count the exact number of people who have received the questionnaires.

3.5. Measurement

We have used self reporting survey based questionnaires and prepared in such a way that it could be completed in 5 to 10 minutes. Although response rate can often be very low for surveys, carefully prepared questionnaires have been widely acknowledged as an effective research method in the area of behavioral sciences (Baruch & Leeming, 2001).

As mentioned earlier, we had three different groups of respondents. People with MBA, people without MBA and a group consists of superiors who would be able tell there opinion about MBAs and people without MBA. In the questionnaires used for the superiors' group, we asked about superior's perception on the differences between MBA holders and people without MBA in relation to job related performance. Typically these superiors who completed the questionnaire had 1-30 people with MBA worked for them in the last 10 years. The educational background of the superiors was also included in the questionnaire because it might be possible that their view of people with MBA might be influenced by their educational background. However, we realized this issue in the last phase of data collection and out of the total 22 responses we could get only 6 responses with educational background included in their answers. Therefore, educational background of superiors is not considered in this study due to insufficient information.

MBA holders and people without MBA

There were 17 common items included in our questionnaires sent out to people with MBA and without MBA. We have developed the questionnaires based on training evaluation techniques described in the *Handbook of Training Evaluation and Measurement Methods (third edition)* (Phillips, 1997). The questioner items were prepared based on the framework described in chapter 2. We developed simple, objective and brief questions, which should be easily understood by all respondents. Since our study was conducted to people in different countries, we expected to have respondents who did not have English as their first language. Therefore, we used clear English and simple expression to avoid ambiguity and misunderstanding in every statement in the questionnaires. The original questionnaires were developed in English and we also made the same questionnaires in Japanese. We put special care

when translating the questionnaires into Japanese to avoid any mistranslation which might change the original meanings. Before finalizing the items in the questioner, we have tested the questionnaire with several individuals. We have also conducted a small pilot study to see the clarity and meaningfulness of the items from the point of view of potential respondents. A five-point Likert scale ranging from 1 to 5 was used, 1 being strongly disagree to 5 being strongly agree.

After collecting more than 80 responses, we have conducted exploratory factor analysis of the 17 items using Principle Component Analysis as the extraction technique with Varimax rotation technique. Analyses using 3 to 8 pre-fixed factors were tried and 5 factors yielded the best result after rejecting 5 items out the total 17 items. Only factors with loading more than .60 were included. Table 3.2 gives the item descriptions and factor loading of the 5 selected factors.

Table 3.2 Factor analysis: MBA holders and people without MBA

Item	Loading
<i>Factor I: Employability</i>	
1. It was easy for me to find my current job.	.907
2. It will be easy for me to find another job even if I lose the job I have now.	.716
<i>Factor II: Job satisfaction</i>	
3. I am satisfied with my current income.	.884
4. I am satisfied with my current position.	.838
5. Overall, I am satisfied with my current job.	.801
<i>Factor III: Confidence in knowledge and skills</i>	
6. I am qualified to have promotion(s).	.894
7. I am confident about my knowledge and skills at work.	.897
<i>Factor IV: Career growth</i>	
8. I am motivated to work hard in my current job.	.826
9. I feel I have excellent opportunities for career growth.	.808
10. In my current job I get excellent opportunity for personal growth and development.	.797
<i>Factor V: Status</i>	
11. In my current job I get opportunity to participation in important decisions.	.637
12. My current job gives me enough flexibility and independence.	.906

The identified five factors are namely *Employability*, *Job satisfaction*, *Confidence in Knowledge and Skills*, *Career Growth* and *Status*. The items included in these factors were combined by taking simple average irrespective the factor loadings. For the test of reliability, Cronbach's α was calculated and

given in Table 3.3 For the analysis, missing answers were replaced with the average value of the answers belonging to each item.

Table 3.3 Reliability: MBA holders and people without MBA

Factor	No. of items	Cronbach's α
Employability	2	.595
Job satisfaction	3	.867
Confidence in knowledge and skills	2	.793
Career growth	3	.818
Status	2	.641

Superiors

There were 14 items asked supervisors to compare job related performance between MBA holders and people without MBA. This questionnaire was developed also based on *Handbook of Training Evaluation and Measurement Methods (third edition)* (Phillips, 1997) and both English and Japanese questionnaires were used. Same as what we did for MBA and people without MBA, we paid special care for the language translations since the original questionnaire was in English and tested the questionnaire with some individuals to make sure the clarity and meaningfulness of the items. They were also asked about country of work place, size of the organization, job position and the number of MBA graduates who are currently working with them (or worked for them in the past 10 years). Due to the small number of total respondents, we do not distinguish these variables for analysis. The details are given in Tables from 3.1.J to 3.1.M. Data was collected using a five-point Likert scale ranging from 1 to 5, 1 being strongly disagree to 5 being strongly agree. We qualitatively analyzed the data collected from superiors by looking at what percentage of respondents agreed with selected items of interest. Related items were grouped into financial benefit, business related knowledge and career growth.

3.6. Limitations

There are several important limitations to this study. One of the limitations is lack of internal validity. We used multiple control variables such as gender, country of work, year of work experience, educational background etc to examine effectiveness of MBA intervention on the outcome (dependent) variables to minimize threat to external validity. However there can be many more other possible factors which will influence the results on MBA effectiveness.

Strictly speaking, our sample in this study is not truly a random sample. We contacted the respondents through our friends and professional contacts. Although we have a sample with fairly random distribution of gender, educational background, position and size of respondent's organization and income, a certain degree of bias must be introduced in our sampling due to the way we distributed our questionnaires. This can be a threat to external validity.

It is also important to note that the total size of our sample is very small compared the actual size of the population. For example in the case of MBA holders, as we stated in chapter 1, more than 200,000 MBA degrees are awarded world wide every year (Lorenzi, 2004) and approximately 121,000 MBAs were awarded in 2002 only in the US alone (Ewers, 2005). Our sample represents less than .0005% of the population. Therefore threat to conclusion validity due to small sample size may be significant in this study.

Last major limitation is the reliability of the instrument we have used for this study. In general, the number of item included in a construct influences the reliability of the instrument. In this study, employability, job satisfaction, confidence in knowledge and skills, career growth, and status were measured using scales with 2 or 3 items. It is clear that it has had impact on the reliability of the instrument, which showed a Cronbach's α of .59. This can also negatively influence validity of our conclusions from this study.

Chapter 4 Results

4.1. Introduction

In chapter 2 we hypothesized effectiveness of MBA with respect to financial benefit, employability, job satisfaction, confidence in knowledge and skills, career growth and status. In order to examine these hypotheses, we employed linear regression analysis to see the relation between dependent variables and MBA intervention after correcting for the effect of other independent variables such as gender, work experience, education etc. The analysis was conducted separately for Japan and the US. In addition to separately examining the data within each country, we have also examined the impact of MBA intervention irrespective of the country of work place. The results supported our hypothesis on financial benefit and showed MBA graduates earn higher income than people without MBA in Japan, The US and also in the combined sample. The results also showed MBA intervention positively impacted career growth for those who are working in the US. However, our results did not show any correlation between MBA intervention and employability, job satisfaction, confidence in knowledge and skills, career growth or status in Japan. From the analysis of data collected from superiors on their perception of people working for them, we found that our hypothesis on financial benefit was supported.

In this study, being preliminary, we have kept the acceptable significance level as .10. Even though we have respondents from 5 different countries other than Japan and the US, when performed country specific analysis, we have only considered Japan and the US separately. This is because the number of participants from five other countries formed only 14% of the total sample and there are only one or a few people in each country sample. It is important to note that country of work place does not indicate the nationality of the respondents. Also, individual characteristics which can be attributed from the national culture of respondents and the economic conditions or political conditions of a country or region are not considered in this study. The R^2 for most models investigated was between .101 and .519. The plausible reason for this poor R^2 comes mainly from the fact that in this study we have focused on financial benefit and all the control variables were selected based on their expected influence on this dependent variable. In this respect, it is not a surprise that the R^2 for models investigating the variation in financial benefit coming from MBA are much higher. They range from .715 to .910.

4.2. Results

In Japan

The sample of Japan consists of 11 people with an MBA degree and 17 people without it and is summarized in Table 4.1 (see p.31). Among the individuals working in Japan, MBA influenced financial benefit ($R^2=.910$) and employability ($R^2 = .499$). It has no impact on job satisfaction, career growth, confidence in business related knowledge and status. Detailed results showing how the

independent and control variables influence the dependent variable is given below and is summarized in Table 4.2.

Table 4.1 Descriptive statistics: MBA holders working in Japan and No MBA working in Japan

Variable	Group	Number	Mean	Total mean	Std. Deviation
Employability	MBA	11	3.10	2.99	.64
	No MBA	17	2.91		
Job satisfaction	MBA	11	3.06	2.90	.96
	No MBA	17	2.80		
Confidence in knowledge and skills	MBA	11	3.64	3.38	.84
	No MBA	17	3.21		
Career growth	MBA	11	3.43	3.31	.57
	No MBA	17	3.24		
Status	MBA	11	3.64	3.17	.60
	No MBA	17	2.87		
Financial benefit	MBA	11	4.91	2.96	1.76
	No MBA	17	1.65		

Table 4.2 Results of linear regression analysis: MBA holders working in Japan and No MBA working in Japan: Standardized coefficients Beta

Variable	Employability	Job satisfaction	Confidence in knowledge and skills	Career growth	Status	Financial benefit
MBA: Japan	-.706*					
Top 100 MBA	.568*					.262***
Gender					-.525**	-.169*
Year of work experience						.436****
Educational background	.429**		.511**			
Previous business education						-.218**
Current position						.446***
Current work hour	-.419**					
Current organizational size						
R ²	.499	.359	.383	.151	.519	.910

* $p < .10$; ** $p < .05$; *** $p < .01$; **** $p < .001$. The values of insignificant results are left out of the table.

Influence on Financial benefit: $R^2 = .910$

MBA brand, gender, years of work experience, previous business education, and current position had

impact on financial benefit. Current job position influenced financial benefit the most and gender difference influenced it the least. MBA from other (not in the top 100) business schools did not influence one's financial benefit, however, people with MBA from the top 100 business schools experienced more financial benefit than those without MBA ($\beta = .262, p < .01$). The higher the job position, the higher the financial benefit they have received ($\beta = .446, p < .01$). The longer people worked, the more financial benefit they got ($\beta = .436, p < .001$) and those who majored in a non-business area of study in previous education have higher financial benefit than those who majored in Business ($\beta = -.218, p < .01$). Males had higher financial benefit than females ($\beta = -.169, p < .10$).

Influence on the other dependent variable

MBA negatively influenced employability, ($R^2 = .499, \beta = -.706, p < .10$), however, MBA from top 100 business schools had positively impacted employability in Japan ($\beta = .568, p < .10$). Educational background and current working hour per week influenced employability. Those who had higher educational degree have higher employability ($\beta = .429, p < .05$), and people working part-time had higher employability ($\beta = .419, p < .05$).

Our results showed that MBA had no significant influence on *Job satisfaction* ($R^2 = .359$) and *Career growth* ($R^2 = .151$). Only educational background had impact on *Confidence in knowledge and skills* ($R^2 = .383$). People with higher level of education showed more confidence in their knowledge. For example, people with Doctor's degrees were the most confident and those with Bachelor's degree were the least confident ($\beta = .511, p < .05$). Only gender influenced *Status* ($R^2 = .519$). Males hold positions with higher status than females ($\beta = -.525, p < .05$).

In the US

The sample in the US consists of 20 people with MBA and 25 without MBA. It is summarized in Table 4.3 (see p. 34).

Among the people working in the US, although MBA from other business schools had no influence on employability or financial benefit, people who had MBA from the top 100 business schools experienced higher employability ($R^2 = .316, \beta = .494, p < .05$) and those who got MBA from top 100 business schools had higher financial benefit ($R^2 = .715, \beta = .586, p < .05$). Detailed results showing how the independent and control variables influence the dependent variable is given below and is summarized in Table 4.4 (see p.34).

Table 4.3 Descriptive statistics: MBA holders working in the US and No MBA working in the US

Variable	Group	Number	Mean	Total mean	Std. Deviation
Employability	MBA	20	3.20	3.20	1.09
	No MBA	25	3.20		.82
Job satisfaction	MBA	20	3.00	3.07	1.04
	No MBA	25	3.13		.90
Confidence in knowledge and skills	MBA	20	4.13	4.05	.53
	No MBA	25	4.00		.54
Career growth	MBA	20	3.72	3.41	.87
	No MBA	25	3.16		.80
Status	MBA	20	3.40	3.28	.94
	No MBA	25	3.19		.72
Financial benefit	MBA	20	2.95	2.56	1.23
	No MBA	25	2.24		.879

Table 4.4 Results of linear regression analysis: MBA holders working in the US and No MBA working in the US: Standardized coefficients Beta

Variable	Employability	Job satisfaction	Confidence in knowledge and skills	Career growth	Status	Financial benefit
MBA: the US						
Top 100 MBA	.494**					.586****
Gender	-.266*					-.235**
Year of work experience						.250**
Educational background		-.381**				
Previous business education						
Current position						.207**
Current work hour						.302***
Current organizational size						
R ²	.316	.243	.174	.222	.209	.715

* $p < .10$; ** $p < .05$; *** $p < .01$; **** $p < .001$. The values of insignificant results are left out of the table.

Influence on Financial benefit: $R^2 = .715$

Brand of MBA, gender, year of work experience, current job position and total hours of work per week had impact on financial benefit. Whether one had MBA from top 100 business school or not influenced financial benefit the most and current job position influenced it the least. MBA holders from top 100 business schools had higher financial benefit than people without MBA ($\beta = .586$, p

< .001). Full-time workers had higher financial benefit than part-time workers ($\beta = .302, p < .01$). People who had worked longer had higher financial benefit than people with shorter tenures ($\beta = .250, p < .05$) and males had higher financial benefit than females ($\beta = -.235, p < .05$). People in higher job position had higher financial benefit and those who were in lower positions had lower financial benefit ($\beta = .207, p < .05$).

Influence on other dependent variable

Brand of MBA and gender had impact on *Employability* ($R^2 = .316$). MBA from top 100 business schools had positive influence on employability ($\beta = .494, p < .05$) and males experienced higher employability than females ($\beta = -.266, p < .10$). Only level of previous education influenced *Job satisfaction* ($R^2 = .243$) but negatively. People with Bachelor's degree showed highest level of job satisfaction and those with Doctor's degree showed the lowest ($\beta = -.381, p < .05$). None of the variables had influenced *Confidence in knowledge and skills* ($R^2 = .174$), *Career growth* ($R^2 = .222$) or *Status* ($R^2 = .209$).

The whole sample

The total sample has 36 MBA holders and 50 people without MBA and this includes individuals in Japan, the US and some other countries. Analysis using the data from the combined sample helps us generalize our finding irrespective of country of work place. A summary of sample characteristics are given in Table 4.5.

Table 4.5 Descriptive statistics: The whole sample MBA and No MBA

Variable	Group	Number	Mean	Total mean	Std. Deviation
Employability	MBA	36	3.20	3.19	.94
	No MBA	50	3.18		
Job satisfaction	MBA	36	2.91	2.98	1.02
	No MBA	50	3.04		
Confidence in knowledge and skills	MBA	36	3.97	3.82	.68
	No MBA	50	3.71		
Career growth	MBA	36	3.45	3.27	.84
	No MBA	50	3.14		
Status	MBA	36	3.35	3.27	.89
	No MBA	50	3.22		
Financial benefit	MBA	36	3.36	2.51	1.85
	No MBA	50	1.94		

The overall results also supported our hypothesis on financial benefit, but MBA holders from top 100 business schools ($R^2 = .797, \beta = .409, p < .001$). MBA negatively influenced employability ($R^2 = .284, \beta = -.290, p < .05$) and MBA top 100 business schools positively influenced employability ($R^2 = .284, \beta$

=.373, $p < .01$). The results showed that MBA is effective for one's job related income and employability only if people completed MBA from one of the top 100 business schools. The results showed no significant correlation between MBA and job satisfaction, confidence in knowledge and skills, career growth or status. We will now look at the influence of independent variables on each factor separately and the results are summarized in Table 4.6.

Table 4.6 Results of linear regression analysis: The whole sample MBA and No MBA: Standardized coefficients Beta

Variable	Employability	Job satisfaction	Confidence in knowledge and skills	Career growth	Status	Financial benefit
MBA	-.290**					
Top 100 MBA	.373***				.235*	.409****
Country of work place	.288*		.426****		.217*	
Gender	-.297***				-.180*	-.223****
Year of work experience					.262*	.327****
Educational background		-.229**	.272**			
Previous business education						
Current position		.235*				.427****
Current work hour	-.209**	.220*			.259**	.138**
Current organizational size						.151**
R ²	.284	.197	.283	.101	.268	.797

* $p < .10$; ** $p < .05$; *** $p < .01$; **** $p < .001$. The values of insignificant results are left out of the table.

Influence on Financial benefit: R² = .797

MBA brand, gender, year of work experience, current position, hours of work per week (part time or full time), and size of current organization influenced financial benefit. Job position had the most impact and working hours per week had the least impact. The higher the position, the higher financial benefit individuals received ($\beta = .427$, $p < .001$), the longer they worked (total number of years of work experience), the higher the income they received ($\beta = .327$, $p < .001$) and the bigger the organization they worked for, the higher the income they got ($\beta = .151$, $p < .05$). People with MBA from top 100 business schools had higher income ($\beta = .409$, $p < .001$). Males had higher income than females ($\beta = -.223$, $p < .001$). Full-time workers had higher financial benefit than part-time workers ($\beta = .138$, $p < .05$).

Influence on other dependent variable

MBA, brand of MBA, gender, country of work place and working hour per week influenced *Employability* ($R^2 = .284$) and brand of MBA has the most impact on employability. MBA holders had less employability than people without MBA ($\beta = -.290, p < .05$), however, MBA holders from top 100 business schools had higher employability ($\beta = .373, p < .01$). Males experience higher employability than females ($\beta = -.297, p < .01$) and individuals working in the US experience higher employability than those working in Japan ($\beta = .288, p < .10$).

Educational background, current position and current working hour had impact on *Job satisfaction* ($R^2 = .197$). Individuals with Bachelor's degree had the highest level of job satisfaction and ones with Doctor's degree had the lowest level of job satisfaction ($\beta = -.229, p < .05$). The higher the position at work, the more satisfaction they felt ($\beta = .235, p < .10$) and full-time workers were more satisfied compared to part-time workers ($\beta = .220, p < .10$).

Country of work place and educational background influenced *Confidence in knowledge and skills* ($R^2 = .283$) and country they worked had higher impact on confidence. People working in countries other than Japan and the US had the highest confidence in knowledge and skills, people working in the US are more confident than people working in Japan ($\beta = .426, p < .001$). People with Doctor's degree expressed more confidence than those with Master's or Bachelor's degree ($\beta = .272, p < .05$). None of the variables had any influence on *Career growth*: ($R^2 = .101$).

Brand of MBA, country of work place, gender, total years of work experience and working hours per week (full time or part time) had impact on *Status* ($R^2 = .268$). Although MBA in general had no influence on status, MBA from top 100 business school had positive impact on status ($\beta = .235, p < .10$). People working in countries other than Japan and the US experienced the highest status (more flexibility and independence at work) and people working in the US had higher status than people working in Japan ($\beta = .217, p < .10$). Males had higher status than females ($\beta = -.180, p < .10$). People working full-time had higher status than those who are working part-time ($\beta = .259, p < .05$) and the longer people worked, the higher status they got ($\beta = .262, p < .05$).

4.3. Perspectives of superiors on differences between MBA holders and people without MBA

The purpose of collecting data on the perspectives of superiors on the effectiveness of employees with and without MBA is to validate our findings based on self-reported survey questionnaires. We have collected data from 22 superiors, 13 in Japan, 7 in the US, 1 in the UK and 1 in India. We focused an analysis on superiors' perception on job related financial benefit, business related knowledge and career growth of their subordinates and the findings are given below and details are given in Table 4.7. The results are also given in charts in Appendix B.4.

Table 4.7 Superiors' perspective on difference between MBA holders and people without MBA

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA graduates get higher starting salary than non-MBA graduates.	0 0%	2 9%	2 9%	15 68%	3 14%	22 100%
I see differences in salary between MBA graduates (higher salary) and non MBA graduates (lower salary) in our organization when they have the same year of work experience.	0 0%	4 18%	9 41%	7 32%	2 9%	22 100%
MBA graduates bring more new ideas to work than non-MBA graduates.	3 14%	3 14%	6 27%	9 41%	1 5%	22 100%
MBA graduates have more business knowledge than non-MBA graduates.	1 5%	4 18%	7 32%	6 27%	4 18%	22 100%
MBA graduates are better at solving complex business problems than non-MBA graduates.	2 9%	3 14%	9 41%	8 36%	0 0%	22 100%
MBA graduates do not work for the same profession as their previous job.	0 0%	5 23%	12 55%	5 23%	0 0%	22 100%
MBA graduates deserve to get promoted in our organization.	1 5%	5 23%	10 45%	4 18%	2 9%	22 100%
MBA is an important "passport" to change one's career in business world.	0 0%	0 0%	5 23%	15 68%	2 9%	22 100%

Financial benefit

82% of the superiors either agreed or strongly agreed that the starting salary of MBA holders is higher than that of people without MBA while only 9% disagreed with this. 42% of superiors either agreed or strongly agreed that MBA holders earn higher salary compared to their counter parts without MBA but with similar experience. However, 18% of them disagreed and 41% did remain neutral to this. Only 28% of superiors either agreed or strongly agreed that MBA holders earn more in life than people without MBA. 32% of them either disagreed or strongly disagreed. From this result it is reasonable say that superiors' perception is in line with our finding on the causal relationship between MBA and job related income.

Business related knowledge

As for business related knowledge is concerned, 46% of superiors either agreed or strongly agreed that MBA holders bring more ideas to work, 45% of them either agreed or strongly agreed that MBA holders have more business knowledge, and 36% of them either agreed or strongly agreed that MBA holders are better at problem solving than people without MBA. Since half of the respondents (superiors) perceived that MBA are more knowledgeable and the other half perceived otherwise, it reasonable to think that from this data it is not possible to see any indication of a causal relationship between and MBA and business related knowledge.

Career growth

In general superiors did not perceive any difference in career growth between MBA holders and people without MBA. 27% of them either agreed or strongly agreed that MBA holders deserve to be promoted more than people without MBA and 28% of them either disagreed or strongly disagreed with it. 23% of superiors agreed that MBA holders experience more change profession more often than people without MBA while the same 23% of them disagreed to it. Almost half the respondents answered neutral to both items. This would possibly mean that, at least according to superiors, difference in career growth between MBA holders and people without MBA is not significant.

4.3.1. Difference between perceptions of superiors in Japan and in the US

From the t-test results in Table 4.8, we found clear difference between the perspectives of superiors in Japan and the US on financial benefit of MBA holders and people without MBA. There is no significant difference on other job related outcomes between the perspective of superiors working in the US and Japan. Detailed answers of the superiors are given in Appendix B.4.

Table 4.8 T-test result: Superiors' perspective

Variable	Group	Number	Mean	Std. Deviation	Sig. level
Higher starting salary	Japan	13	3.62	.241	P < .10
	US	7	4.29	.184	
Salary difference	Japan	13	3.00	.253	P < .05
	US	7	3.86	.261	
More ideas	Japan	13	3.00	.320	-
	US	7	3.29	.474	
More business knowledge	Japan	13	3.31	.286	-
	US	7	3.29	.522	
Better at problem solving	Japan	13	3.15	.249	-
	US	7	3.00	.436	
More change of profession	Japan	13	3.08	.211	-
	US	7	2.86	.261	
Deserve more for promotion	Japan	13	3.15	.249	-
	US	7	3.14	.459	
MBA is a passport in business world	Japan	13	3.92	.137	-
	US	7	3.71	.286	

Table 4.9 shows the perspectives of superiors working in Japan and the US on financial benefit of MBA holders. 77% of superiors in Japan agreed MBA holders have higher starting salary than people without MBA, 100% of superiors in the US agreed to it. Only 23% of superiors in Japan agreed that MBA holders have higher income than people without MBA with the same years of work experience, 71% of them in the US agreed to it.

Table 4.9 Difference between perceptions of superiors in Japan and in the US

	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Total	Total
	JP	US	JP	US	JP	US	JP	US	JP	US	JP	US
MBA graduates get higher starting salary than non-MBA graduates.	0 0%	0 0%	2 15%	0 0%	1 8%	0 0%	9 69%	5 71%	1 8%	2 29%	13 100%	7 100%
I see differences in salary between MBA graduates (higher salary) and non MBA graduates (lower salary) in our organization when they have the same year of work experience.	0 0%	0 0%	4 31%	0 0%	6 46%	2 29%	2 15%	4 57%	1 8%	1 14%	13 100%	7 100%
MBA graduates bring more new ideas to work than non-MBA graduates.	2 15%	1 14%	2 15%	0 0%	3 23%	3 43%	6 46%	2 29%	0 0%	1 14%	13 100%	7 100%
MBA graduates have more business knowledge than non-MBA graduates.	0 0%	1 14%	3 23%	1 14%	5 38%	1 14%	3 23%	3 43%	2 15%	1 14%	13 100%	7 100%
MBA graduates are better at solving complex business problems than non-MBA graduates.	1 8%	1 14%	1 8%	1 14%	6 46%	2 29%	5 38%	3 43%	0 0%	0 0%	13 100%	7 100%
MBA graduates do not work for the same profession as their previous job.	0 0%	0 0%	3 23%	2 29%	6 46%	4 57%	4 31%	1 14%	0 0%	0 0%	13 100%	7 100%
MBA graduates deserve to get promoted in our organization.	0 0%	1 14%	3 23%	0 0%	6 46%	4 57%	3 23%	1 14%	1 8%	1 14%	13 100%	7 100%
MBA is an important “passport” to change one’s career in business world.	0 0%	0 0%	0 0%	0 0%	2 15%	3 43%	10 77%	3 43%	1 8%	1 14%	13 100%	7 100%

Chapter 5 Conclusion and Recommendations

5.1. Conclusion

We started this exploratory study by asking “How does an MBA degree impact one’s job related income in Japan?” and “Is it different from that of the US?” We have also looked at the impact of MBA on other job related outcome such as employability, job satisfaction, confidence in business related knowledge and skills, career growth and status. As far as financial benefit is concerned, only MBA from the top 100 business schools was effective both in Japan and the US and also the same with other countries. In this regard the top 100 business schools are successful in contributing to students’ job related income growth. Another finding from this study showed that the top 100 MBA had positive impact on employability in Japan, US and the other countries, but MBA from other business schools negatively influenced employability in Japan and also for the total sample including other countries. Status was positively influenced by the top 100 MBA in the total sample. We have also found that MBA had no correlation with job satisfaction, confidence in knowledge and skills or career growth in Japan or the US. The overall results did not support our hypothesis on employability and the results from only MBA from the top 100 business schools supported out hypothesis on financial benefit and status.

Many previous studies and reports have stated that MBA is a “passport” for individuals to get into a state of financial growth, our results clearly supports this assertion in both Japanese and US business context. Based on this study we did not find any relationship between MBA and other job related outcomes. As Pfeffer & Fong (2002) notes, as discussed in chapter 2, that jobs in business management are not restricted to MBA graduates. It is possible that this situation provides recruiters with an idea that they do not have to hire MBA graduates to run a better business. Moreover business education is not something which can only be taught by only business schools. Executive business education, for example, is offered by some consulting companies, various training and education companies as well. Based on these and other similar arguments it is not surprising to find that MBA in general did not have impact employability. Also, although it is widely said that MBA gives people more confidence to make decisions, it does not really give people the competence to deal with the messy reality in which decisions are executed (Charan & Colvin, 1999). While case study is one of the most popular methods and has prevailed in MBA classes, case is a case in point and will not work as it may work in the classroom in the actual messy business environment with more diversity (Charan & Colvin, 1999). Confidence in knowledge and skills can be developed through actual work experience and MBA may not be the only way to achieve it.

Despite the limitations of this study, we still believe that our study was significant because it will help us design better research programs to evaluate the influence of MBA intervention on job related outcomes. This will in turn help potential MBA students on their decision making process, employers

understand the role and purpose of MBA education and above all business schools can gain insight about the actual out of their MBA programs and could use this information to further improve the curriculum.

5.2. Reflection

While this is a preliminary study to evaluate effectiveness of MBA in Japan and compare it with that of the US, we have learned what has been missing in our research design and data collection methods. Also we have learned effective ways to develop more reliable research instruments and what had to be taken into account to obtain valid data for studies in social science. In this respect, we will pay special attention to the following aspects of a good research design in our future research. Questionnaire item design will receive special attention and we will incorporate, as much as possible, standard well tested items to improve the reliability of the instrument and conclusion validity. We would also pay extra attention to the selection of control variables to improve internal validity. Above all collecting data from a large sample population is very important for the overall significance of our research.

5.3. Recommendations and Future Study

Before thinking about recommendations, it is important to realize that a preliminary study of this nature will normally lead to more questions and ideas for future research than answers and recommendations. We would like to do three things in our future studies on the effectiveness of a formal training intervention. Firstly, we will scan the literature and develop a list of most important job related tangible and intangible personal, organizational and societal outcomes. We will use this list to determine major dependent variables to study. Secondly, we will look at, in addition to the intervention, all possible independent variables such as motivation, social networks and individual difference. Thirdly, we will elaborate our basic model by introducing an exhaustive list of mediating variables such as knowledge, network and change in attitude gained through the intervention.

Also we would propose that future study should pay more attention to overcome some of the methodological difficulties encountered in the present study. For example, to establish a clear causal relationship between MBA and financial benefit, one should make sure that both MBA holders and people without MBA have the same level of motivation, knowledge, experience and socio-economic background. In this respect, Pfeffer (1977) and Dreher et al. (1985) studied the role of socio-economic background as a moderator in the causal relationship between MBA degree and financial benefit. Screening theory (Meesters, 1992) also notes that socio-economic background indicates trainability of employees. Another factor which would influence financial success and many other job outcomes is individual personality difference. Some studies examined MBA holders' personality and its moderating role in relation to MBA and financial benefit (Harrell, 1969). The role of individual personality difference in moderating the relationship between MBA and job outcomes will be the main focus of our future study. In the future, we plan to study the role of personality, characterized by the big five personality traits and core self-evaluation, in moderating the relationship between MBA and

job outcomes. In addition, we would like to conduct a multi-national study by incorporating respondents from at least five major markets, namely the US, Japan, China, India and Europe.

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APPENDICES

9. Type of MBA

- | | |
|---|--|
| <input type="checkbox"/> Full-time 1 year | <input type="checkbox"/> Distance learning |
| <input type="checkbox"/> Full-time 2 year | <input type="checkbox"/> Executive MBA |
| <input type="checkbox"/> Part-time | <input type="checkbox"/> Other () |

**10. How much did your organization contribute towards the expenses of your MBA study?
Please indicate by circling an approximate percentage:**

0% 10 20 30 40 50 60 70 80 90 100%

11. When did you finish your MBA

12. Job position RIGHT BEFORE starting your MBA

- | | |
|---|---|
| <input type="checkbox"/> Regular employee | <input type="checkbox"/> Director |
| <input type="checkbox"/> Manager | <input type="checkbox"/> Vice President |
| <input type="checkbox"/> Junior Manager | <input type="checkbox"/> CEO |
| <input type="checkbox"/> Senior Manager | <input type="checkbox"/> Other () |
| <input type="checkbox"/> General Manager | |

13. Was your job full-time or par-time BEFORE MBA?

- | | |
|---|--|
| <input type="checkbox"/> Full-time (40hrs/week or more) | <input type="checkbox"/> Part-time (Less than 40 hrs/week) |
|---|--|

**14. Annual GROSS income (before tax) RIGHT BEFORE entering MBA
(x10,000 YEN OR x 100 of US\$)**

- | | |
|--|--|
| <input type="checkbox"/> Under 400 | <input type="checkbox"/> 1,400 -1,599 |
| <input type="checkbox"/> 400 – 699 | <input type="checkbox"/> 1,600 - 1,799 |
| <input type="checkbox"/> 700 – 999 | <input type="checkbox"/> 1,800 - 1,999 |
| <input type="checkbox"/> 1,000 – 1,199 | <input type="checkbox"/> 2,000 – 2,999 |
| <input type="checkbox"/> 1,200 -1,399 | <input type="checkbox"/> Above 3,000 |

15. Industry you worked in RIGHT BEFORE entering MBA

- | | |
|--|--|
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Government |
| <input type="checkbox"/> Architecture / Construction | <input type="checkbox"/> Health care (including hospitals) |
| <input type="checkbox"/> Aviation | <input type="checkbox"/> High tech / Electronics |
| <input type="checkbox"/> Automobile | <input type="checkbox"/> Pharmaceutical |
| <input type="checkbox"/> Chemical / Petrochemical | <input type="checkbox"/> Retail |

- | | |
|---|--|
| <input type="checkbox"/> Consulting | <input type="checkbox"/> Software / IT |
| <input type="checkbox"/> Consumer electronics | <input type="checkbox"/> Trading |
| <input type="checkbox"/> Education / Research | <input type="checkbox"/> Other () |
| <input type="checkbox"/> Financial services / Banking | |

16. How many people worked for your organization RIGHT BEFORE entering MBA?

- | | |
|-------------------------------------|---|
| <input type="checkbox"/> 1 – 10 | <input type="checkbox"/> 1,001 – 2,000 |
| <input type="checkbox"/> 11 – 100 | <input type="checkbox"/> 2,001 – 3,000 |
| <input type="checkbox"/> 101 – 500 | <input type="checkbox"/> 3,001 – 10,000 |
| <input type="checkbox"/> 501 – 1000 | <input type="checkbox"/> Above 10,000 |

17. Did your income change RIGHT AFTER MBA?

Yes / No

18. If YES, what % change in annual GROSS income did you experience RIGHT AFTER MBA?

_____ %

19. Your CURRENT job position

- | | |
|---|---|
| <input type="checkbox"/> Regular employee | <input type="checkbox"/> Director |
| <input type="checkbox"/> Manager | <input type="checkbox"/> Vice President |
| <input type="checkbox"/> Junior Manager | <input type="checkbox"/> CEO |
| <input type="checkbox"/> Senior Manager | <input type="checkbox"/> Other () |
| <input type="checkbox"/> General Manager | |

20. Is your CURRENT job full-time or par-time ?

- | | |
|---|--|
| <input type="checkbox"/> Full-time (40hrs/week or more) | <input type="checkbox"/> Part-time (Less than 40 hrs/week) |
|---|--|

21. Your CURRENT annual GROSS income (before tax)

(x10,000 YEN OR x 100 of US\$)

- | | |
|--|--|
| <input type="checkbox"/> Under 400 | <input type="checkbox"/> 1,400 -1,599 |
| <input type="checkbox"/> 400 – 699 | <input type="checkbox"/> 1,600 - 1,799 |
| <input type="checkbox"/> 700 – 999 | <input type="checkbox"/> 1,800 - 1,999 |
| <input type="checkbox"/> 1,000 – 1,199 | <input type="checkbox"/> 2,000 – 2,999 |
| <input type="checkbox"/> 1,200 -1,399 | <input type="checkbox"/> Above 3,000 |

22. Your CURRENT industry

- | | |
|--|--|
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Government |
| <input type="checkbox"/> Architecture / Construction | <input type="checkbox"/> Health care (including hospitals) |
| <input type="checkbox"/> Aviation | <input type="checkbox"/> High tech / Electronics |

Why an MBA?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
2. It will be easy for me to find another job even if I lose the job I have now.	<input type="checkbox"/>				
3. I have strong network in the business community.	<input type="checkbox"/>				
4. I am satisfied with my current income	<input type="checkbox"/>				
5. I am satisfied with my current position	<input type="checkbox"/>				
6. Overall, I am satisfied with my current job.	<input type="checkbox"/>				
7. I am qualified to have promotion(s).	<input type="checkbox"/>				
8. I am confident about my knowledge and skills at work.	<input type="checkbox"/>				
9. My job fits with my educational background.	<input type="checkbox"/>				
10. I am motivated to work hard in my current job.	<input type="checkbox"/>				
11. I feel I have excellent opportunities for career growth.	<input type="checkbox"/>				
12. In my current job, I will feel a high level of job security.	<input type="checkbox"/>				
13. In my current job I get excellent opportunity for personal growth and development.	<input type="checkbox"/>				
14. Through my current job I am able to fulfill my job related aspirations.	<input type="checkbox"/>				
15. In my current job I get opportunity to participation in important decisions.	<input type="checkbox"/>				
16. In my current job my skills are fully utilized.	<input type="checkbox"/>				
17. My current job gives me enough flexibility and independence.	<input type="checkbox"/>				
18. The knowledge I gained from my MBA is helping me perform well in my current job.	<input type="checkbox"/>				
19. I developed strong business ties with many people from my MBA class.	<input type="checkbox"/>				
20. I find customers and /or partners through the external contacts of my business school.	<input type="checkbox"/>				

Why an MBA?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
21. After my MBA I feel more confident when dealing with business issues at work.	<input type="checkbox"/>				
22. MBA helped me find a more interesting job.	<input type="checkbox"/>				
23. All the promotion(s) I got after my MBA were mainly due to the MBA. (If applicable).	<input type="checkbox"/>				
24. My salary has increased after I finished my MBA.	<input type="checkbox"/>				
25. I am just happy that I have an MBA.	<input type="checkbox"/>				
26. The experience I gained during my MBA is helping me perform well in my current job.	<input type="checkbox"/>				
27. The network I have developed during my MBA has no influence on performing in my current job.	<input type="checkbox"/>				
28. The network I have developed during my MBA helps me develop new business / client contacts.	<input type="checkbox"/>				
29. My increased confidence from MBA helped me improve my performance at work.	<input type="checkbox"/>				
30. MBA helped me change my field of work.	<input type="checkbox"/>				
31. I have (more) responsibilities at work after my MBA.	<input type="checkbox"/>				
32. My main goal of MBA study was just to get the diploma.	<input type="checkbox"/>				
33. The knowledge I have gained through my MBA study is NOT applicable to my current job	<input type="checkbox"/>				
34. I seek advice and information from the network I have developed during my MBA for my current job.	<input type="checkbox"/>				
35. My major goal of the MBA study was to change my career.	<input type="checkbox"/>				
36. I have more authority at work after my MBA.	<input type="checkbox"/>				

Why an MBA?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
37. I do not expect anything more from an MBA, other than the diploma.	<input type="checkbox"/>				
38. MBA clarified my business fundamentals	<input type="checkbox"/>				
39. External contacts of my business school helped me find a job.	<input type="checkbox"/>				
40. Time for spent for my MBA study was a waste as far as my career is concerned.	<input type="checkbox"/>				
41. I have more people working under me after my MBA.	<input type="checkbox"/>				
42. The knowledge I have gained through my MBA will help / has helped me set-up my own business.	<input type="checkbox"/>				
43. Money I spent for MBA is worthwhile because I could change the field of work.	<input type="checkbox"/>				
44. After MBA, my ability to learn on-the-job has increased.	<input type="checkbox"/>				

personal growth and development.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
14. Through my current job I am able to fulfill my job related aspirations.	<input type="checkbox"/>				
15. In my current job I get opportunity to participation in important decisions.	<input type="checkbox"/>				
16. In my current job my skills are fully utilized.	<input type="checkbox"/>				
17. My current job gives me enough flexibility and independence.	<input type="checkbox"/>				

Why an MBA?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
4. MBA graduates get higher starting salary than non-MBA graduates.	<input type="checkbox"/>				
5. MBA graduates have more business knowledge than non-MBA graduates.	<input type="checkbox"/>				
6. There will be a lot of opportunities for MBA graduates to have a job in variety of field.	<input type="checkbox"/>				
7. MBA does not have anything to do with promotion in our organization.	<input type="checkbox"/>				
8. I see differences in salary between MBA graduates (higher salary) and non MBA graduates (lower salary) in our organization when they have the same year of work experience.	<input type="checkbox"/>				
9. MBA graduates are better at solving complex business problems than non-MBA graduates.	<input type="checkbox"/>				
10. MBA degree does not help to change one's career.	<input type="checkbox"/>				
11. I have never seen MBA graduates got promoted.	<input type="checkbox"/>				
12. MBA graduates earn more than other graduates the whole time.	<input type="checkbox"/>				
13. I do not see any differences in performance between MBA and non-MBA graduates.	<input type="checkbox"/>				
14. MBA is an important "passport" to change one's career in business world.	<input type="checkbox"/>				

Appendix A.4

Questionnaire for MBA holders in Japanese

この度はアンケート記入にご協力いただきまして誠にありがとうございます。このアンケートは職業社会における経営修士（MBA）の有効性の調査を目的としています。この調査は、トゥエンテ大学（オランダ）、テキサス大学ダラス校（アメリカ）、そして株式会社みのり経営研究所（東京）による共同研究の一環として実施しています。当アンケートで導かれた調査結果は、トゥエンテ大学にて岩崎友香が修士論文として使用させていただきます。当調査は個人を特定することは目的ではなく、個人が特定される情報を集めることはいたしておりません。また、アンケートでお答えいただいた内容を機密事項として取り扱い、研究終了後に廃棄することをお約束いたします。

1. 勤務先の国名

2. 性別

男性

女性

3. 年齢

_____ 歳

4. MBA 以前の就業経験年数

_____ 年間

5. MBA 以前に修了した学歴

学士

修士

博士

その他（ _____ ）

6. MBA 以前に修了した学歴の専門分野

商学・経営学

文学・歴史学

心理学

自然科学

経済学

工学

社会学・人文科学

医学・薬学

その他（ _____ ）

7. MBA 以前に修了した学歴の大学、またはその他機関名

8. MBA を取得された大学、またはその他機関名

9. MBA のタイプ

- | | |
|-----------------------------------|-------------------------------------|
| <input type="checkbox"/> 1年コース全日制 | <input type="checkbox"/> 通信教育 |
| <input type="checkbox"/> 2年コース全日制 | <input type="checkbox"/> 幹部 MBA コース |
| <input type="checkbox"/> パートタイム | <input type="checkbox"/> その他 () |

10. MBA 取得に際して、あなたが勤務されていた会社から金銭面での援助を受けましたか？あてはまる数字を○で囲んでください。

0% 10 20 30 40 50 60 70 80 90 100%

11. MBA 取得年

19____ / 200__

12. MBA を始める直前の役職

- | | |
|---------------------------------|----------------------------------|
| <input type="checkbox"/> 一般社員 | <input type="checkbox"/> 取締役 |
| <input type="checkbox"/> マネージャー | <input type="checkbox"/> 副社長 |
| <input type="checkbox"/> 係長 | <input type="checkbox"/> 社長 |
| <input type="checkbox"/> 課長 | <input type="checkbox"/> その他 () |
| <input type="checkbox"/> 部長 | |

13. 12の就業形態

- フルタイム社員（週40時間以上勤務）
- パートタイム社員（週40時間未満勤務）

14. MBA を始める直前の年収（税金等込み）

- | | |
|--|--|
| <input type="checkbox"/> 400万円未満 | <input type="checkbox"/> 1,400-1,599万円 |
| <input type="checkbox"/> 400-699万円 | <input type="checkbox"/> 1,600-1,799万円 |
| <input type="checkbox"/> 700-999万円 | <input type="checkbox"/> 1,800-1,999万円 |
| <input type="checkbox"/> 1,000-1,199万円 | <input type="checkbox"/> 2,000-2,999万円 |
| <input type="checkbox"/> 1,200-1,399万円 | <input type="checkbox"/> 3,000万円以上 |

15. MBA を始める直前にお勤めになっていた組織の業種

- | | |
|-----------------------------------|--------------------------------------|
| <input type="checkbox"/> 農業 | <input type="checkbox"/> 政府 |
| <input type="checkbox"/> 建築・土木 | <input type="checkbox"/> 健康・病院 |
| <input type="checkbox"/> 航空 | <input type="checkbox"/> 先端技術工業・電子化学 |
| <input type="checkbox"/> 自動車 | <input type="checkbox"/> 製薬 |
| <input type="checkbox"/> 化学・石油 | <input type="checkbox"/> 小売 |
| <input type="checkbox"/> コンサルティング | <input type="checkbox"/> ソフトウェア・IT |
| <input type="checkbox"/> 家電メーカー | <input type="checkbox"/> 貿易 |

- コンサルティング
- 家電メーカー
- 教育・研究
- 金融・銀行
- ソフトウェア・IT
- 貿易
- その他 ()

23. 22の会社の従業員数

- 1-10
- 11-100
- 101-500
- 501-1,000
- 1,001-2,000
- 2,001-3,000
- 3,001-10,000
- 10,000 以上

24. MBA であなたが価値を置かれていることを、1 から 9 のランクにしてご記入ください。(1 : 最も価値が大きい、9 : 最も価値が少ない)

また、MBA 取得以前と MBA 取得後に価値を置かれる点が変わった場合、「以前」、「以後」の両方に 1 から 9 のランクを記入してください。

以前	以後	利点
		MBA で習得したビジネスに関する新たな知識
		MBA の学生としての経験
		MBA 受講中の人脈、ネットワーク
		全体的な自負
		経済的な利益
		より高い役職
		職種の変更
		自分の事業を始められる可能性
		MBA という学位を得たこと

25. 以下の記述に対しあなたの考えにあてはまる賛成度、反対度を選んでください。

	非常に 反対	反対	中立	賛成	非常に 賛成
1. 現職を見つけるのは簡単だった。	<input type="checkbox"/>				
2. 現職を失ったとしても、別の職を見つけるのは簡単だろう。	<input type="checkbox"/>				
3. 私は職業社会で強い人脈をもっている。	<input type="checkbox"/>				
4. 私は現在の収入に満足している。	<input type="checkbox"/>				
5. 私は現在の役職に満足している。	<input type="checkbox"/>				
6. 全般的に、現職に満足している。	<input type="checkbox"/>				

	非常に 反対	反対	中立	賛成	非常に 賛成
7. 私は昇進するに値する。	<input type="checkbox"/>				
8. 私は仕事における自分の知識と技術に自信がある。	<input type="checkbox"/>				
9. 現職はわたしの学歴の分野に一致している。	<input type="checkbox"/>				
10. 現職で熱心に働くことに喜びを感じる。	<input type="checkbox"/>				
11. 私には今後のキャリアに大きなチャンスがある。	<input type="checkbox"/>				
12. 現職で、高い職の安定を感じる。	<input type="checkbox"/>				
13. 現職には私個人が成長できる機会がある。	<input type="checkbox"/>				
14. 現職は私が抱く職に対する野望を満たしてくれる。	<input type="checkbox"/>				
15. 現職で、重要な決断決定に参加する機会がある。	<input type="checkbox"/>				
16. 現職で、私の技術が存分に活かされている。	<input type="checkbox"/>				
17. 現職で、私は自由に仕事ができる。	<input type="checkbox"/>				
18. MBA で得た知識のおかげで現職が務まっている。	<input type="checkbox"/>				
19. MBA を受講していたおかげで現在私は職業社会において多くの人々と強いつながりがある。	<input type="checkbox"/>				
20. 現職で私が得た顧客や客は、私が MBA を取得した機関（大学等）が持つ外部との接触の賜物である。	<input type="checkbox"/>				
21. MBA 取得後、職場での経営関係の話には自信がたった。	<input type="checkbox"/>				
22. MBA のおかげでさらに興味のある職に就くことができた。	<input type="checkbox"/>				
23. MBA 取得後の昇進の全ては、主に MBA のおかげである。	<input type="checkbox"/>				
24. MBA 取得後、私の収入は増えた。	<input type="checkbox"/>				
25. 私は、単に MBA を取得したことが幸せだ。	<input type="checkbox"/>				
26. MBA で得た経験のおかげで、現職でうまく仕事が務まっている。	<input type="checkbox"/>				
27. MBA 受講中に得た人脈は、現職において私の仕事ぶりに全く関係がない。	<input type="checkbox"/>				
28. MBA 受講中に得た人脈のおかげで、現職において、新規顧客や客を集めることができている。	<input type="checkbox"/>				
29. MBA 取得により得た自信は、私の仕事に役立っている。	<input type="checkbox"/>				
30. MBA は、私が就ける職の分野の幅を広げた。	<input type="checkbox"/>				
31. MBA 取得後、より責任のある立場に就くようになった。	<input type="checkbox"/>				

Why an MBA?

	非常に 反対	反対	中立	賛成	非常に 賛成
32. MBA 取得の目的は、MBA の学位を取得することだけであった。	<input type="checkbox"/>				
33. MBA で得た知識は私の現職に関係がない。	<input type="checkbox"/>				
34. 現職で活かされる助言や情報は、MBA 受講中に知り合った人々からである。	<input type="checkbox"/>				
35. MBA 取得の目的は、キャリアを変更するためであった。	<input type="checkbox"/>				
36. MBA 取得後、職務においてより大きな権力を持つようになった。	<input type="checkbox"/>				
37. MBA からは、その学位取得の価値しか期待していない。	<input type="checkbox"/>				
38. MBA を取得したおかげで、ビジネスの基本が理解できた。	<input type="checkbox"/>				
39. MBA を取得した機関（大学等）の人脈のおかげで、私は現職に就いている。	<input type="checkbox"/>				
40. MBA 取得のために費やした時間は、キャリア面から判断すると無駄な時間であった。	<input type="checkbox"/>				
41. MBA 取得後、部下が増えた。	<input type="checkbox"/>				
42. MBA で得た知識は、将来私が自分の事業を始める時に役立つだろう、もしくは事業設立に役立った。	<input type="checkbox"/>				
43. 職を選ぶ分野の幅が広がったことから、MBA 取得のために費やしたお金は価値がある。	<input type="checkbox"/>				
44. MBA 取得後、職場での学習能力が高まった。	<input type="checkbox"/>				

Appendix A.5

Questionnaire for people without MBA in Japanese

この度はアンケート記入にご協力いただきまして誠にありがとうございます。このアンケートは職業社会における個人の学歴とキャリア成長の調査を目的としています。この調査は、トゥエンテ大学（オランダ）、テキサス大学ダラス校（アメリカ）、そして株式会社みのり経営研究所（東京）による共同研究の一環として実施しています。当アンケートで導かれた調査結果は、トゥエンテ大学にて岩崎友香が修士論文として使用させていただきます。当調査は個人を特定することは目的ではなく、個人が特定される情報を集めることはいたしておりません。また、アンケートでお答えいただいた内容を機密事項として取り扱い、研究終了後に廃棄することをお約束いたします。

1. 勤務先の国名

2. 性別

- 男性 女性

3. 年齢

_____ 歳

4. 最終学歴

- 学士 修士
 博士 その他 (_____)

5. 最終学歴の専門分野

- 商学・経営学 文学・歴史学
 心理学 自然科学
 経済学 工学
 社会学・人文科学 医学・薬学
 その他 (_____)

6. 最終学歴の大学、またはその他機関名

7. 最終学位取得年

19____ / 200__

8. 初就職開始のあなたの役職

- 一般社員 取締役

- | | |
|---------------------------------|----------------------------------|
| <input type="checkbox"/> マネージャー | <input type="checkbox"/> 副社長 |
| <input type="checkbox"/> 係長 | <input type="checkbox"/> 社長 |
| <input type="checkbox"/> 課長 | <input type="checkbox"/> その他 () |
| <input type="checkbox"/> 部長 | |

9. 8の就業形態

- フルタイム社員 (週40時間以上勤務)
- パートタイム社員 (週40時間未満勤務)

10. 初任給のあなたの年収 (税金等込み)

- | | |
|--|--|
| <input type="checkbox"/> 400万円未満 | <input type="checkbox"/> 1,400-1,599万円 |
| <input type="checkbox"/> 400-699万円 | <input type="checkbox"/> 1,600-1,799万円 |
| <input type="checkbox"/> 700-999万円 | <input type="checkbox"/> 1,800-1,999万円 |
| <input type="checkbox"/> 1,000-1,199万円 | <input type="checkbox"/> 2,000-2,999万円 |
| <input type="checkbox"/> 1,200-1,399万円 | <input type="checkbox"/> 3,000万円以上 |

11. 現在の役職

- | | |
|---------------------------------|----------------------------------|
| <input type="checkbox"/> 一般社員 | <input type="checkbox"/> 取締役 |
| <input type="checkbox"/> マネージャー | <input type="checkbox"/> 副社長 |
| <input type="checkbox"/> 係長 | <input type="checkbox"/> 社長 |
| <input type="checkbox"/> 課長 | <input type="checkbox"/> その他 () |
| <input type="checkbox"/> 部長 | |

12. 11の就業形態

- フルタイム社員 (週40時間以上勤務)
- パートタイム社員 (週40時間未満勤務)

13. 現在のあなたの年収 (税金等込み)

- | | |
|--|--|
| <input type="checkbox"/> 400万円未満 | <input type="checkbox"/> 1,400-1,599万円 |
| <input type="checkbox"/> 400-699万円 | <input type="checkbox"/> 1,600-1,799万円 |
| <input type="checkbox"/> 700-999万円 | <input type="checkbox"/> 1,800-1,999万円 |
| <input type="checkbox"/> 1,000-1,199万円 | <input type="checkbox"/> 2,000-2,999万円 |
| <input type="checkbox"/> 1,200-1,399万円 | <input type="checkbox"/> 3,000万円以上 |

14. 現在お勤めの組織の業種

- | | |
|--------------------------------|--------------------------------------|
| <input type="checkbox"/> 農業 | <input type="checkbox"/> 政府 |
| <input type="checkbox"/> 建築・土木 | <input type="checkbox"/> 健康・病院 |
| <input type="checkbox"/> 航空 | <input type="checkbox"/> 先端技術工業・電子化学 |
| <input type="checkbox"/> 自動車 | <input type="checkbox"/> 製薬 |

- | | |
|-----------------------------------|------------------------------------|
| <input type="checkbox"/> 化学・石油 | <input type="checkbox"/> 小売 |
| <input type="checkbox"/> コンサルティング | <input type="checkbox"/> ソフトウェア・IT |
| <input type="checkbox"/> 家電メーカー | <input type="checkbox"/> 貿易 |
| <input type="checkbox"/> 教育・研究 | <input type="checkbox"/> その他 () |
| <input type="checkbox"/> 金融・銀行 | |

15. 14の会社の従業員数

- | | |
|------------------------------------|---------------------------------------|
| <input type="checkbox"/> 1-10 | <input type="checkbox"/> 1,001-2,000 |
| <input type="checkbox"/> 11-100 | <input type="checkbox"/> 2,001-3,000 |
| <input type="checkbox"/> 101-500 | <input type="checkbox"/> 3,001-10,000 |
| <input type="checkbox"/> 501-1,000 | <input type="checkbox"/> 10,000 以上 |

16. 以下の記述に対しあなたの考えにあてはまる賛成度、反対度を選んでください。

	非常に 反対	反対	中立	賛成	非常に 賛成
1. 現職を見つけるのは簡単だった。	<input type="checkbox"/>				
2. 現職を失ったとしても、別の職を見つけるのは簡単だろう。	<input type="checkbox"/>				
3. 私は職業社会で強い人脈をもっている。	<input type="checkbox"/>				
4. 私は現在の収入に満足している。	<input type="checkbox"/>				
5. 私は現在の役職に満足している。	<input type="checkbox"/>				
6. 全般的に、現職に満足している。	<input type="checkbox"/>				
7. 私は昇進するに値する。	<input type="checkbox"/>				
8. 私は仕事における自分の知識と技術に自信がある。	<input type="checkbox"/>				
9. 現職はわたしの学歴の分野に一致している。	<input type="checkbox"/>				
10. 現職で熱心に働くことに喜びを感じる。	<input type="checkbox"/>				
11. 私には今後のキャリアに大きなチャンスがある。	<input type="checkbox"/>				
12. 現職で、高い職の安定を感じる。	<input type="checkbox"/>				
13. 現職には私個人が成長できる機会がある。	<input type="checkbox"/>				
14. 現職は私が抱く職に対する野望を満たしてくれる。	<input type="checkbox"/>				
15. 現職で、重要な決断決定に参加する機会がある。	<input type="checkbox"/>				
16. 現職で、私の技術が存分に活かされている。	<input type="checkbox"/>				
17. 現職で、私は自由に仕事ができる。	<input type="checkbox"/>				

Appendix A.6

Questionnaire for superiors in Japanese

この度はアンケート記入にご協力いただきまして誠にありがとうございます。このアンケートは職業社会における経営修士 (MBA) の有効性の調査を目的としています。この調査は、トゥエンテ大学 (オランダ)、テキサス大学ダラス校 (アメリカ)、そして株式会社みのり経営研究所 (東京) による共同研究の一環として実施しています。当アンケートで導かれた調査結果は、トゥエンテ大学にて岩崎友香が修士論文として使用させていただきます。当調査は個人を特定することは目的ではなく、個人が特定される情報を集めることはいたしておりません。また、アンケートでお答えいただいた内容を機密事項として取り扱い、研究終了後に廃棄することをお約束いたします。

1. 勤務先の国名

2. あなたがお勤めの組織の業種

- | | |
|-----------------------------------|--------------------------------------|
| <input type="checkbox"/> 農業 | <input type="checkbox"/> 政府 |
| <input type="checkbox"/> 建築・土木 | <input type="checkbox"/> 健康・病院 |
| <input type="checkbox"/> 航空 | <input type="checkbox"/> 先端技術工業・電子化学 |
| <input type="checkbox"/> 自動車 | <input type="checkbox"/> 製薬 |
| <input type="checkbox"/> 化学・石油 | <input type="checkbox"/> 小売 |
| <input type="checkbox"/> コンサルティング | <input type="checkbox"/> ソフトウェア・IT |
| <input type="checkbox"/> 家電メーカー | <input type="checkbox"/> 貿易 |
| <input type="checkbox"/> 教育・研究 | <input type="checkbox"/> その他 () |
| <input type="checkbox"/> 金融・銀行 | |

3. 2の従業員数

- | | |
|------------------------------------|---------------------------------------|
| <input type="checkbox"/> 1-10 | <input type="checkbox"/> 1,001-2,000 |
| <input type="checkbox"/> 11-100 | <input type="checkbox"/> 2,001-3,000 |
| <input type="checkbox"/> 101-500 | <input type="checkbox"/> 3,001-10,000 |
| <input type="checkbox"/> 501-1,000 | <input type="checkbox"/> 10,000 以上 |

4. あなたの役職

- | | |
|---------------------------------|----------------------------------|
| <input type="checkbox"/> マネージャー | <input type="checkbox"/> 取締役 |
| <input type="checkbox"/> 係長 | <input type="checkbox"/> 副社長 |
| <input type="checkbox"/> 課長 | <input type="checkbox"/> 社長 |
| <input type="checkbox"/> 部長 | <input type="checkbox"/> その他 () |

5. 過去10年間であなたの部下に何人のMBA所有者がいましたか。

_____ 人

6. MBA に対して、あなたが価値を置かれていることを、1 から 9 のランクにしてご記入ください。
(1 : 最も価値が大きい、9 : 最も価値が少ない)

	利点
	MBA で習得したビジネスに関する新たな知識
	MBA の学生としての経験
	MBA 受講中の人脈、ネットワーク
	全体的な自負
	経済的な利益
	より高い役職
	職種の変更
	自分の事業を始められる可能性
	MBA という学位を得たこと

7. 以下の記述に対しあなたの考えにあてはまる賛成度、反対度を選んでください。

	非常に 反対	反対	中立	賛成	非常に 賛成
1. MBA 所有者は、MBA 非所有者よりもより多くの新たなアイデアを仕事につなげる。	<input type="checkbox"/>				
2. MBA 所有者は以前勤めていた職業と同じ職種は選ばない。	<input type="checkbox"/>				
3. 私の（勤める）会社では MBA 所有者は昇進するに値する。	<input type="checkbox"/>				
4. MBA 所有者は、MBA 非所有者よりも高い収入を得ている。	<input type="checkbox"/>				
5. MBA 所有者は、MBA 非所有者よりも多くのビジネスに関する知識を持っている。	<input type="checkbox"/>				
6. MBA 所有者には様々な業種で働けるチャンスがある。	<input type="checkbox"/>				
7. 私の（勤める）会社では、MBA は昇進に関係がない。	<input type="checkbox"/>				
8. 同じ年数の職務経験のある MBA 所有者と MBA 非所有者では、私の（勤める）会社では収入に違いがある。	<input type="checkbox"/>				
9. MBA 所有者は、MBA 非所有者よりもビジネスに関する複雑な問題を解決する能力が高い。	<input type="checkbox"/>				
10. MBA はキャリアの転換に役立たない。	<input type="checkbox"/>				
11. 昇進をしたことがない MBA 所有者に出会ったことがない。	<input type="checkbox"/>				

Why an MBA?

	非常に 反対	反対	中立	賛成	非常に 賛成
1 2. MBA 所有者は他の社員より多くの収入を得ている。	<input type="checkbox"/>				
1 3. MBA 所有者と MBA 非所有者のあいだで仕事の能力に違いはない。	<input type="checkbox"/>				
1 4. ビジネス界では、MBA は個人がキャリアを転換する上で重要な切符である。	<input type="checkbox"/>				

Appendix B.1

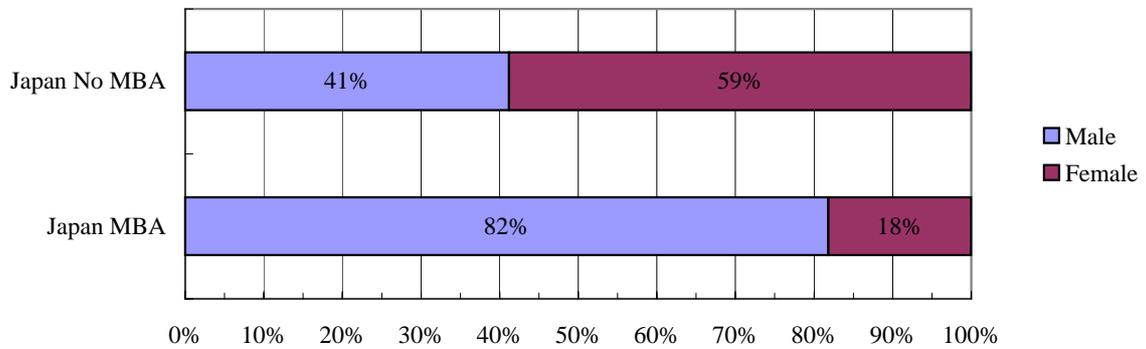
Details of questionnaire responses: MBA holders working in the Japan (Japan MBA) and people without MBA working in Japan (Japan No MBA)

The number of respondents: **28 (Japan MBA 11 and Japan No MBA 17)**

Note: Missing answers are kept blank. They are not counted in the tables below.

Gender

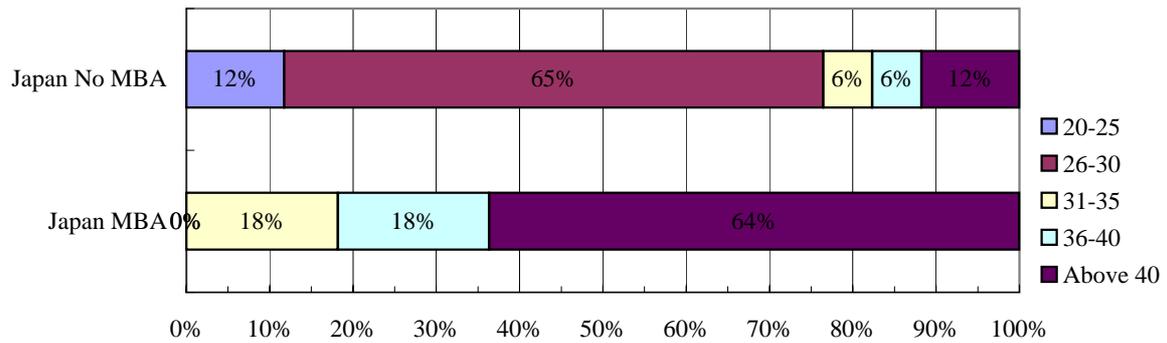
	Male	Female	Total
Japan MBA	9 82%	2 18%	11 100%
Japan No MBA	7 41%	10 59%	17 100%
Total	16 57%	12 43%	28 100%



Age

	21-25	26-30	31-35	36-40	Above 40	Total
Japan MBA	0 0%	0 0%	2 18%	2 18%	7 64%	11 100%
Japan No MBA	2 12%	11 65%	1 6%	1 6%	2 12%	17 100%
Total	2 7%	11 39%	3 11%	3 11%	9 32%	28 100%

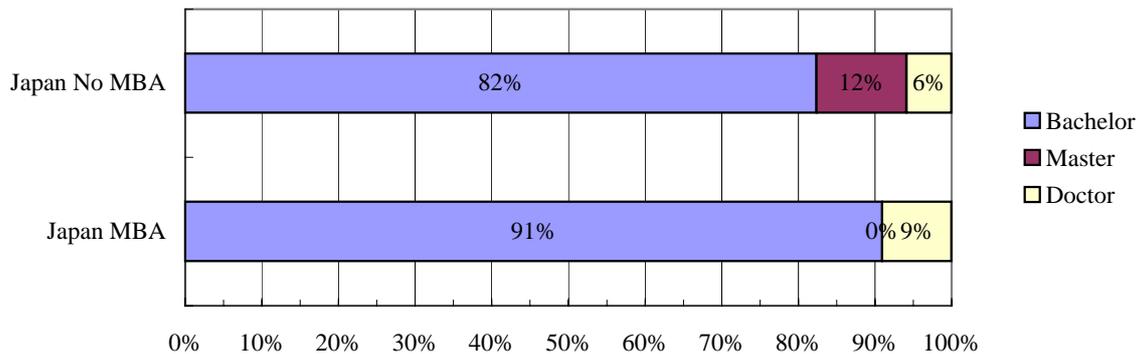
Note: Respondents above 45 years of age are relatively few, therefore they are included under the category of "Above 40".



Educational background

	Bachelor	Master	Doctor	Total
Japan MBA	10 91%	0 0%	1 9%	11 100%
Japan No MBA	14 82%	2 12%	1 6%	17 100%
Total	24 86%	2 7%	2 7%	28 100%

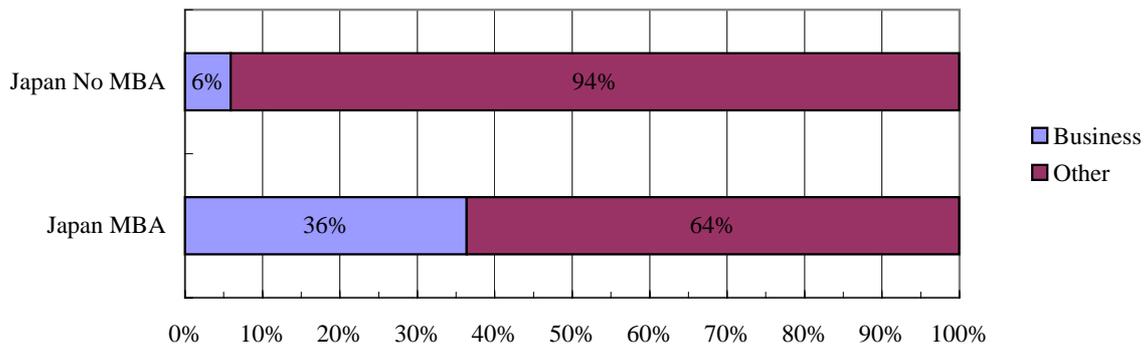
Note: Educational background is defined as the highest formal degree received in case of people without MBA and the highest degree received before attending the MBA program in case of people with MBA.



Previous Business education

	Business	Other	Total
Japan MBA	4 36%	7 64%	11 100%
Japan No MBA	1 6%	16 94%	17 100%
Total	5 18%	23 82%	28 100%

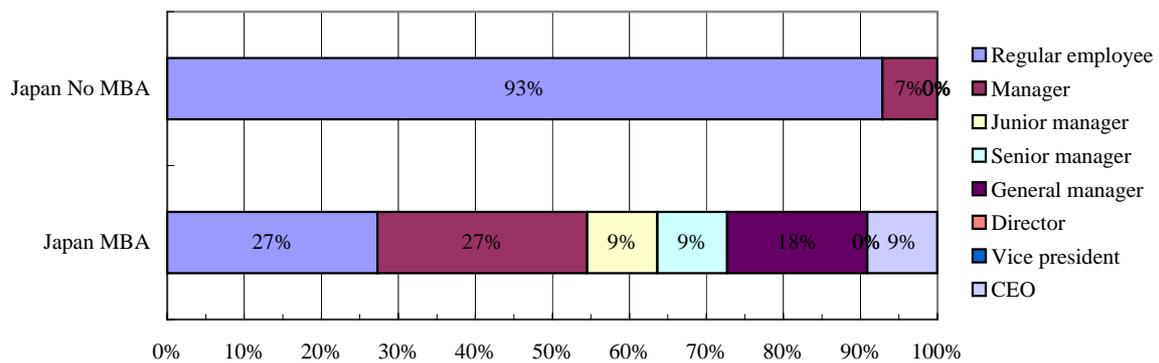
Note: In case of people without MBA, previous business education is defined as any formal business degree received and in the case of MBA holders any other formal business degree other than MBA.



Current position

	Regular employee	Manager	Junior manager	Senior manager	General manager	Director	Vice president	CEO	Total
Japan MBA	3 27%	3 27%	1 9%	1 9%	2 18%	0 0%	0 0%	1 9%	11 100%
Japan No MBA	13 93%	1 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	14 100%
Total	16 64%	4 16%	1 4%	1 4%	2 8%	0 0%	0 0%	1 4%	25 100%

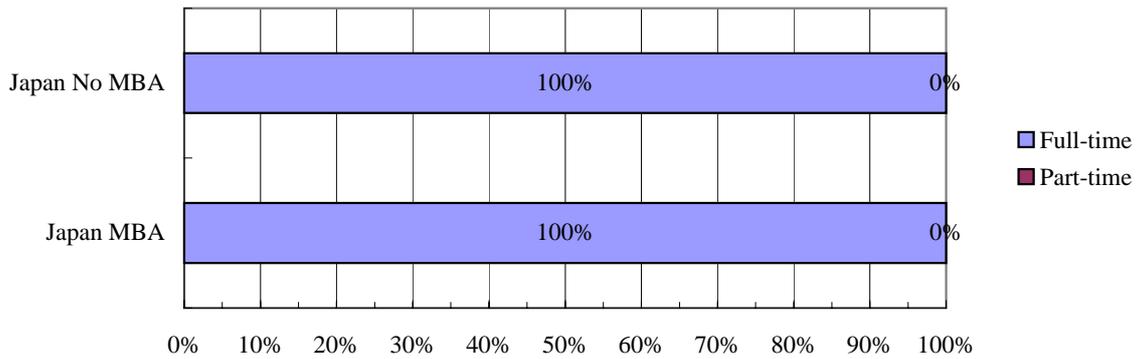
Note: These are self reported data.



Current working hour

	Full-time	Part-time	Total
Japan MBA	11 100%	0 0%	11 100%
Japan No MBA	15 100%	0 0%	15 100%
Total	26 100%	0 0%	26 100%

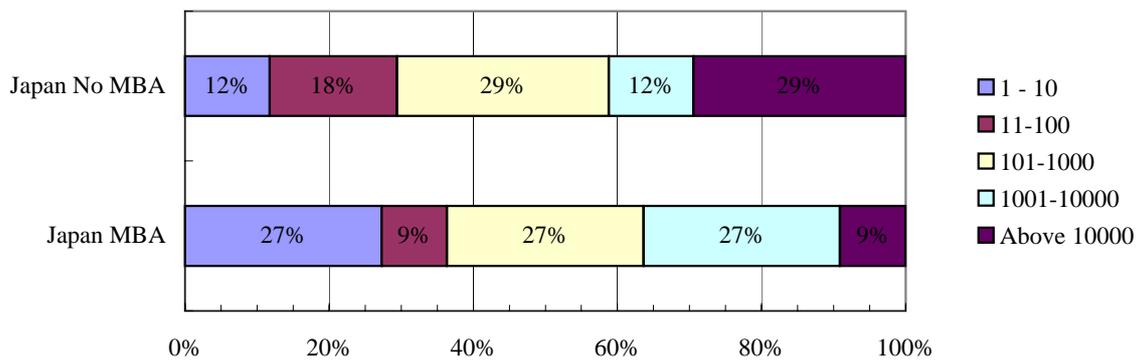
Note: Full-time is defined as more than 40 hours/week work hour and part-time is defined as less than 40 hours/week work hour in this research.



Current organization size

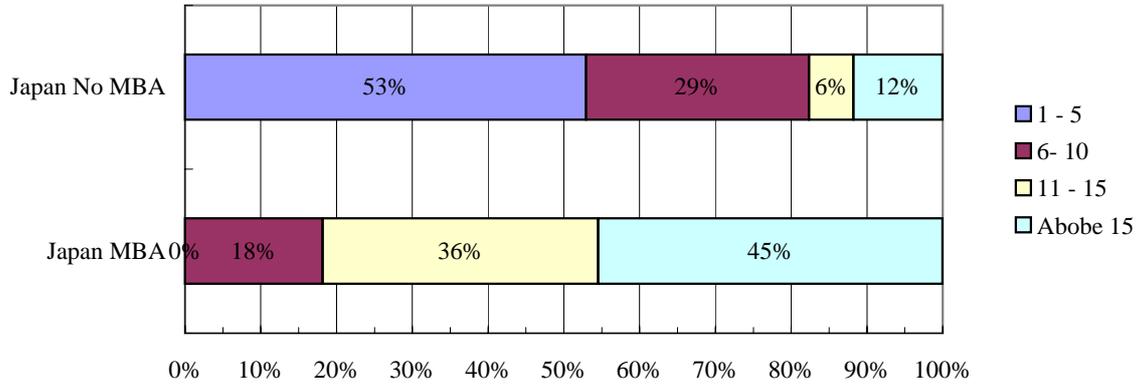
	1-10	11-100	101-1000	1001-10000	Above 10000	Total
Japan MBA	3 27%	1 9%	3 27%	3 27%	1 9%	11 100%
Japan No MBA	2 12%	3 18%	5 29%	2 12%	5 29%	17 100%
Total	5 18%	4 14%	8 29%	5 18%	6 21%	28 100%

Note: These are self reported data.



Total year of work experience

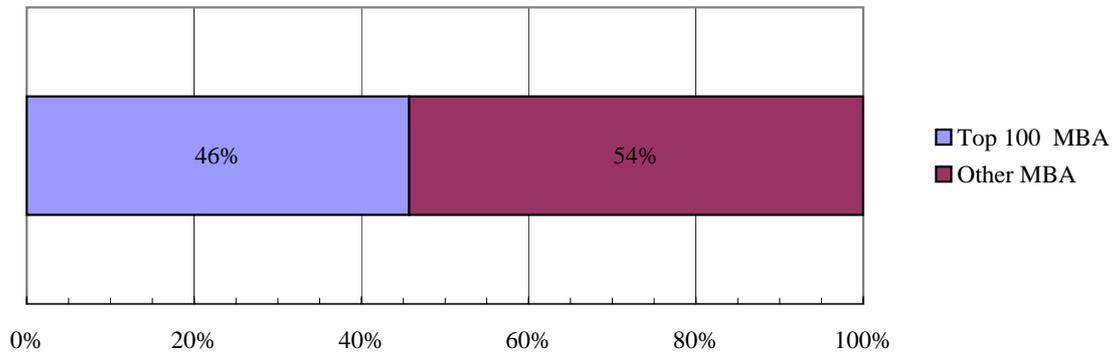
	1-5	6-10	11-15	Above 15	Total
Japan MBA	0 0%	2 18%	4 36%	5 45%	11 100%
Japan No MBA	9 53%	5 29%	1 6%	2 12%	17 100%
Total	9 32%	7 25%	5 18%	7 25%	28 100%



MBA graduates from the top 100 business school and from other business school

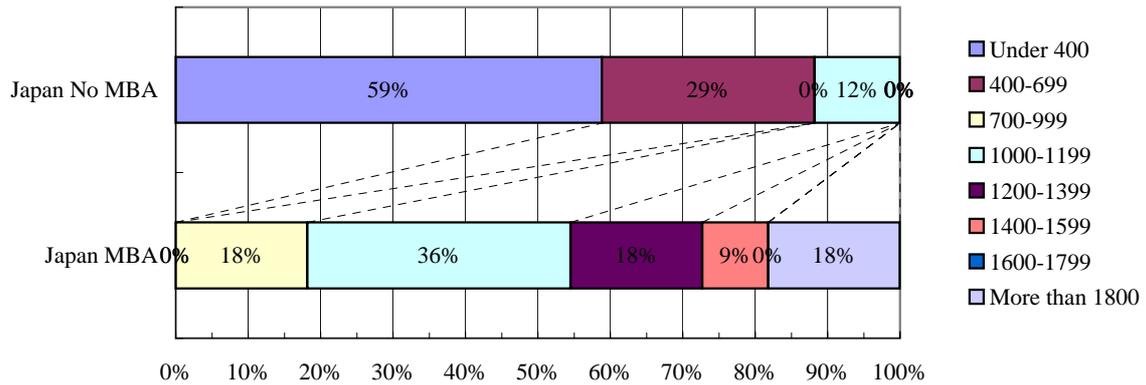
	Brand	Other	Total
MBA holders	16 46%	19 54%	35 100%

"Top 100" is defined based on Financial Times' top 100 full-time global MBA programs published in 2005.



Financial benefit

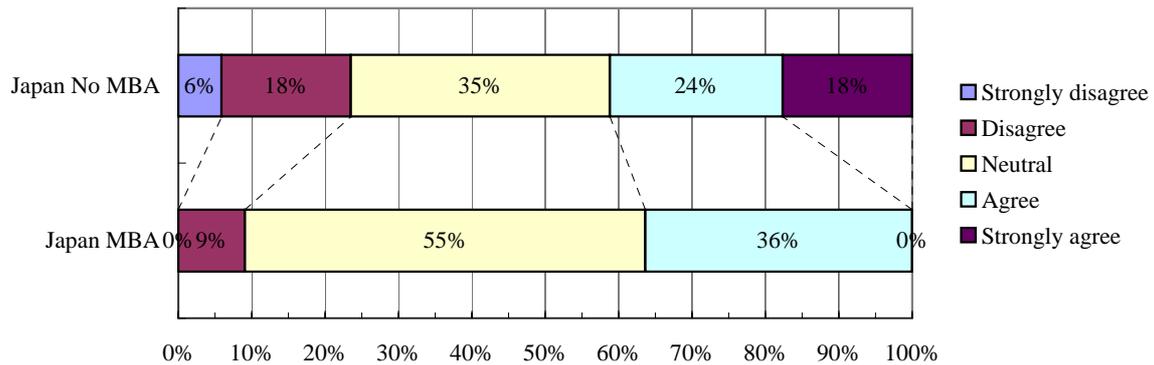
	Under 400	400-699	700-999	1,000-1,199	1,200-1,399	1,400-1,599	1,600-1,799	More than 1800	Total
Japan MBA	0 0%	0 0%	2 18%	4 36%	2 18%	1 9%	0 0%	2 18%	11 100%
Japan No MBA	10 59%	5 29%	0 0%	2 12%	0 0%	0 0%	0 0%	0 0%	17 100%
Total	10 36%	5 18%	2 7%	6 21%	2 7%	1 4%	0 0%	2 7%	28 100%



Employability item 1

It was easy for me to find my current job.

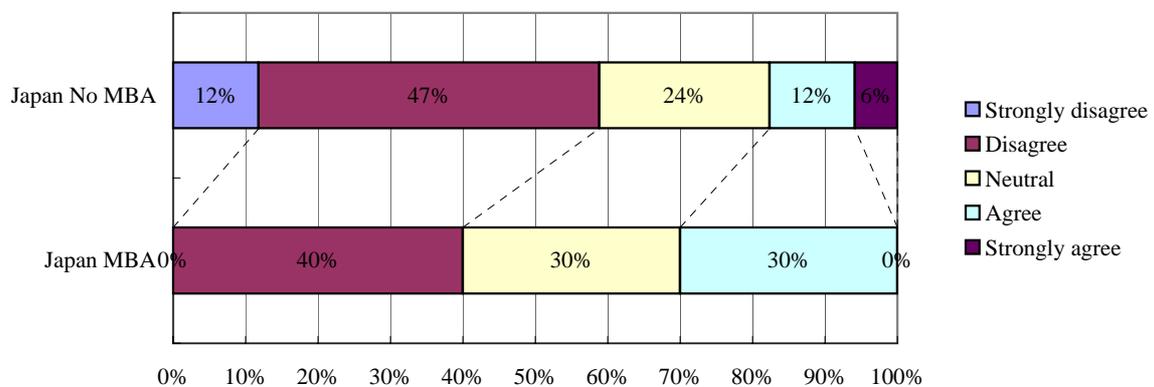
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Japan MBA	0 0%	1 9%	6 55%	4 36%	0 0%	11 100%
Japan No MBA	1 6%	3 18%	6 35%	4 24%	3 18%	17 100%
Total	1 4%	4 14%	12 43%	8 29%	3 11%	28 100%



Employability item 2

It will be easy for me to find another job even if I lose the job I have now.

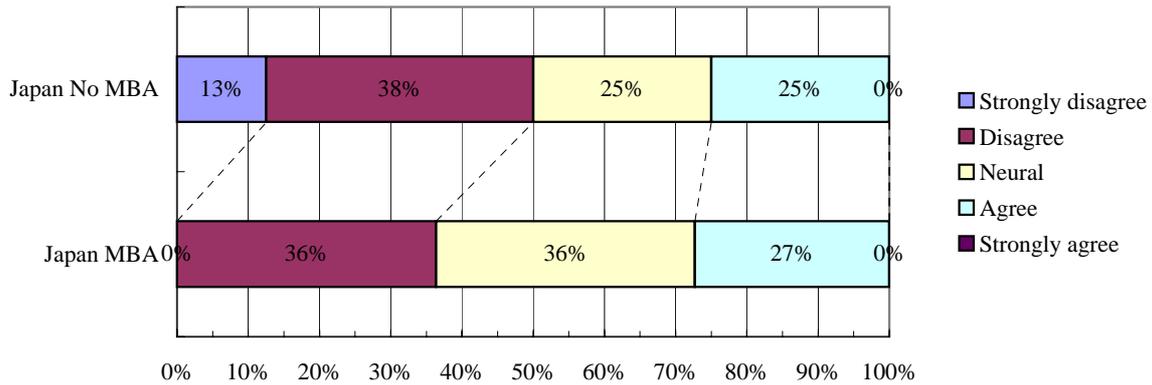
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Japan MBA	0 0%	4 40%	3 30%	3 30%	0 0%	10 100%
Japan No MBA	2 12%	8 47%	4 24%	2 12%	1 6%	17 100%
Total	2 7%	12 44%	7 26%	5 19%	1 4%	27 100%



Job satisfaction item 1

I am satisfied with my current income.

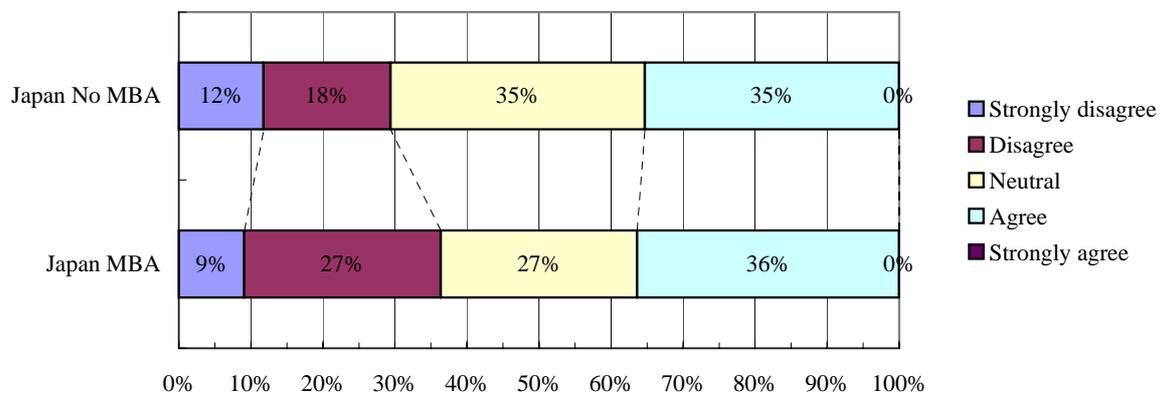
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Japan MBA	0 0%	4 36%	4 36%	3 27%	0 0%	11 100%
Japan No MBA	2 13%	6 38%	4 25%	4 25%	0 0%	16 100%
Total	2 7%	10 37%	8 30%	7 26%	0 0%	27 100%



Job satisfaction item 2

I am satisfied with my current position.

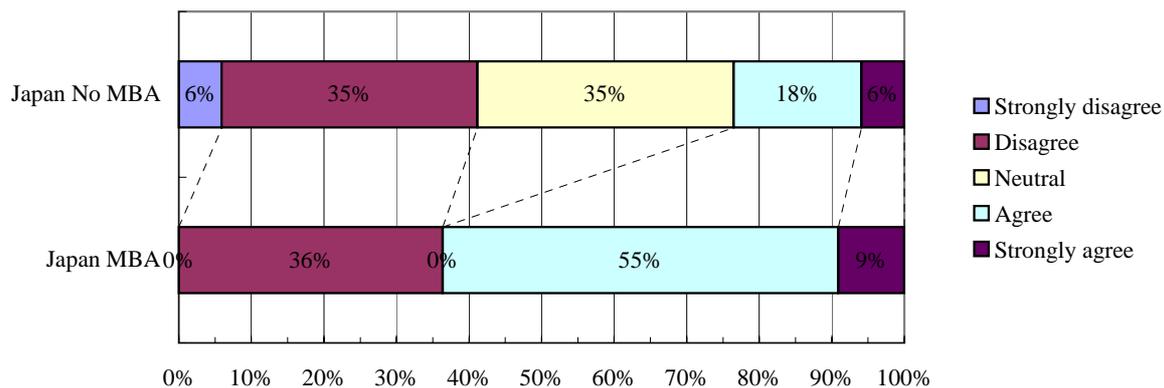
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Japan MBA	1 9%	3 27%	3 27%	4 36%	0 0%	11 100%
Japan No MBA	2 12%	3 18%	6 35%	6 35%	0 0%	17 100%
Total	3 11%	6 21%	9 32%	10 36%	0 0%	28 100%



Job satisfaction item 3

Overall, I am satisfied with my current job.

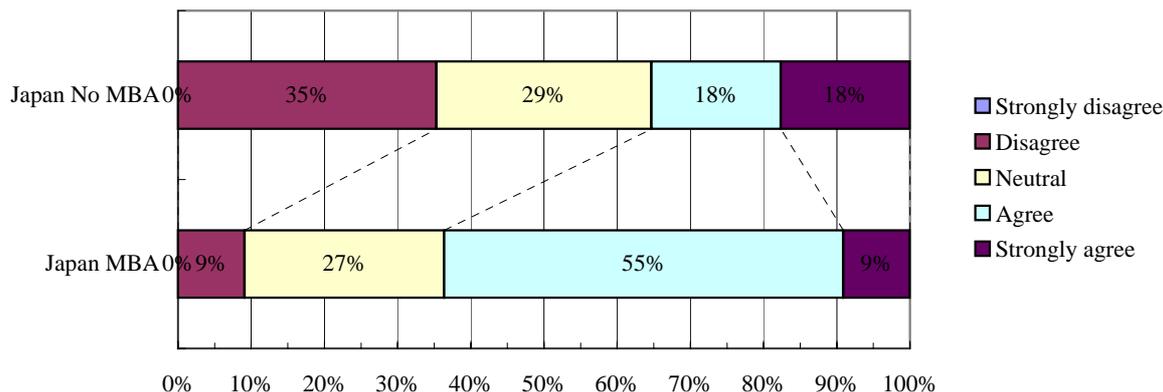
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Japan MBA	0 0%	4 36%	0 0%	6 55%	1 9%	11 100%
Japan No MBA	1 6%	6 35%	6 35%	3 18%	1 6%	17 100%
Total	1 4%	10 36%	6 21%	9 32%	2 7%	28 100%



Confidence in knowledge and skills item 1

I am qualified to have promotion(s).

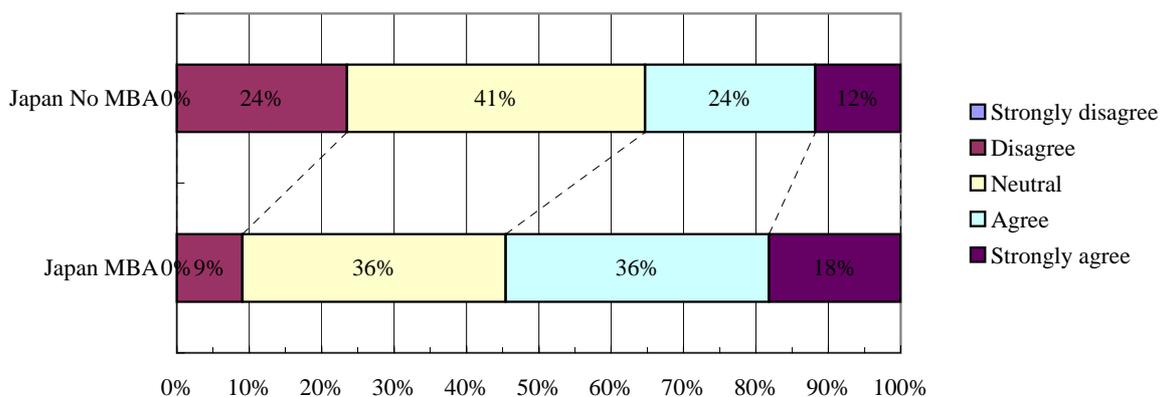
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Japan MBA	0 0%	1 9%	3 27%	6 55%	1 9%	11 100%
Japan No MBA	0 0%	6 35%	5 29%	3 18%	3 18%	17 100%
Total	0 0%	7 25%	8 29%	9 32%	4 14%	28 100%



Confidence in knowledge and skills item 2

I am confident about my knowledge and skills at work.

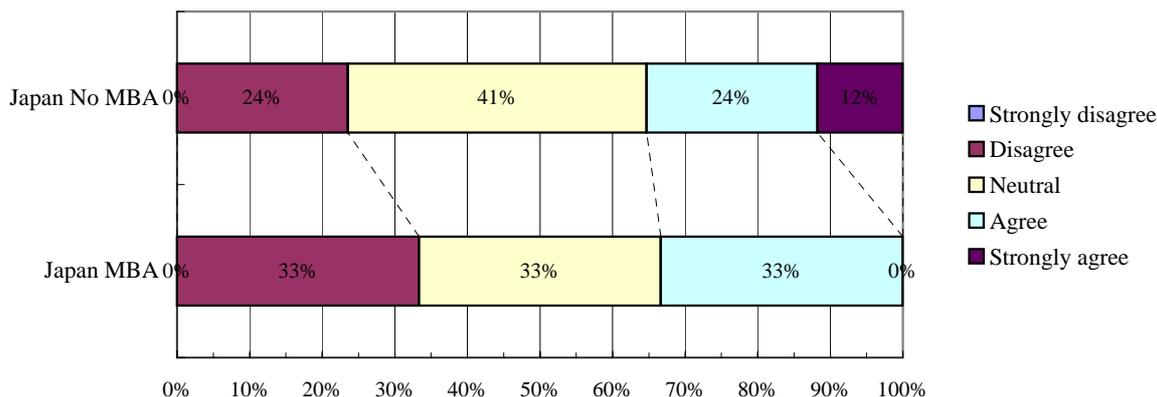
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Japan MBA	0 0%	1 9%	4 36%	4 36%	2 18%	11 100%
Japan No MBA	0 0%	4 24%	7 41%	4 24%	2 12%	17 100%
Total	0 0%	5 18%	11 39%	8 29%	4 14%	28 100%



Career growth item 1

I am motivated to work hard in my current job.

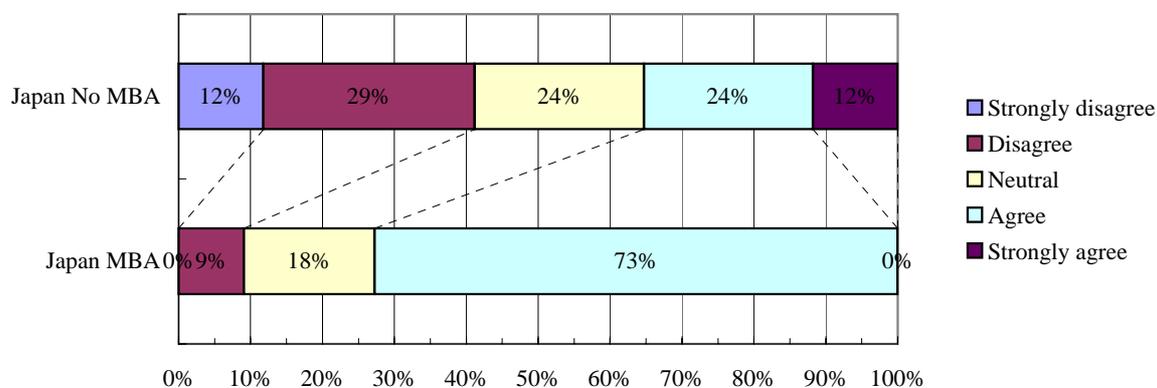
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Japan MBA	0 0%	1 33%	1 33%	1 33%	0 0%	3 100%
Japan No MBA	0 0%	4 24%	7 41%	4 24%	2 12%	17 100%
Total	0 0%	5 25%	8 40%	5 25%	2 10%	20 100%



Career growth item 2

I feel I have excellent opportunities for career growth.

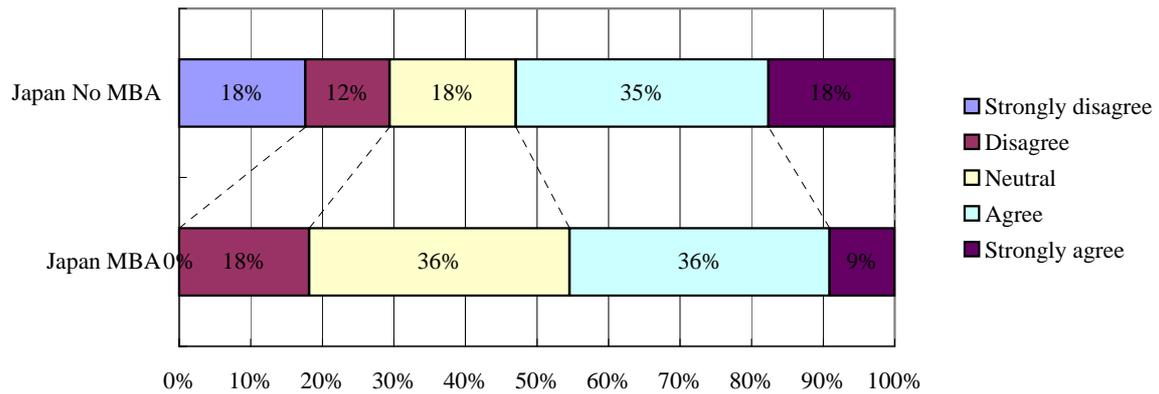
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Japan MBA	0 0%	1 9%	2 18%	8 73%	0 0%	11 100%
Japan No MBA	2 12%	5 29%	4 24%	4 24%	2 12%	17 100%
Total	2 7%	6 21%	6 21%	12 43%	2 7%	28 100%



Career growth item 3

In my current job I get excellent opportunity for personal growth and development.

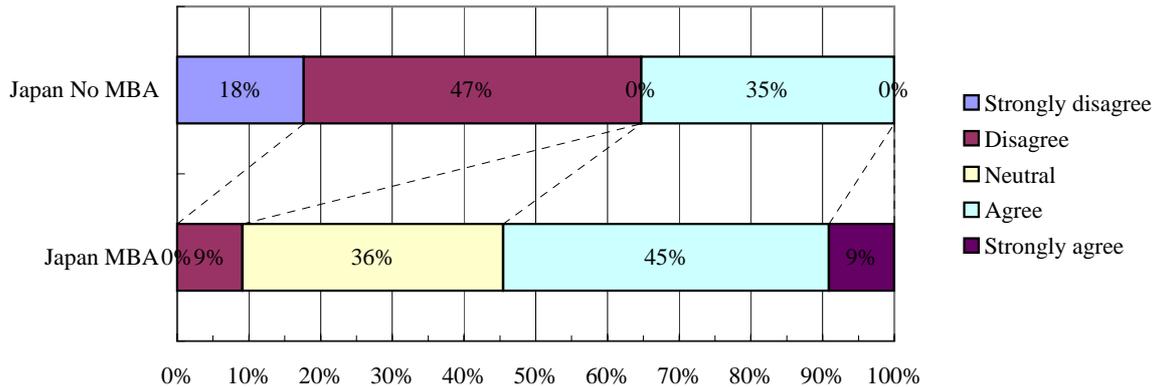
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Japan MBA	0 0%	2 18%	4 36%	4 36%	1 9%	11 100%
Japan No MBA	3 18%	2 12%	3 18%	6 35%	3 18%	17 100%
Total	3 11%	4 14%	7 25%	10 36%	4 14%	28 100%



Status item 1

In my current job I get opportunity to participate in important decisions.

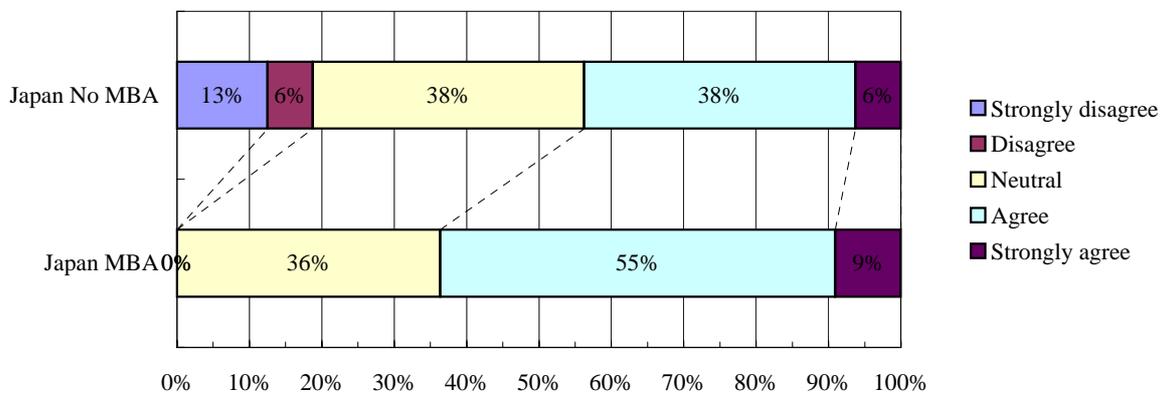
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Japan MBA	0 0%	1 9%	4 36%	5 45%	1 9%	11 100%
Japan No MBA	3 18%	8 47%	0 0%	6 35%	0 0%	17 100%
Total	3 11%	9 32%	4 14%	11 39%	1 4%	28 100%



Status item 2

My current job gives me enough flexibility and independence.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Japan MBA	0 0%	0 0%	4 36%	6 55%	1 9%	11 100%
Japan No MBA	2 13%	1 6%	6 38%	6 38%	1 6%	16 100%
Total	2 7%	1 4%	10 37%	12 44%	2 7%	27 100%



Appendix B.2

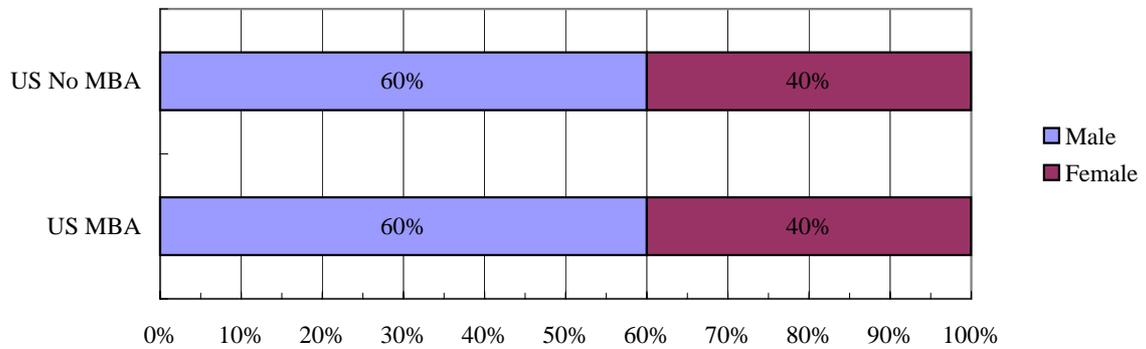
Details of questionnaire responses: MBA holders working in the US (US MBA) and people without MBA working in the US (US No MBA)

The number of respondents: **45 (US MBA 20 and US No MBA 25)**

Note: Missing answers are kept blank. They are not counted in the tables below.

Gender

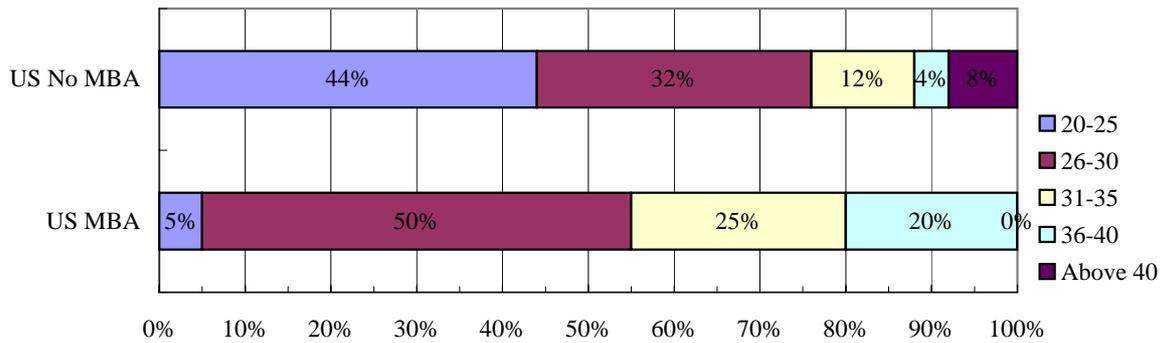
	Male	Female	Total
US MBA	12 60%	8 40%	20 100%
US No MBA	15 60%	10 40%	25 100%
Total	27 60%	18 40%	45 100%



Age

	21-25	26-30	31-35	36-40	Above 40	Total
US MBA	1 5%	10 50%	5 25%	4 20%	0 0%	20 100%
US No MBA	11 44%	8 32%	3 12%	1 4%	2 8%	25 100%
Total	12 27%	18 40%	8 18%	5 11%	2 4%	45 100%

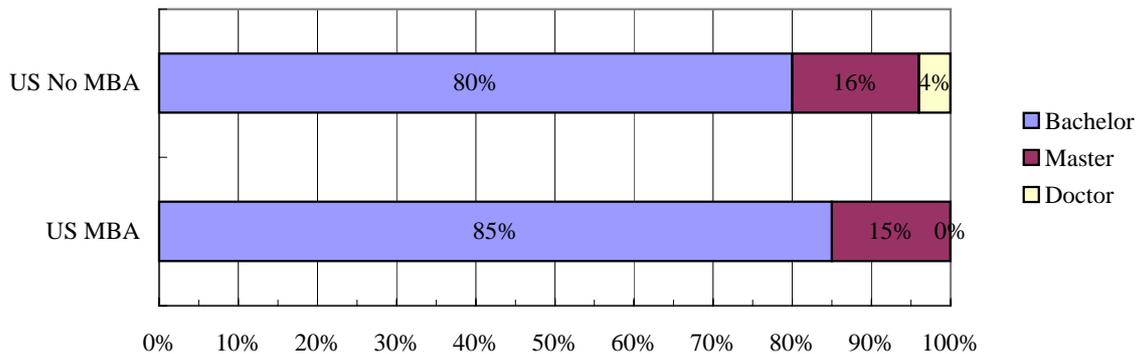
Note: Respondents above 45 years of age are relatively few, therefore they are included under the category of "Above 40".



Educational background

	Bachelor	Master	Doctor	Total
US MBA	17 85%	3 15%	0 0%	20 100%
US No MBA	20 80%	4 16%	1 4%	25 100%
Total	37 82%	7 16%	1 2%	45 100%

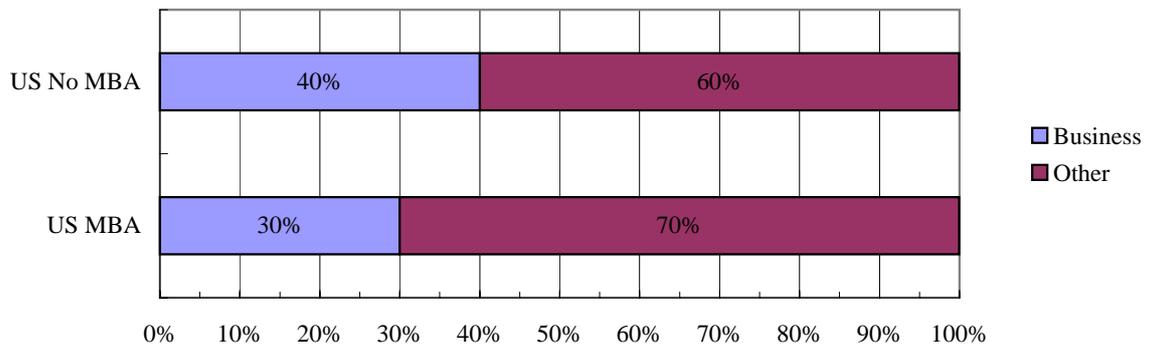
Note: Educational background is defined as the highest formal degree received in case of people without MBA and the highest degree received before attending the MBA program in case of people with MBA.



Previous Business education

	Business	Other	Total
US MBA	6 30%	14 70%	20 100%
US No MBA	10 40%	15 60%	25 100%
Total	16 36%	29 64%	45 100%

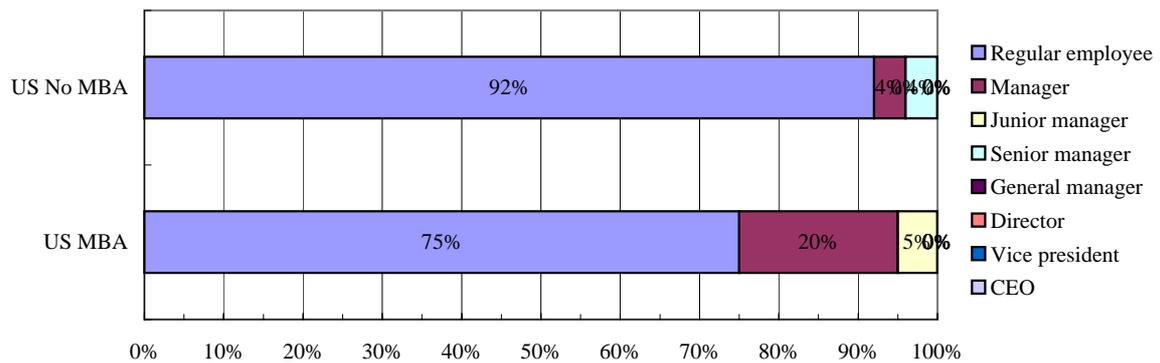
Note: In case of people without MBA, previous business education is defined as any formal business degree received and in the case of MBA holders any other formal business degree other than MBA.



Current position

	Regular employee	Manager	Junior manager	Senior manager	General manager	Director	Vice president	CEO	Total
US MBA	15 75%	4 20%	1 5%	0 0%	0 0%	0 0%	0 0%	0 0%	20 100%
US No MBA	23 92%	1 4%	0 0%	1 4%	0 0%	0 0%	0 0%	0 0%	25 100%
Total	38 84%	5 11%	1 2%	1 2%	0 0%	0 0%	0 0%	0 0%	45 100%

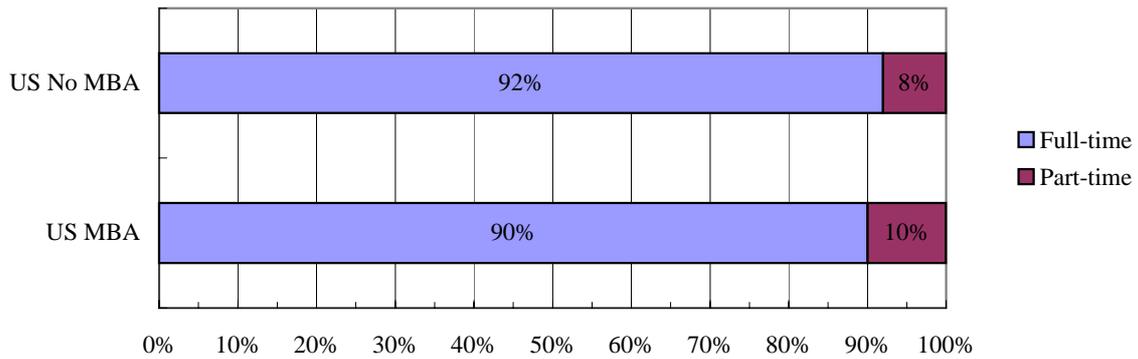
Note: These are self reported data.



Current working hour

	Full-time	Part-time	Total
US MBA	18 90%	2 10%	20 100%
US No MBA	23 92%	2 8%	25 100%
Total	41 91%	4 9%	45 100%

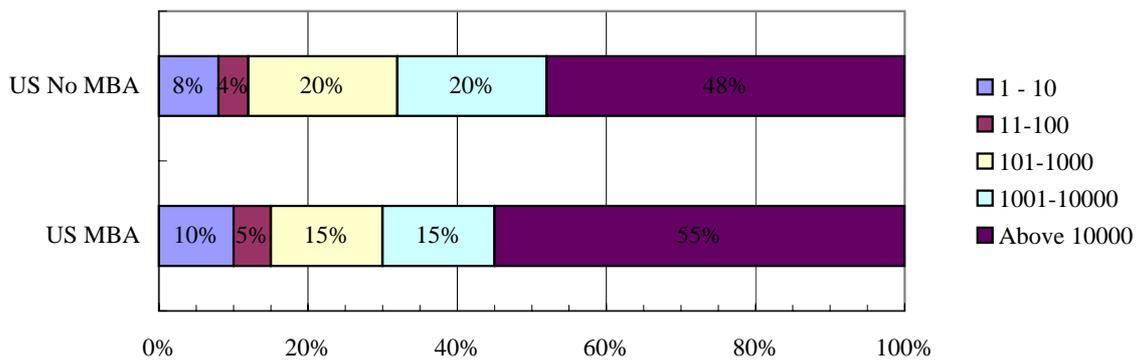
Note: Full-time is defined as more than 40 hours/week work hour and part-time is defined as less than 40 hours/week work hour in this research.



Current organization size

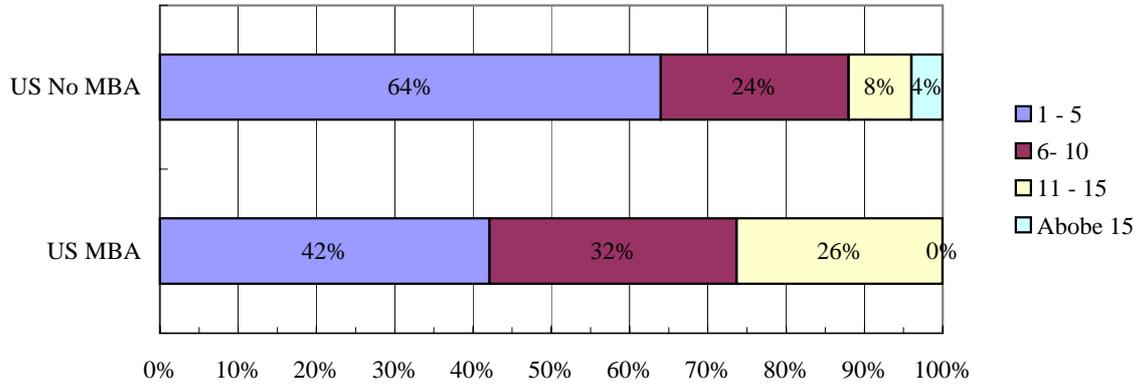
	1-10	11-100	101-1000	1001-10000	Above 10000	Total
US MBA	2 10%	1 5%	3 15%	3 15%	11 55%	20 100%
US No MBA	2 8%	1 4%	5 20%	5 20%	12 48%	25 100%
Total	4 9%	2 4%	8 18%	8 18%	23 51%	45 100%

Note: These are self reported data.



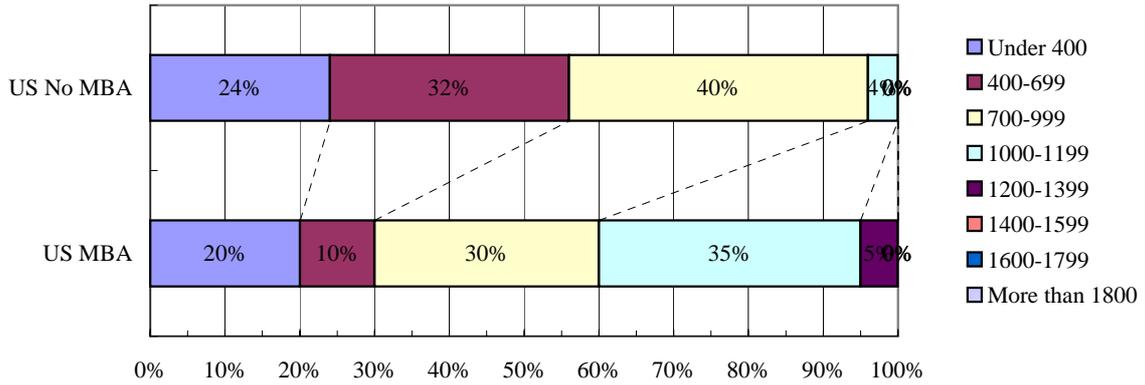
Total year of work experience

	1-5	6-10	11-15	Above 15	Total
US MBA	8 42%	6 32%	5 26%	0 0%	19 100%
US No MBA	16 64%	6 24%	2 8%	1 4%	25 100%
Total	24 55%	12 27%	7 16%	1 2%	44 100%



Financial benefit

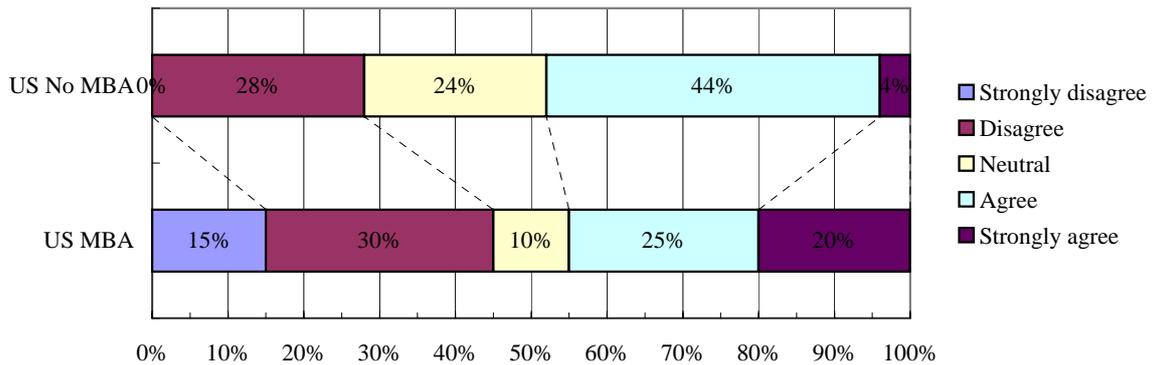
	Under 400	400-699	700-999	1,000-1,199	1,200-1,399	1,400-1,599	1,600-1,799	More than 1800	Total
US MBA	4 20%	2 10%	6 30%	7 35%	1 5%	0 0%	0 0%	0 0%	20 100%
US No MBA	6 24%	8 32%	10 40%	1 4%	0 0%	0 0%	0 0%	0 0%	25 100%
Total	10 22%	10 22%	16 36%	8 18%	1 2%	0 0%	0 0%	0 0%	45 100%



Employability item 1

It was easy for me to find my current job.

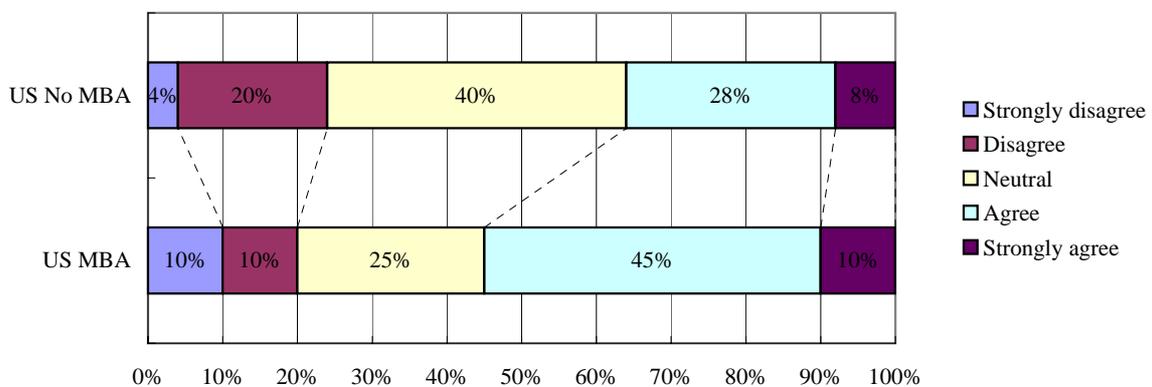
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
US MBA	3 15%	6 30%	2 10%	5 25%	4 20%	20 100%
US No MBA	0 0%	7 28%	6 24%	11 44%	1 4%	25 100%
Total	3 7%	13 29%	8 18%	16 36%	5 11%	45 100%



Employability item 2

It will be easy for me to find another job even if I lose the job I have now.

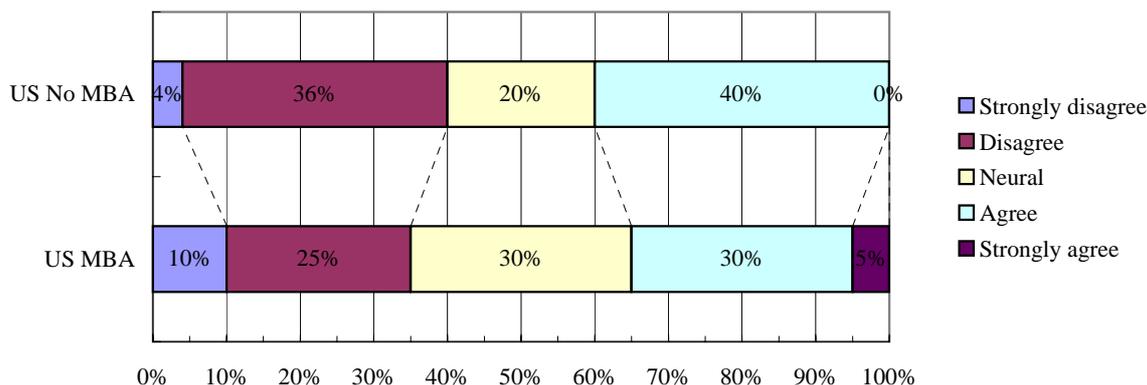
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
US MBA	2 10%	2 10%	5 25%	9 45%	2 10%	20 100%
US No MBA	1 4%	5 20%	10 40%	7 28%	2 8%	25 100%
Total	3 7%	7 16%	15 33%	16 36%	4 9%	45 100%



Job satisfaction item 1

I am satisfied with my current income.

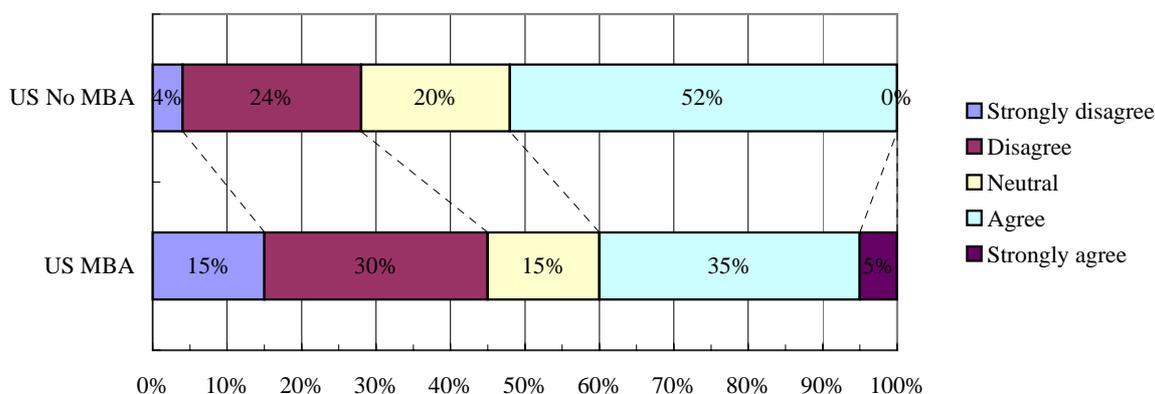
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
US MBA	2 10%	5 25%	6 30%	6 30%	1 5%	20 100%
US No MBA	1 4%	9 36%	5 20%	10 40%	0 0%	25 100%
Total	3 7%	14 31%	11 24%	16 36%	1 2%	45 100%



Job satisfaction item 2

I am satisfied with my current position.

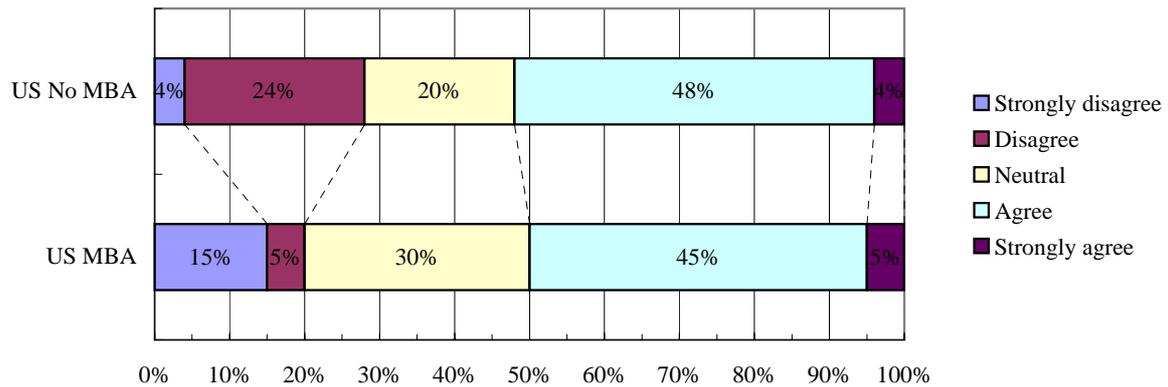
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
US MBA	3 15%	6 30%	3 15%	7 35%	1 5%	20 100%
US No MBA	1 4%	6 24%	5 20%	13 52%	0 0%	25 100%
Total	4 9%	12 27%	8 18%	20 44%	1 2%	45 100%



Job satisfaction item 3

Overall, I am satisfied with my current job.

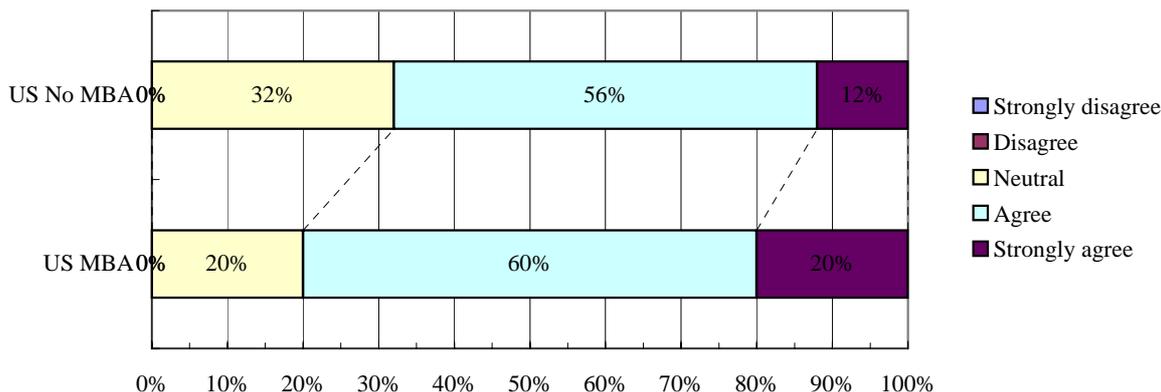
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
US MBA	3 15%	1 5%	6 30%	9 45%	1 5%	20 100%
US No MBA	1 4%	6 24%	5 20%	12 48%	1 4%	25 100%
Total	4 9%	7 16%	11 24%	21 47%	2 4%	45 100%



Confidence in knowledge and skills item 1

I am qualified to have promotion(s).

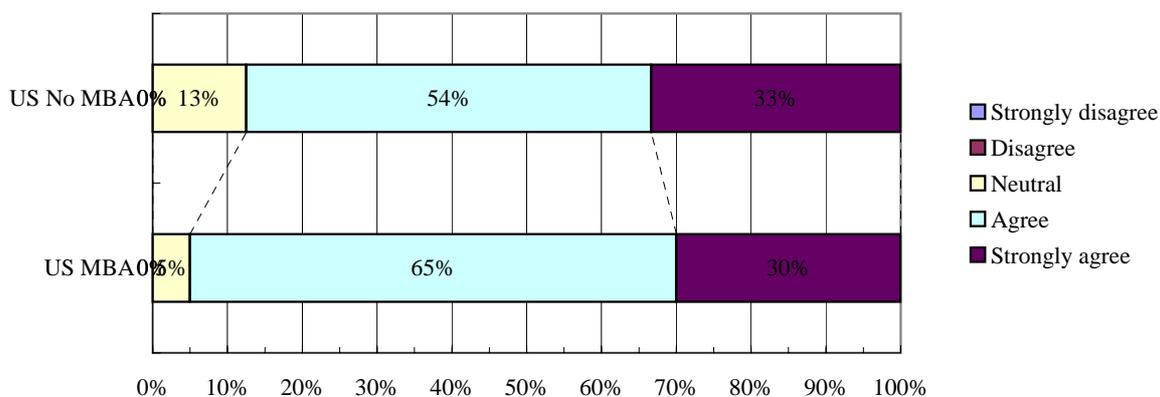
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
US MBA	0 0%	0 0%	4 20%	12 60%	4 20%	20 100%
US No MBA	0 0%	0 0%	8 32%	14 56%	3 12%	25 100%
Total	0 0%	0 0%	12 27%	26 58%	7 16%	45 100%



Confidence in knowledge and skills item 2

I am confident about my knowledge and skills at work.

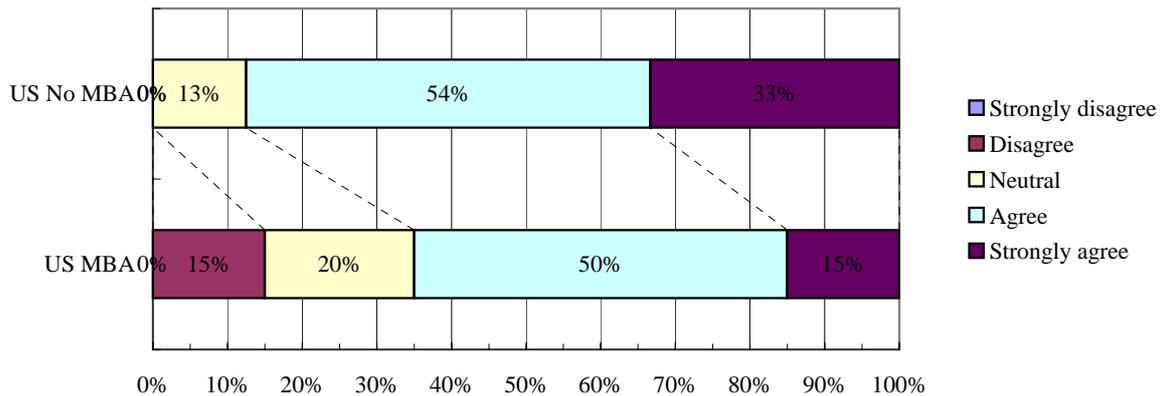
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
US MBA	0 0%	0 0%	1 5%	13 65%	6 30%	20 100%
US No MBA	0 0%	0 0%	3 13%	13 54%	8 33%	24 100%
Total	0 0%	0 0%	4 9%	26 59%	14 32%	44 100%



Career growth item 1

I am motivated to work hard in my current job.

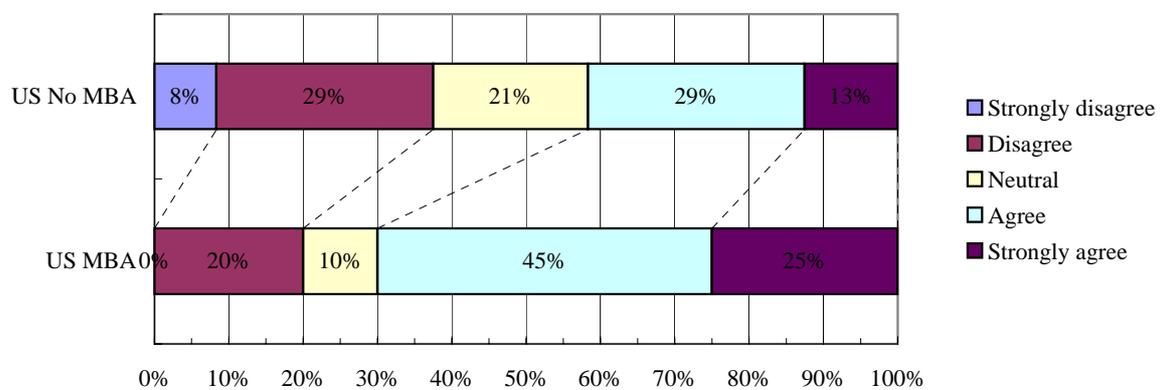
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
US MBA	0 0%	3 15%	4 20%	10 50%	3 15%	20 100%
US No MBA	0 0%	0 0%	3 13%	13 54%	8 33%	24 100%
Total	0 0%	3 7%	7 16%	23 52%	11 25%	44 100%



Career growth item 2

I feel I have excellent opportunities for career growth.

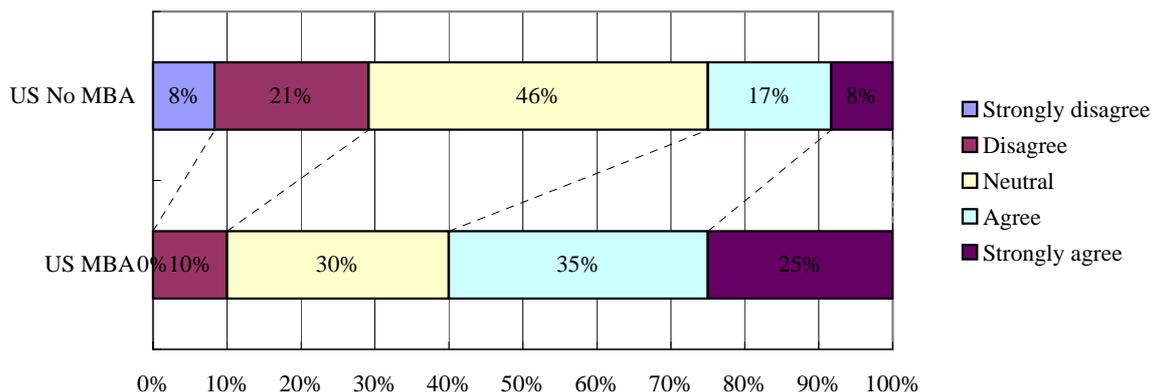
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
US MBA	0 0%	4 20%	2 10%	9 45%	5 25%	20 100%
US No MBA	2 8%	7 29%	5 21%	7 29%	3 13%	24 100%
Total	2 5%	11 25%	7 16%	16 36%	8 18%	44 100%



Career growth item 3

In my current job I get excellent opportunity for personal growth and development.

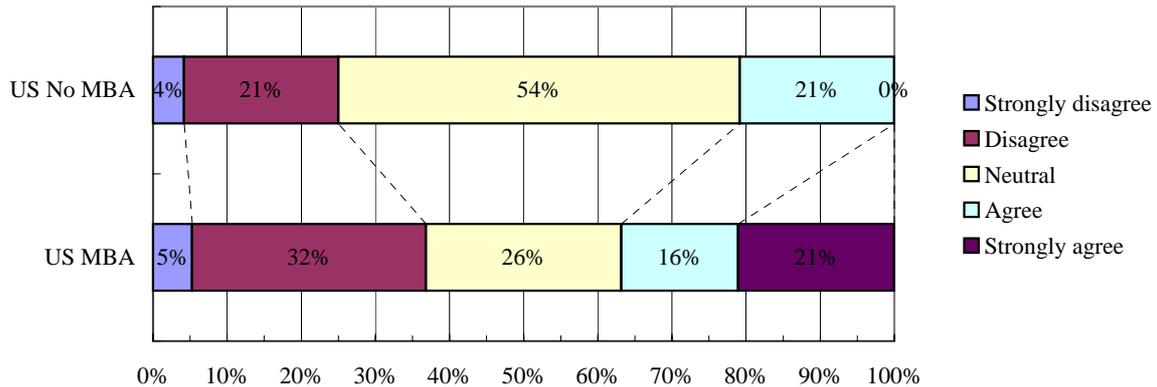
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
US MBA	0 0%	2 10%	6 30%	7 35%	5 25%	20 100%
US No MBA	2 8%	5 21%	11 46%	4 17%	2 8%	24 100%
Total	2 5%	7 16%	17 39%	11 25%	7 16%	44 100%



Status item 1

In my current job I get opportunity to participate in important decisions.

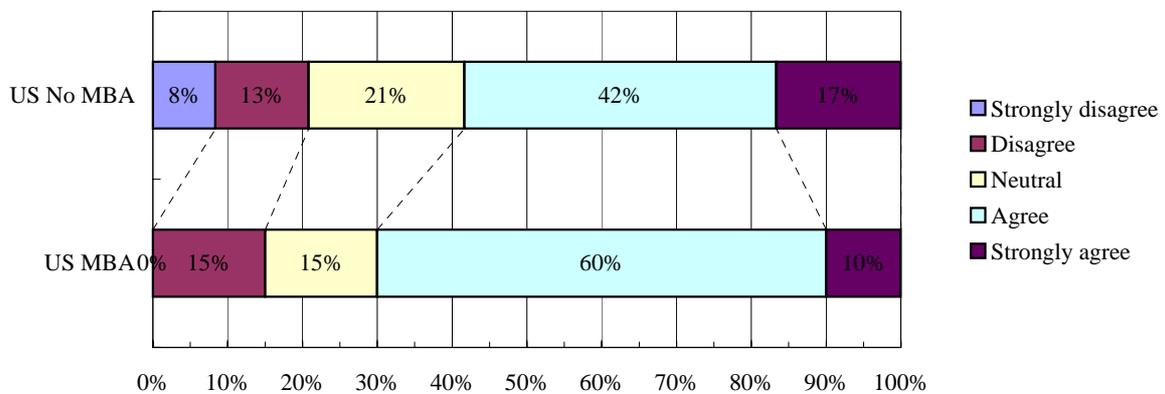
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
US MBA	1 5%	6 32%	5 26%	3 16%	4 21%	19 100%
US No MBA	1 4%	5 21%	13 54%	5 21%	0 0%	24 100%
Total	2 5%	11 26%	18 42%	8 19%	4 9%	43 100%



Status item 2

My current job gives me enough flexibility and independence.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
US MBA	0 0%	3 15%	3 15%	12 60%	2 10%	20 100%
US No MBA	2 8%	3 13%	5 21%	10 42%	4 17%	24 100%
Total	2 5%	6 14%	8 18%	22 50%	6 14%	44 100%



Appendix B.3

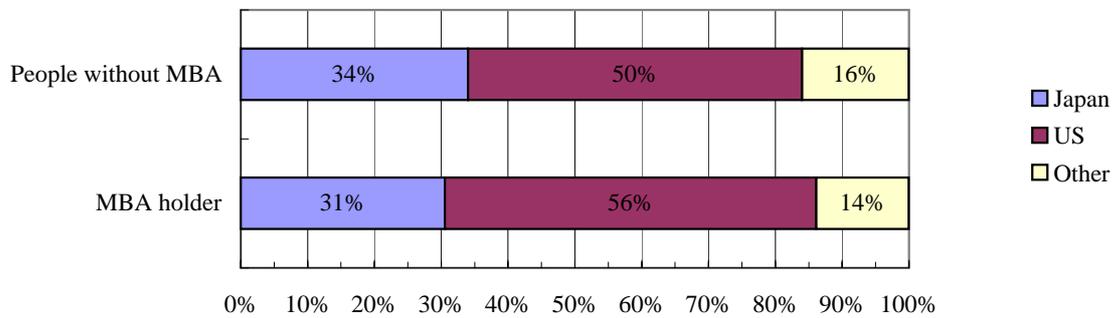
Details of questionnaire responses: MBA holders (MBA) and people without MBA (No MBA)

The number of respondents: **86 (MBA 36 and No MBA 50)**

Note: Missing answers are kept blank. They are not counted in the tables below.

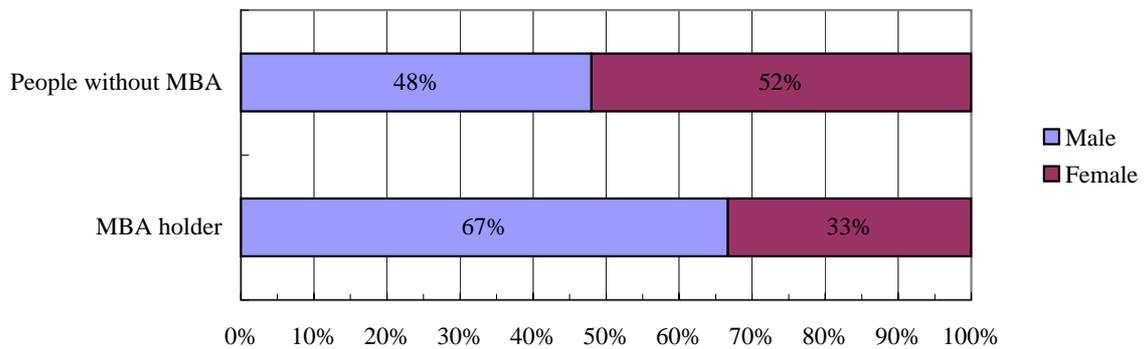
Country of work place

	Japan	US	Other	Total
MBA	11 31%	20 56%	5 14%	36 100%
No MBA	17 34%	25 50%	8 16%	50 100%
Total	28 33%	45 52%	13 15%	86 100%



Gender

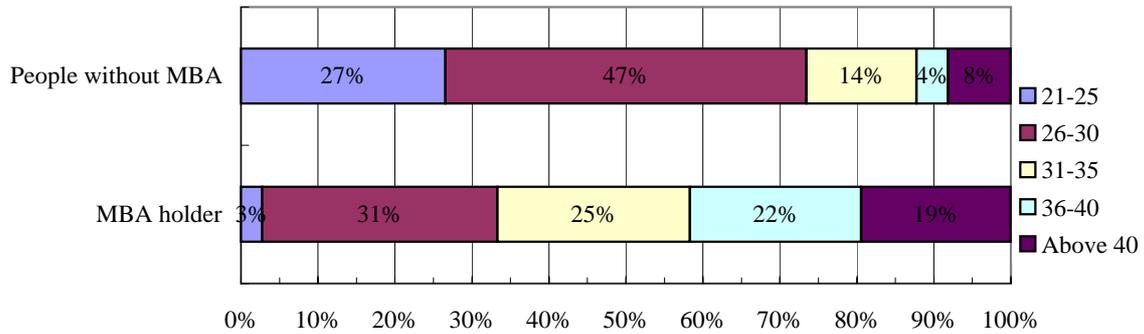
	Male	Female	Total
MBA	24 67%	12 33%	36 100%
No MBA	24 48%	26 52%	50 100%
Total	48 56%	38 44%	86 100%



Age

	21-25	26-30	31-35	36-40	Above 40	Total
MBA	1 3%	11 31%	9 25%	8 22%	7 19%	36 100%
No MBA	13 27%	23 47%	7 14%	2 4%	4 8%	49 100%
Total	14 16%	34 40%	16 19%	10 12%	11 13%	85 100%

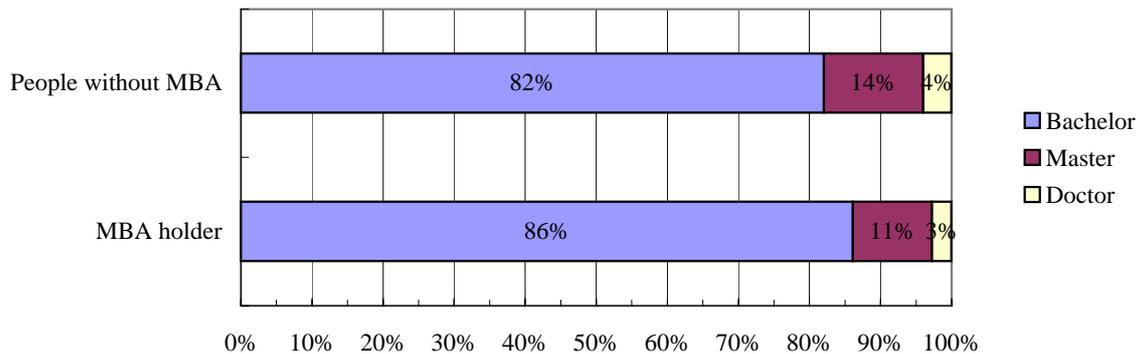
Note: Respondents above 45 years of age are relatively few, therefore they are included under the category of "Above 40".



Educational background

	Bachelor	Master	Doctor	Total
MBA	31 86%	4 11%	1 3%	36 100%
No MBA	41 82%	7 14%	2 4%	50 100%
Total	72 84%	11 13%	3 3%	86 100%

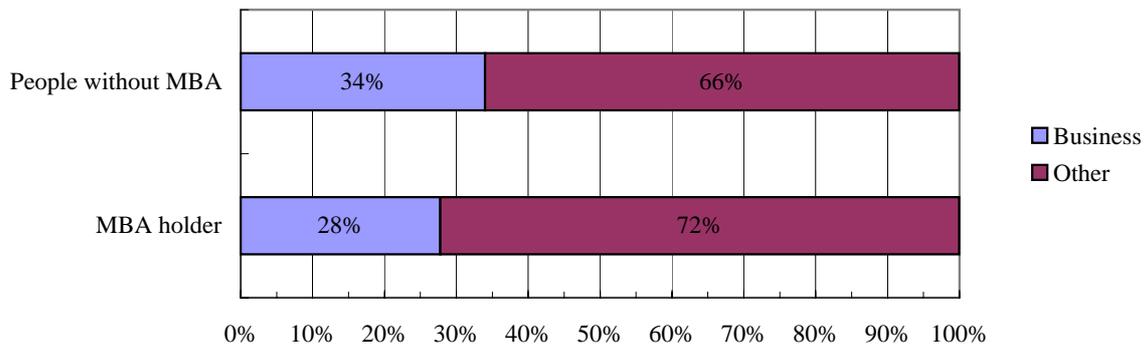
Note: Educational background is defined as the highest formal degree received in case of people without MBA and the highest degree received before attending the MBA program in case of people with MBA.



Previous Business education

	Business	Other	Total
MBA	10 28%	26 72%	36 100%
No MBA	17 34%	33 66%	50 100%
Total	27 31%	59 69%	86 100%

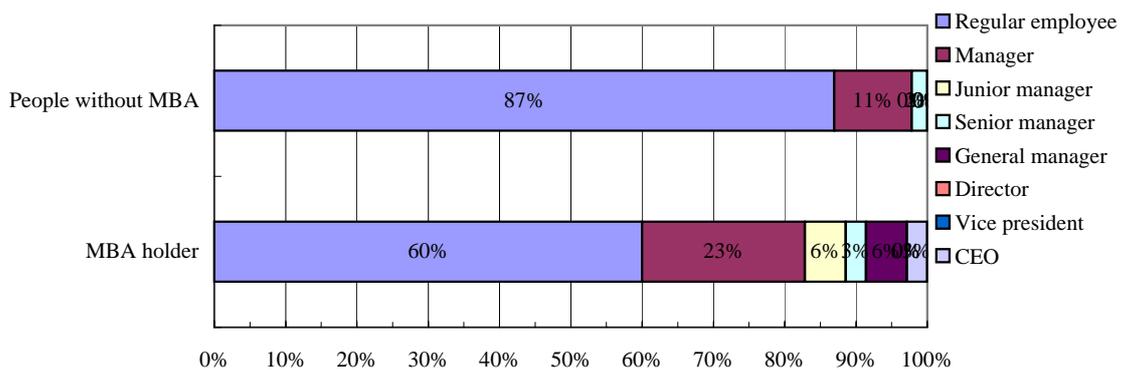
Note: In case of people without MBA, previous business education is defined as any formal business degree received and in the case of MBA holders any other formal business degree other than MBA.



Current position

	Regular employee	Manager	Junior manager	Senior manager	General manager	Director	Vice president	CEO	Total
MBA	21 60%	8 23%	2 6%	1 3%	2 6%	0 0%	0 0%	1 3%	35 100%
No MBA	40 87%	5 11%	0 0%	1 2%	0 0%	0 0%	0 0%	0 0%	46 100%
Total	61 75%	13 16%	2 2%	2 2%	2 2%	0 0%	0 0%	1 1%	81 100%

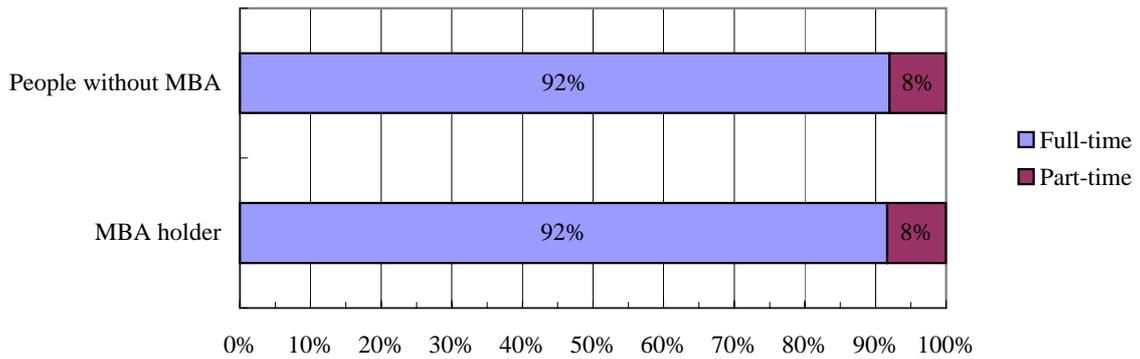
Note: These are self reported data.



Current working hour

	Full-time	Part-time	Total
MBA	33 92%	3 8%	36 100%
No MBA	46 92%	4 8%	50 100%
Total	79 92%	7 8%	86 100%

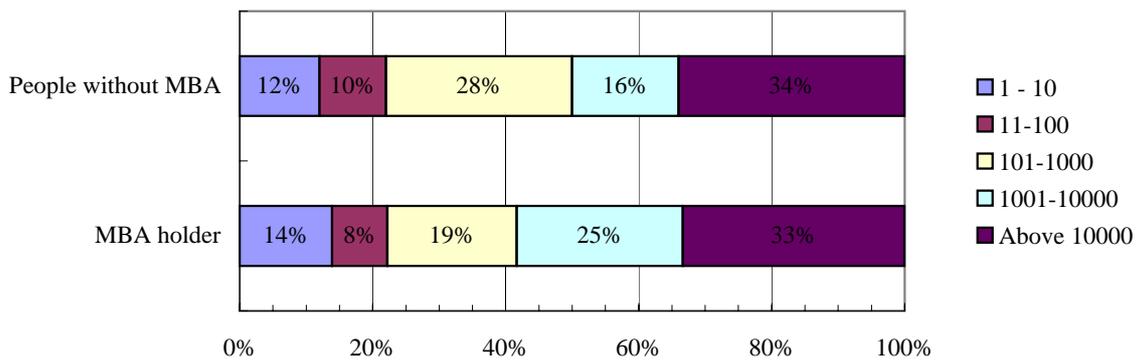
Note: Full-time is defined as more than 40 hours/week work hour and part-time is defined as less than 40 hours/week work hour in this research.



Current organization size

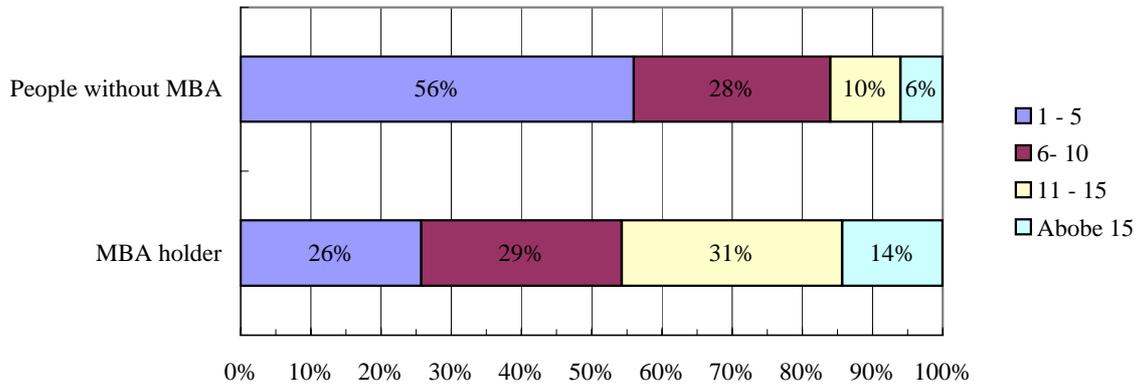
	1-10	11-100	101-1000	1001-10000	Above 10000	Total
MBA	5 14%	3 8%	7 19%	9 25%	12 33%	36 100%
No MBA	6 12%	5 10%	14 28%	8 16%	17 34%	50 100%
Total	11 13%	8 9%	21 24%	17 20%	29 34%	86 100%

Note: These are self reported data.



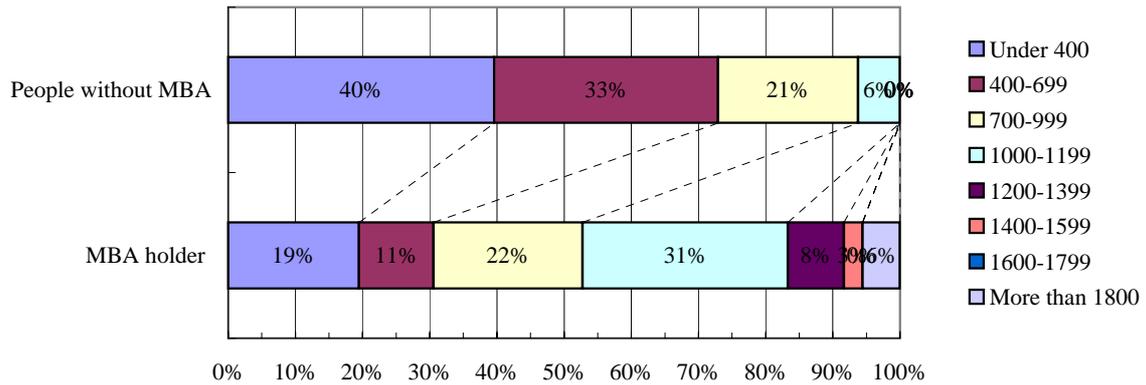
Total year of work experience

	1-5	6-10	11-15	Above 15	Total
MBA	9 26%	10 29%	11 31%	5 14%	35 100%
No MBA	28 56%	14 28%	5 10%	3 6%	50 100%
Total	37 44%	24 28%	16 19%	8 9%	85 100%



Financial benefit

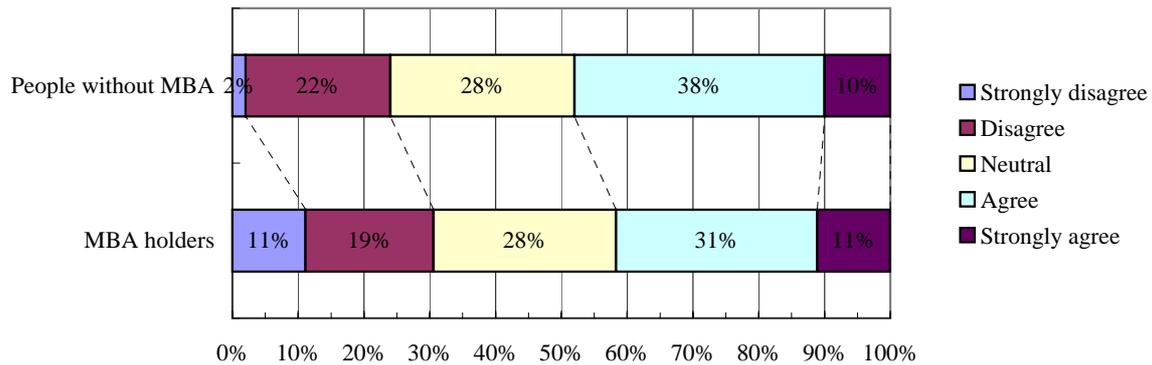
	Under 400	400-699	700-999	1,000-1,199	1,200-1,399	1,400-1,599	1,600-1,799	More than 1800	Total
MBA	7 19%	4 11%	8 22%	11 31%	3 8%	1 3%	0 0%	2 6%	36 100%
No MBA	19 40%	16 33%	10 21%	3 6%	0 0%	0 0%	0 0%	0 0%	48 100%
Total	26 31%	20 24%	18 21%	14 17%	3 4%	1 1%	0 0%	2 2%	84 100%



Employability item 1

It was easy for me to find my current job.

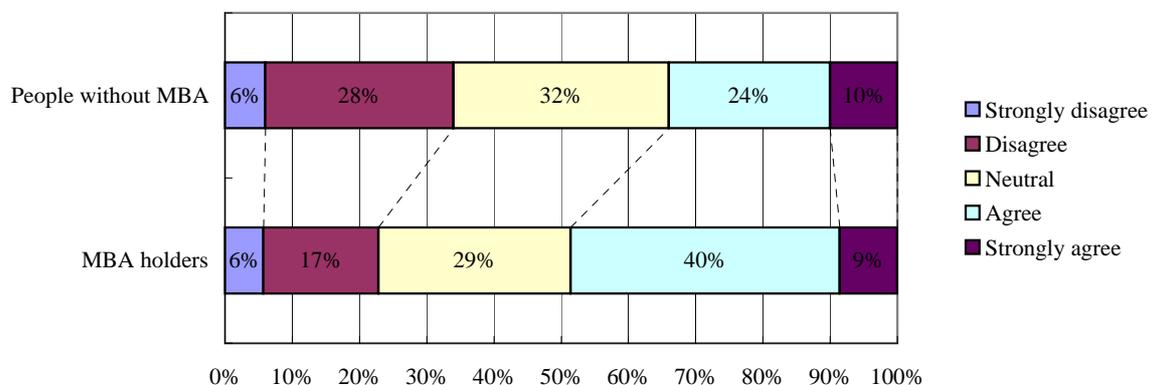
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA	4 11%	7 19%	10 28%	11 31%	4 11%	36 100%
No MBA	1 2%	11 22%	14 28%	19 38%	5 10%	50 100%
Total	5 6%	18 21%	24 28%	30 35%	9 10%	86 100%



Employability item 2

It will be easy for me to find another job even if I lose the job I have now.

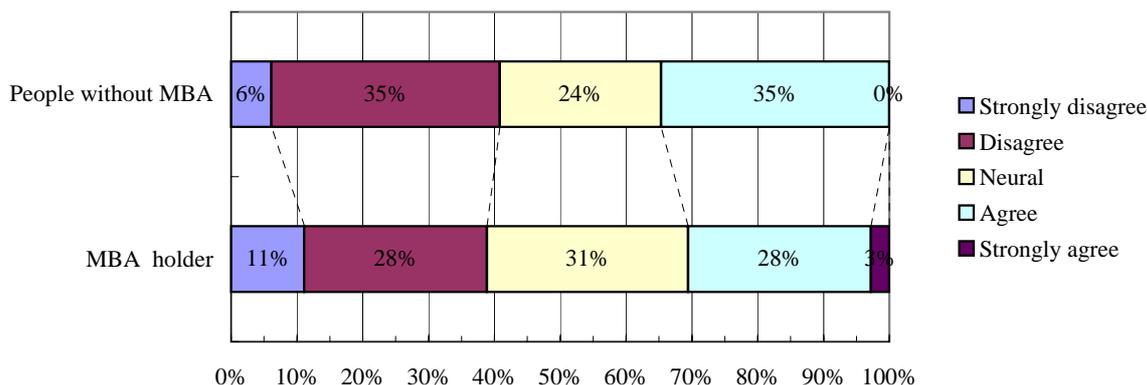
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA	2 6%	6 17%	10 29%	14 40%	3 9%	35 100%
No MBA	3 6%	14 28%	16 32%	12 24%	5 10%	50 100%
Total	5 6%	20 24%	26 31%	26 31%	8 9%	85 100%



Job satisfaction item 1

I am satisfied with my current income.

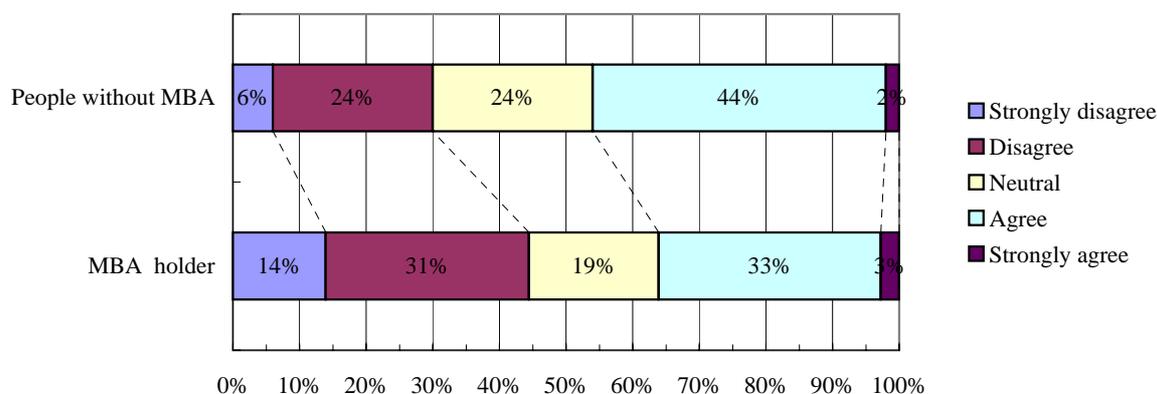
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA	4 11%	10 28%	11 31%	10 28%	1 3%	36 100%
No MBA	3 6%	17 35%	12 24%	17 35%	0 0%	49 100%
Total	7 8%	27 32%	23 27%	27 32%	1 1%	85 100%



Job satisfaction item 2

I am satisfied with my current position.

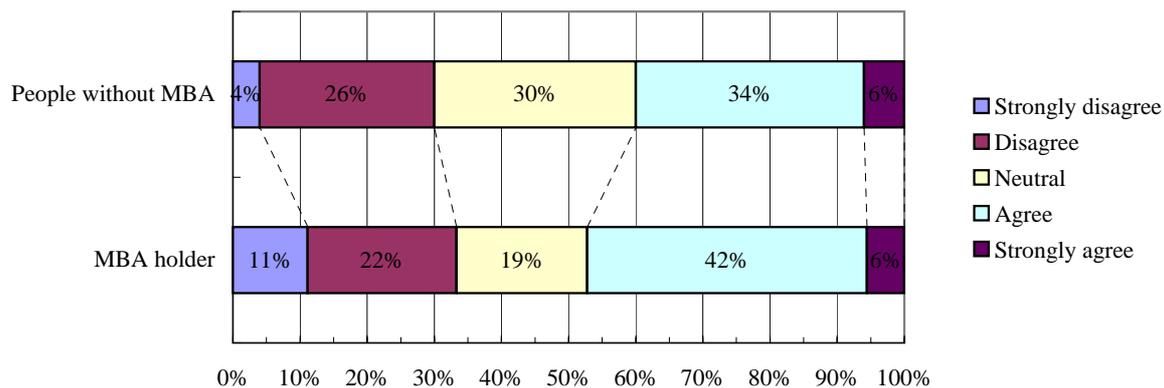
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA	5 14%	11 31%	7 19%	12 33%	1 3%	36 100%
No MBA	3 6%	12 24%	12 24%	22 44%	1 2%	50 100%
Total	8 9%	23 27%	19 22%	34 40%	2 2%	86 100%



Job satisfaction item 3

Overall, I am satisfied with my current job.

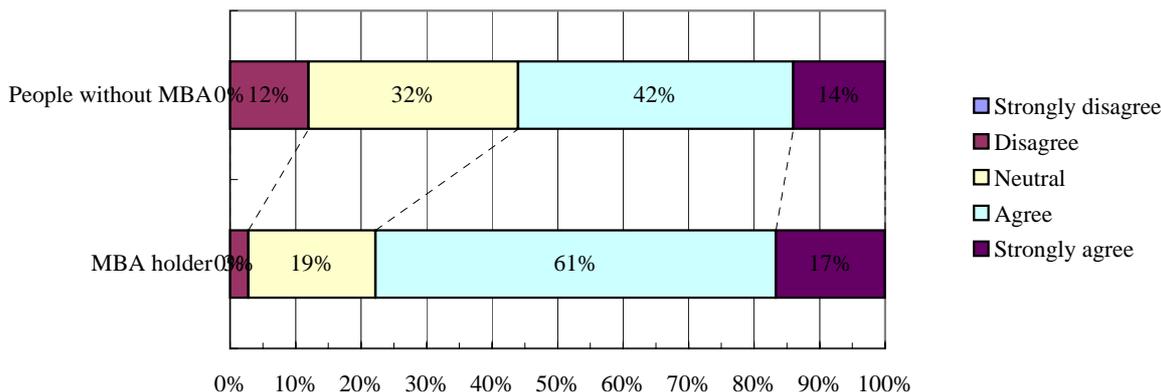
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA	4 11%	8 22%	7 19%	15 42%	2 6%	36 100%
No MBA	2 4%	13 26%	15 30%	17 34%	3 6%	50 100%
Total	6 7%	21 24%	22 26%	32 37%	5 6%	86 100%



Confidence in knowledge and skills item 1

I am qualified to have promotion(s).

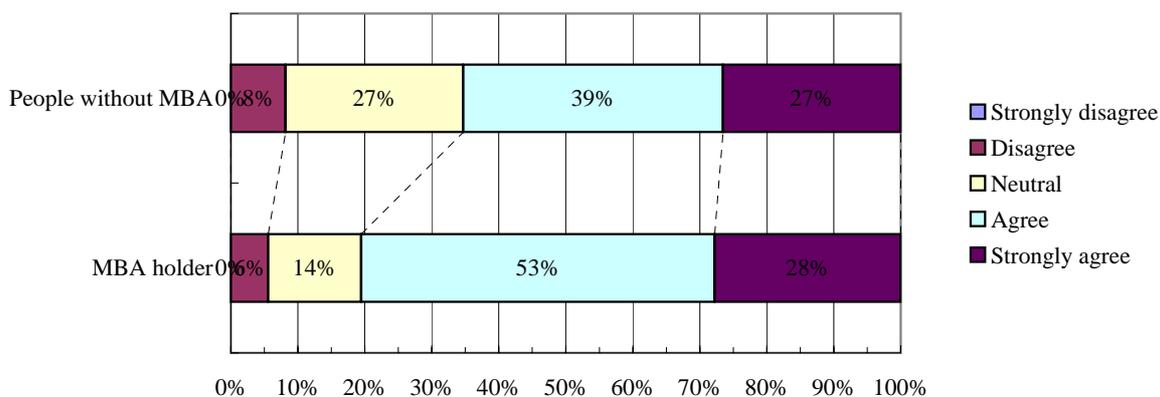
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA	0 0%	1 3%	7 19%	22 61%	6 17%	36 100%
No MBA	0 0%	6 12%	16 32%	21 42%	7 14%	50 100%
Total	0 0%	7 8%	23 27%	43 50%	13 15%	86 100%



Confidence in knowledge and skills item 2

I am confident about my knowledge and skills at work.

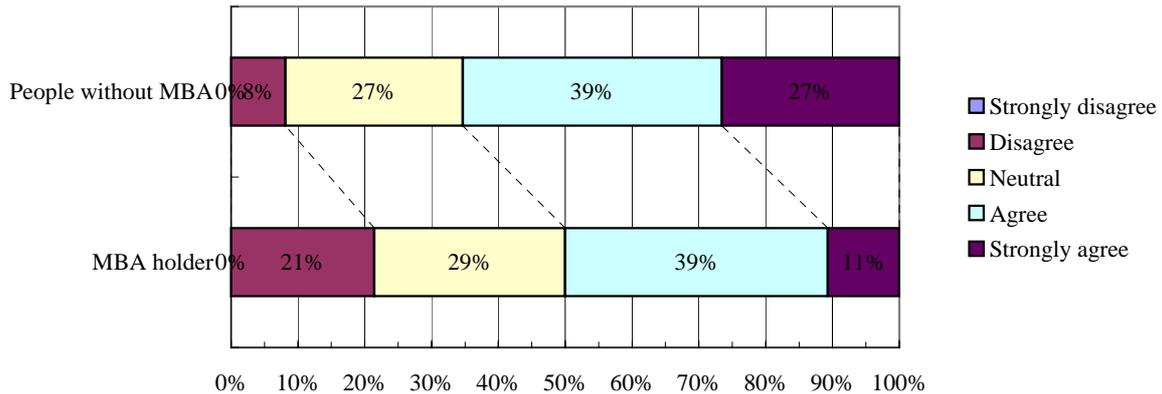
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA	0 0%	2 6%	5 14%	19 53%	10 28%	36 100%
No MBA	0 0%	4 8%	13 27%	19 39%	13 27%	49 100%
Total	0 0%	6 7%	18 21%	38 45%	23 27%	85 100%



Career growth item 1

I am motivated to work hard in my current job.

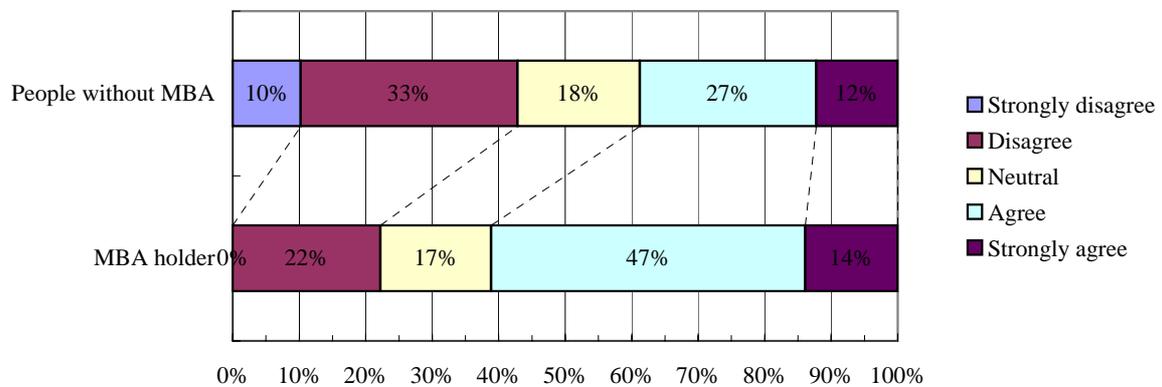
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA	0 0%	6 21%	8 29%	11 39%	3 11%	28 100%
No MBA	0 0%	4 8%	13 27%	19 39%	13 27%	49 100%
Total	0 0%	10 13%	21 27%	30 39%	16 21%	77 100%



Career growth item 2

I feel I have excellent opportunities for career growth.

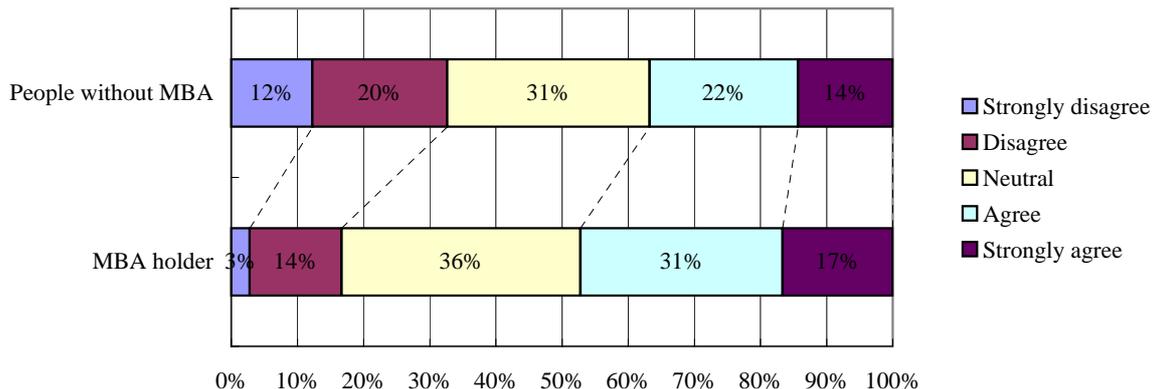
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA	0 0%	8 22%	6 17%	17 47%	5 14%	36 100%
No MBA	5 10%	16 33%	9 18%	13 27%	6 12%	49 100%
Total	5 6%	24 28%	15 18%	30 35%	11 13%	85 100%



Career growth item 3

In my current job I get excellent opportunity for personal growth and development.

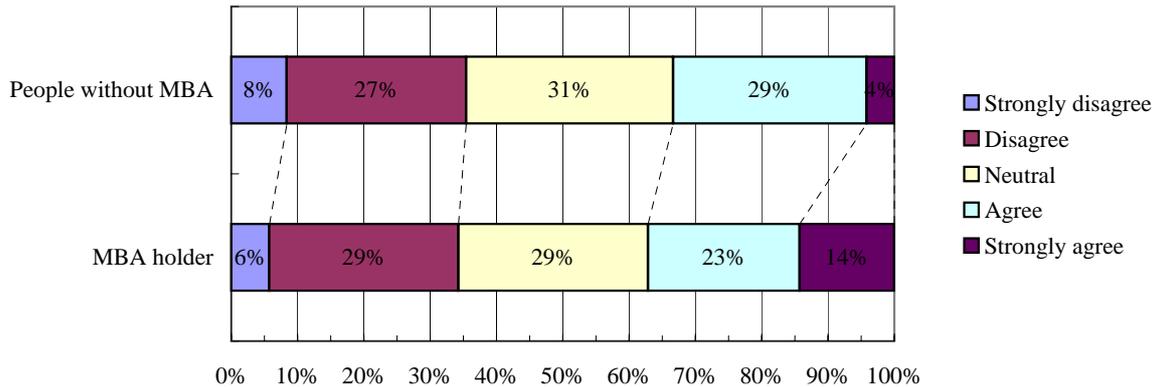
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA	1 3%	5 14%	13 36%	11 31%	6 17%	36 100%
No MBA	6 12%	10 20%	15 31%	11 22%	7 14%	49 100%
Total	7 8%	15 18%	28 33%	22 26%	13 15%	85 100%



Status item 1

In my current job I get opportunity to participate in important decisions.

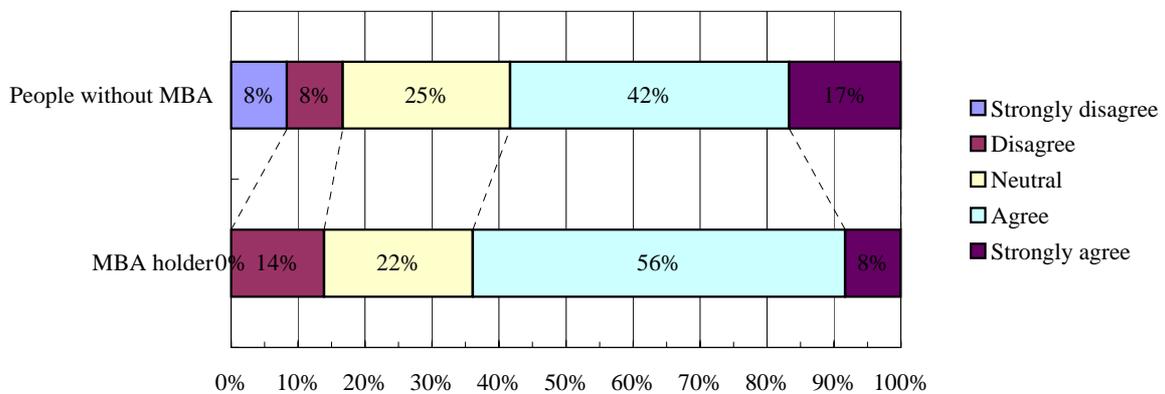
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA	2 6%	10 29%	10 29%	8 23%	5 14%	35 100%
No MBA	4 8%	13 27%	15 31%	14 29%	2 4%	48 100%
Total	6 7%	23 28%	25 30%	22 27%	7 8%	83 100%



Status item 2

My current job gives me enough flexibility and independence.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA	0 0%	5 14%	8 22%	20 56%	3 8%	36 100%
No MBA	4 8%	4 8%	12 25%	20 42%	8 17%	48 100%
Total	4 5%	9 11%	20 24%	40 48%	11 13%	84 100%



Appendix B.4

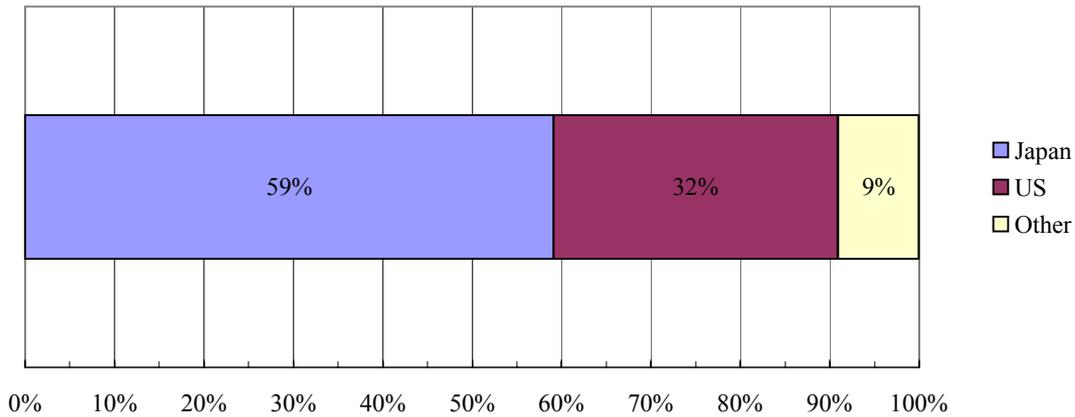
Superiors' perspective on difference between MBA holders and people without MBA

Number of respondents: 22

Note: Missing answers are kept blank. They are not counted in the tables below.

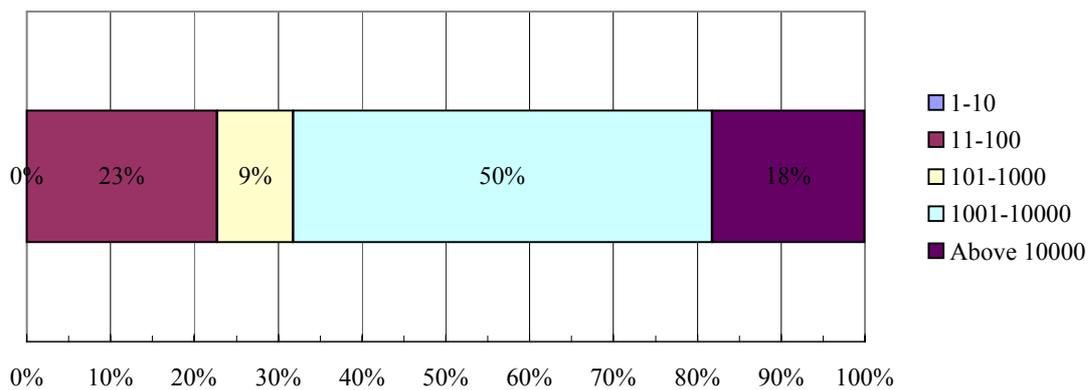
Country of work place

Japan	US	Other	Total
13	7	2	22
59%	32%	9%	100%



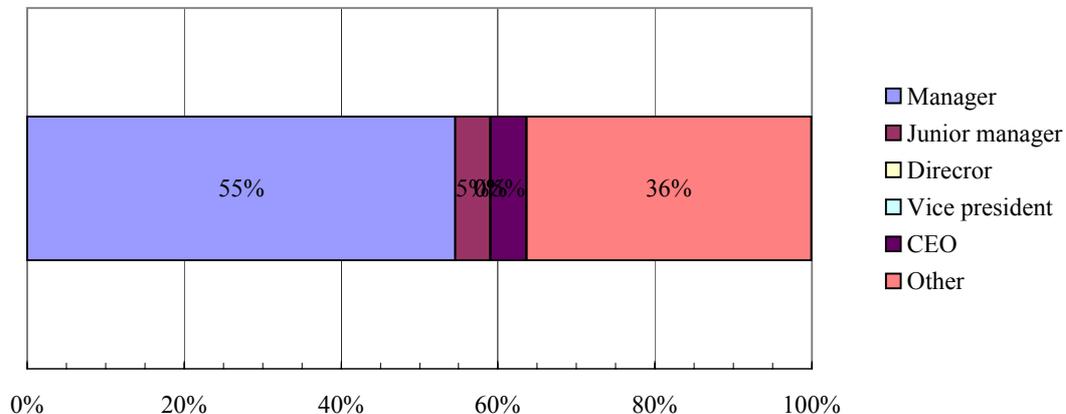
Organizational size

1-10	11-100	101-1000	1001-10000	Above 10000	Total
0	5	2	11	4	22
0%	23%	9%	50%	18%	100%



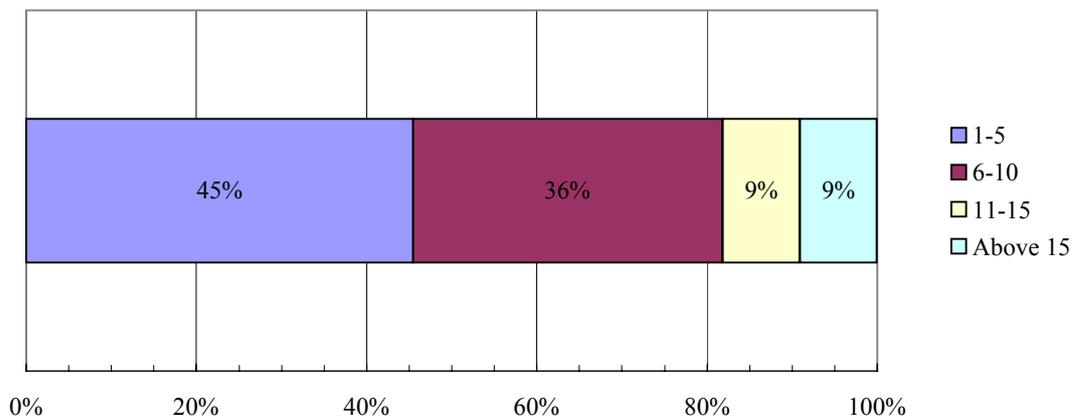
Position

Manager	Junior manager	Director	Vice president	CEO	Other	Total
12	1	0	0	1	8	22
55%	5%	0%	0%	5%	36%	100%



Number of MBA holders working together

1-5	6-10	11-15	Above 15	Total
10	8	2	2	22
45%	36%	9%	9%	100%



Superiors' perspective on difference between MBA holders and people without MBA

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
MBA graduates get higher starting salary than non-MBA graduates.	0 0%	2 9%	2 9%	15 68%	3 14%	22 100%
I see differences in salary between MBA graduates (higher salary) and non-MBA graduates (lower salary) in our organization when they have the same year of work experience.	0 0%	4 18%	9 41%	7 32%	2 9%	22 100%
MBA graduates bring more new ideas to work than non-MBA graduates.	3 14%	3 14%	6 27%	9 41%	1 5%	22 100%
MBA graduates have more business knowledge than non-MBA graduates.	1 5%	4 18%	7 32%	6 27%	4 18%	22 100%
MBA graduates are better at solving complex business problems than non-MBA graduates.	2 9%	3 14%	9 41%	8 36%	0 0%	22 100%
MBA graduates do not work for the same profession as their precious job.	0 0%	5 23%	12 55%	5 23%	0 0%	22 100%
MBA graduates deserve to get promoted in our organization.	1 5%	5 23%	10 45%	4 18%	2 9%	22 100%
MBA is an important "passport" to change one's career in business world.	0 0%	0 0%	5 23%	15 68%	2 9%	22 100%

Why an MBA?

