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Title	Intrinsic vs. extrinsic motivations of Master of Library and Information Science students: A cross-cultural comparative study
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Intrinsic vs. Extrinsic Motivations of Master of Library & Information Science (MLIS) Students: A Cross Cultural Comparative Study

Introduction

Studies targeting at the career development of those newly emerging professions (Rainey, 2009), like librarians, are seldom the preference of researchers. Even within the existing body of library and information science (LIS) literature, most studies conducted by other researchers in the past focused mainly on the technical aspects of librarianship, such as records management, cataloguing and other issues related to reader services, instead of investigating the career and curriculum development of the LIS profession (for example, Miwa (2006)). This trend makes people outside the LIS profession (and even among ourselves) know little about recent trends and career development of a practicing librarian as well as how the Master of Library and Information Science (MLIS) students perceive their career development and why they study a MLIS program, referred to as learning motivation (Lo et al., 2015), in particular. Coupled with the recent evolution of the librarian career due to the rapid development in information technology (Cox & Corrall, 2013), there is a pressing need to understand the career development and learning motivations in the librarian career. The intension of this study is to fill the research gap, by focusing on examining the different intrinsic and extrinsic factors that influenced the student participants to pursue for a graduate degree in LIS. In particular, we conducted a cross-national comparative study by using the MLIS students from four universities from different countries, namely the University of Hong Kong (HKU), the Taiwan National Normal University (TNNU), the Peking University (PKU), and the University of Copenhagen (UC), to investigate into the career and learning motivations of these soon-to-be librarians. This cross-national study has allowed us to conduct a more in-depth and detailed analysis of the cultural impacts on the different career and learning motivations of the MLIS students amongst the four different universities being surveyed, and thus fills the research gap we mentioned.

Aims of the Study

An earlier study has mainly considered career development factors (Lo et al., 2015). For Hong Kong, it is a must to get an MLIS degree to be hired as professional librarian. For Taiwan and China, it is not a must, but now becoming a trend - one needs a master degree in order to get promoted in the long run. They need to continue to update their professional qualifications, knowledge, and skills to adapt to the changes in technology and the needs of the workplace.

In this study, we investigated various factors that encourage a person to pursue for an LIS career through enrolling in an MLIS program. First, we are interested in whether a person's prior working experience in a library would have an impact on their motivation in pursing for an MLIS degree. Plus, we study their learning motivation via the lens of intrinsic and extrinsic motivations. Intrinsic motivation is simply enjoying the act itself (Hennessey & Amabile, 1998). In other words, the intrinsic motivation factors motivate an individual for reasons other than financial and tangible rewards. Instead, they motivate an individual through providing an opportunity for the individual to perform a task which is considered as interesting, challenging, satisfying, exciting, or involving (Robbins & Judge, 2013). On the other hand, extrinsic motivation is how people feel about aspects of the work situation that are external to the job tasks or the work itself (Hirschfeld, 2000), such as salary, bonuses, and promotions (Kunz & Pfaff, 2002; van Herpen, van Praag, & Cools, 2005).

Research Questions

We hope that the findings of this study may stimulate the governments and policymakers of Hong Kong, Taiwan, China, and Denmark to further consider the career development of LIS professionals. We are of the view that this study also has a potential to give new insights into the effectiveness of current approaches for recruitment of the LIS profession, and contributes to the

literature that may help administrators of information agencies and LIS educators conduct workforce planning.

In conducting this research, we have explored the various social, cultural, economic, and educational factors, as well as personal and professional reasons that influenced MLIS students at these four different universities to choose LIS as a profession. The research questions guiding this study are:

R1: Would prior experience of working in a library motivate a person to pursue for an MLIS degree?

R2. What factors would motivate the MLIS students (including mature students) to choose (or to change to) a career in LIS at these four universities?

R3. Would the different cultural and educational backgrounds be factors affecting their career choices?

Literature Review and Development of Hypotheses

The purpose of this study is to identify motivating factors that influence the decision of people to pursue career in LIS through studying for the MLIS programs. Since the relevant topic is rarely studied in the East Asia, we hope that this study can bring insight to our field and practitioners in the region. In this section, we first review the literature related to motivation and career development, and then discuss the study of the impact of culture in LIS.

Career Choice and Motivation

The career path of librarians is an interesting topic for career choice and development research (Noh, 2010, 2011). Noh and Moran (2011) studied the factors influencing people to take up directorship of public libraries in South Korea and noted that organizational culture was the most important factor. Prior research studied a person's choice in taking up a career based on two sets of theories, i.e., structural theories and developmental theories (Allin & Humbersotne, 2006). While structural theories

focus on matching individual characteristics to occupations that mesh with the individual's interests and aptitudes, developmental theories are based on the premise that individuals throughout life go through developmental stages that influence their choice of work. Prior research has shown that both structural theories and developmental theories have impacts on learning motivation (Allin & Humberstone, 2006).

One of the factors that has been known to have an impact on a person's career decision is based on one's prior experience in that field. For example, Julian (1979) studied whether library-related experiences would affect a person's decision for pursuing a librarianship career. He discovered that 87% of subjects who were pursuing for a graduate degree in LIS had prior working experience in a library. Dewey (1985) also discovered that one of the reasons that makes a person decide to pursue for an MLIS degree is the perceived importance of the librarians, which is related to that person's prior experience with the library science field. Plus, MaGrill (1969) noted that usually MLIS students would have a more favorable image of librarians and librarianship compared with non-MLIS students. Thus, the literature suggests that the prior working experience with the library and the librarian of a person would have a significant impact to his/her choice to pursue for a librarianship career, and thus, that person would be more likely to study for the MLIS degree. Therefore, we have our H1 developed as follows:

H1: The learning motivation of MLIS students is influenced by their prior working experience in the library.

In human resource management research, motivation is described as goal-oriented behavior that enables an individual's desire to work hard and persistence of effort in a work setting (Petri & Govern, 2012). In 1959, Herzberg (Herzberg, Mausner, & Snyderman, 1993) developed the Motivation-Hygiene Theory, also known as Two-Factor Theory, which suggested that there are certain factors in the workplace that cause job satisfaction, while a separate set of factors cause dissatisfaction. These factors including a set of intrinsic factors called motivators, including achievement, growth, recognition,

advancement, and the work itself, which lead to job satisfaction in employees related to the nature of the job tasks themselves. Another set of extrinsic factors are called hygiene factors, such as pay and benefit, company policy and administration, relationships with co-workers, supervision, status, job security, working conditions, and salary, without which will lead to job dissatisfaction and are related to the work situation that are external to the job tasks (Hirschfeld, 2000).

There are several well-established theories to explain the impacts of intrinsic and extrinsic factors on a person's career choice. For example, Super (1953; 1980) researched into vocational psychology and developed the Super Model to explain career development. He emphasized that in order to understand individual's career, it is important to know that individual's life stage, as a person's vocational preference change with time and experience (Super, 1990). In other words, an individual's career choice is intrinsically motivated by one's personality and vocational self-concept, which can be developed through a lifelong process with different developmental stages.

Another theory explaining the impact of intrinsic factors on a person's career choice is the Theory of Vocational Personalities and Environments developed by Holland (1959; 1996; 1997). This theory assumes that people's occupations are based on their personalities, and people in the same occupation have similar personal characteristics. In this theory, there are six categories of vocational personalities and environments, namely, realistic, investigative, artistic, social, enterprising, and conventional. Each category is the product of a characteristic interaction between a variety of cultural and personal forces, including peers, parents, social class, culture, and the physical environment (Holland, 1997; Reardon & Lenz, 1999; Spokane, Meir, & Catalano, 2000). As a result, people will search for environments that will let them exercise their skills, values, and roles (Spokane & Cruza-Guet, 2005). Then, people will find stimulating and satisfying when they find environments that allow them to

exercise their skills and abilities, express their attitudes and values, and take on roles and problems (Afolabi, 1996).

Extrinsic factors also affect people's choice, career, and motivation. For example, Krumboltz and his colleagues (Krumboltz, 2009; Krumboltz, Mitchell, & Jones, 1976; Mitchell, Jones, & Krumboltz, 1979) developed a series of theory on career selection to explain why people enter particular educational programs or occupations, why they may change educational programs or occupations, and why they may express various preferences for different occupational activities at selected points in their lives. The foundation of this series of theory, i.e., the social learning theory, suggests that there are four factors influencing an individual's career choice, including genetic endowment and special abilities, environmental conditions and events, learning experiences, and skills. In particular, the environmental conditions and events are related to a person's input and rewards and thus, are related to extrinsic factors.

Another set of theory which explains how extrinsic factors affecting a person's career choice is the social cognitive career theory (Lent, Hackett, & Brown, 1994), which is grounded in Bandura's self-efficacy theory (1986). This theory highlights the relationship among social cognitive variables (e.g., self-efficacy) and their relationship with other variables in the individual's social-contextual environment, such as gender, race/culture, family, community, and political components (Lent, Hackett & Brown, 1994) in career choice, which are extrinsic factors.

In summary, prior research has shown that both extrinsic and intrinsic factors would likely have impacts on a person's career choice. As reported in the literature, extrinsic factors could be defined as factors related to the working condition and remunerations, while intrinsic factors could be defined as factors related to the job tasks itself such as achievement and growth. These two kinds of factors represent two different sets of goals in pursuing our career. Therefore, we would like to investigate to

see if both kinds of factors would affect a person's choice in taking up a career in librarianship. Therefore, we have the following hypothesis.

H2: Both intrinsic and extrinsic factors would affect a person's choice in pursuing an MLIS degree.

Impact of Culture and Career Development

Prior research has discussed the impact of culture on career choice and development. For example, Head and Sorensen (1993) conducted a seven-country study to investigate how cultural difference affects organizational development. Leong (1991) also reported that the cultural background of students (Asian Americans vs. White Americans) would have an impact on their career development attributes and occupational values. Plus, Fouad and Byars-Winston (2005) suggested that the cultural background of subjects can be used for explaining their difference in the perceptions of opportunities and barriers in pursuing their career. Prior research also reports that the cultural background of library users would have an impact on their perception of academic library (Long, 2011), which in turn may affect their decision to take up the academic librarianship as their career (Mosley, 1999; Pinto, Fernández-Ramos, Sáchez, & Meneses, 2013). In this study, we use the Hofstede Cultural Dimensions (Hofstede, Hofstede, & Minkov, 2010) as the framework for analyzing the cultural difference between the four countries in this study.

Hofstede Cultural Dimensions (Hofstede, Hofstede, & Minkov, 2010) have been developed based on a survey conducted in multiple countries since the 1960s. When Hofstede first developed the Hofstede Cultural Dimensions, he established four dimensions, namely power distance, individualism, masculinity, and uncertainty avoidance. Throughout the past fifty years, two more dimensions are established, i.e., long term orientation, and indulgence. These cultural dimension indexes have been used as a quantitative tools for describing the characteristics of different culture. Prior research has used the

Hofstede Cultural Dimensions as a yardstick to consider whether two cultures have significant difference (Ho, 2012; Ho & See-To, 2013) or as a variable in regression analysis (Ho, Yoo, Yu & Tam, 2007). The definitions of these six indexes are tabulated in Table 1.

< Insert Table 1 here. >

In this study, we collected the data from universities located in four different regions, including HKU, TNNU, PKU, and UC. Table 2 summarizes their respective values of their cultural dimensions. It shows that students at the UC seemed to demonstrate a different cultural background when compared with the MLIS students from the three Asian regions (i.e., HKU, TNNU, and PKU). Amongst the students at HKU, TNNU, and PKU, even though people normally assume that students from Hong Kong, Taipei, and Beijing would bear similar cultural background, they are actually having some cultural differences as shown by their Hofstede Cultural Dimension values. For example, with reference to masculinity index of the three regions, the difference between China (66) and Taiwan (45) is more than the corresponding standard deviation (standard deviation = 19.20, versus the difference = 21); and concerning long-term orientation index of the three regions, the difference between Hong Kong (61) and China (87) is also more than the corresponding standard deviation (standard deviation = 24.11, versus the difference = 26). Such differences reflected that even though these three regions are having similar ethnic background, they still have some significant differences amongst these cultures. In addition, as prior research has shown that both intrinsic (for example, Holland (1997)) and extrinsic (for example, Lent, Hackett and Brown (1994)) factors are affected by culture. Therefore, we have the following two hypotheses.

H3: The different cultural backgrounds of the participants have an interaction effect on the career and learning motivation of MLIS students influenced by their prior library working experience.

H4: The different cultural backgrounds amongst the participants have an interaction effect of the impacts on how intrinsic and extrinsic factors, which directly affect a person's choice in pursuing an MLIS degree.

< Insert Table 2 here. >

Research Methods and Data Collection

Many of the previous studies discussed have used a structured questionnaire (Ard, Clemmons, Morgan, Sessions, Spencer, Tidwell, & West, 2006; Bello, 1996) to investigate into this type of research questions. Similarly, for this study a structured, self-administered online questionnaire was considered appropriate as an effective tool for gaining access to geographically dispersed communities. The questionnaire survey was chosen as the sole data collection method for the reason of reaching as many respondents as possible.

The four universities in this study, i.e., HKU, TNNU, PKU, and UC, were chosen for the pragmatic reason that the researchers' had affiliation with the institutions. This allows us to recruit subjects, who were studying in the LIS majors in our own institutions, for data collection. These subjects were recruited as they were the stakeholders of the LIS programs, which were the stakeholders of the programs. Relevant ethics/institutional review board approvals had been sought from the respective universities for our data collection process. This enabled a convenience sample, as the researchers were able to obtain the necessary permission for data collection. Yet, these institutions are renowned ones offering LIS programs in their respective regions. The original questionnaire was in English, and was developed by the researchers at all four universities as a team effort. The finalized English questionnaire was then translated into Chinese. The same English-version of the questionnaire was used for surveying the MLIS students at the UC. The questionnaires were created using SurveyMonkey.com, and were made available to respondents for five months from November 2013 to April 2014. All current MLIS

students enrolled in the Academic Year 2013/14 at the four universities were invited to complete the online questionnaires. The response rate was around 50%.

The survey was analyzed using descriptive statistics in order to identify interesting issues and differences. We then discuss these issues and differences with reference to the literature and using the observation and experiences of the research team in terms of the social, study, and work environment in these four different regions.

Data Analysis

Demographic Background

The demographic backgrounds of the student participants are summarized at Table 3. First, we noted that two-third of the subjects are female, which echoes the finding of Record and Green (2008) that the academic librarianship is a "feminized profession". We also noted that the majority of our subjects (60.5%) were under the age of 30, with the PKU having the largest number of participants under 30 (83.3%). Since MLIS is a graduate-level degree, it necessitates the students to have a bachelor's degree in any discipline prior to enrolling in these MLIS programs. Therefore, we also looked into our participants' undergraduate majors. The survey results indicated that out of all 200 participants surveyed, 52.5% of them had an undergraduate degree in LIS, of which it is the most popular undergraduate major amongst the student participants at TNNU (82.5%), PKU (31.0%), and UC (71.7%). However, the most popular major amongst the HKU participants was engineering and information technology (20.8%). Different from the US, LIS degree at the bachelor level is not uncommon in Taiwan, China, and Denmark. This is also why a master degree is not a must for entry into professional librarianship in these countries.

< Insert Table 3 here. >

The survey results also indicated that both HKU and TNNU had the largest number of MLIS students with previous graduate-level qualifications. At HKU, 41.7% of the respondents indicated that they had already achieved master's degrees; meanwhile at TNNU, 22.8% of master's degrees upon entering the MLIS program (see Table 3). Despite the large number of graduate-degree holders at both HKU and TNNU, none of them had a doctoral qualification.

We are also interested in the occupation of our subjects when they enrolled in the MLIS programs. Our findings are reported in Table 4. First, we noted that the majority of the MLIS students at HKU (87.5%) and TNNU (70.2%) had a full-time job (either in the library or in another profession) when they enrolled in the MLIS program on a part-time basis, whereas the students at PKU (16.7%) and UC (28.3%) did not. Such findings (combining the age factor) indicated very likely that the students at PKU and UC enrolled in the MLIS program immediately after completing their undergraduate degrees, and they did not have working experience, a finding that is similar to other studies (Li & Bray, 2007; Lo *et al.*, 2015). Concerning the reasons for making the decision to pursue an MLIS degree, out of all the 200 participants surveyed at all the four universities, 55.5% of them chose to pursue for this MLIS graduate degree out of an active/personal choice; while 16% of them said that it was out of a comprised choice, i.e., studying in MLIS was not their first or ideal choice for pursuing their graduate study but this was the optimal choice based on the actual scenario (for example, study budget, academic standing, etc.). Meanwhile, HKU (4.9%) and TNNU (45.6%) had the highest number of students already working full-time in a library (see Tables 4), while pursuing an MLIS degree. It was obvious that these students at HKU and TNNU were pursuing the MLIS degree for career-advancement reasons.

< Insert Table 4 here. >

Prior Library Working Experience and Learning Motivation

To investigate whether prior work experience in a library would have an impact on a person's motivation for pursing an MLIS degree, the questionnaire invited the participants to provide their opinion on this issue, based on a five-point Likert scale (see Table 5).

< Insert Table 5 here. >

As shown in Table 5, out of all the 200 participants surveyed at all the four universities, 91 of them had prior working experience in a library. Around 40% of them viewed that their prior work experience in a library did affect their decision to pursue for MLIS degree (i.e., with a great deal impact); whereas around 20% of them did not think so (i.e., with a litter or not at all impact). As there are around 20% more subjects of the view that their prior experience has motivated the students to pursue for the MLIS, it is therefore safe to conclude that H1 is supported. When we further look into whether there is a significant difference in this aspect between the four universities that we have investigated, we note that this effect is more significant at both HKU and TNNU. However, this effect is not found amongst the students at UC, as we note that there are more students are of the view that their prior working experience in the library has little or even no impact to their decision. Plus, we cannot make any meaningful conclusion on PKU's data because only five students responded to the question. As there is an obvious difference on the impact of prior library experience of the decision to pursue for the MLIS degree between Denmark, Hong Kong, and Taiwan, we can also conclude that our H3 is supported.

Factors affecting Learning Motivation of MLIS Students

Identifying factors that affect the career and learning motivations of MLIS students is the main objective of this study. By revealing factors that contribute to the career and learning motivation, administrators of information agencies and LIS educators can seek for measures to enhance its motivational forces and provide information to the MLIS graduates as important factors for choosing

their careers in LIS. It is expected that the findings may essential for the long-term workforce planning and career development of LIS professionals.

Our participants were given 23 factors, which were developed through a Delphi panel of library and information science, that contribute to career and learning motivation of MLIS students to choose from (See Q.4 of Section 2 of the Appendix). They were asked to identify those influential factors, which motivate them to pursue their MLIS program. The top seven factors for each region are summarized in Table 6.

< Insert Table 6 here. >

Based on the responses collected from participants at the four universities, we noted that there are distinctive differences, in terms of the ranking of the factors, amongst student groups at each participating university. For example, the participants at HKU and TNNU ranked "career advancement in the library field" and "want to stay competitive in the library field", which are extrinsic factors, as the most influential factor for pursuing an MLIS program, respectively. On the other hand, students at PKU selected both "want to change into a profession that gives more job security", an extrinsic factor, and "did not want to work, just wanted to stay in school & study more after finishing my BA", an intrinsic factor as their top reasons. However, UC participants selected an intrinsic factor, i.e., "being interested in LIS", as their top selection criteria.

To further investigate how different factors affect the participants at four universities pursuing an MLIS degree, we asked them to response to a list of 16 factors that motivated them at a personal level (see Table 7).

< Insert Table 7 here. >

As shown in Table 7, we noted that our participants at all the four universities have very different responses to the 16 factors. Basically, they ranked the factors in a totally different order, and the range

of the factor scores also deviate amongst different universities. For example, the participants at the HKU and the TNNU both have 15 out of 16 factors with factor scores more than 3.0, i.e., the midpoint of the Likert Scale, whereas students from the PKU and the UC only had 8 and 9 factors with factor score more than 3.0. It would be safe to say that our participants at the HKU and TNNU were of the view that most of the factors listed in the survey were important for making their decision to pursue an MLIS degree (as the factor score is more than 3.0) and the students of the PKU and the UC were of the view that only half of them were relevant for their decision-making process.

To test whether the extrinsic or intrinsic factors are more influential to the students' choices in pursing for an MLIS degree, we conducted a Mann-Whitney U-test, which is a non-parametric test for testing whether there is a significant difference about the distribution of these two types of factors. When we conducted the U-test, we needed to first compute the two U-values related to the two sets of conditions, i.e., intrinsic factors and extrinsic factors, and use the smaller U-value to compare with the critical U-value with respect to a certain α-value (see Table 8).

< Insert Table 8 here. >

As shown in Table 8, we computed the U-value for the extrinsic and intrinsic factors. Based on our analysis, we note that students at UC were more affected by the intrinsic factors (with $\alpha = 0.10$, i.e., marginally significant) than by the extrinsic factors. In brief, our result supports the following findings. Firstly, student participants at all the four universities would take both extrinsic and intrinsic factors in their process of decision-making, which supports our H2. Lastly, students at UC were more in favor of the intrinsic factors in making their decisions, whereas students at the other three universities (HKU, PKU, and TNNU) all ranked the intrinsic and extrinsic factors indifferently, which supports our H4.

Discussion

This study was designed to identify the various career and learning motivational factors that influenced the decisions of individuals to pursue careers in LIS. We developed four hypotheses for looking into whether (i) prior working experience in a library would motivate a person to pursuing for an MLIS degree; (ii) whether intrinsic and extrinsic factors would motive their choice; and (iii) whether their cultural background would moderate their behavior. We also gathered the demographic and other related information to conduct some basic analyses.

First of all, we discovered that prior working experience in a library would be an important factor that would affect the participants' career choices, i.e., H1. This result echoes prior research results, which indicates that the opportunity to undertake work experience appears to be another factor affecting students' career decision-making (McClenney, 1989). It has been argued that working experience provides students with opportunities to explore different jobs and learn about their future career (Moniarou-Papaconstantinou, Tsatsaroni, Katsis, & Koulaidis, 2010). As a result, they developed more confidence to make their career decisions (Guindon & Richmond, 2005). Students with limited work experience, however, tend to be a lack of the ability to generate career options or just make their career decisions based on their career interests rather than their abilities associated with their career (Feldman & Whitcomb, 2005). As a result, students with working experience in the related field are likely to make more effective career decisions than those without experience. This study, therefore, demonstrated the value of relevant library working experience would influence the participants to make their career-decision-making process, because it provided them with the opportunities to learn about their potential career (for example, the actual working conditions and environment and the expected job skills and knowledge), and develop their abilities relevant to their job expectations of their future career as an LIS professional. The results of this study also indicated that the influence of prior working experience in the library of their choice of taking up an academic librarian career is moderated by the cultural background

of our students. In particular, the prior working experience in the library contributed more to the decision making process of students from Hong Kong and Taiwan but has less contribution to Danish students as shown in the results presented in our Table 5 in the previous section, which supports H3.

Our H2 and H4 focused on examining whether the different intrinsic or extrinsic factors would influence a person's decision in pursuing an MLIS degree. In the first part of our study, we discovered that factors like "want to stay competitive in the library field", "allows opportunities to transfer my skills and knowledge to library work", and "being interested in LIS" were the core intrinsic-extrinsic factors amongst a majority of the student participants at all four universities to select a career in LIS. It is also interesting to note that "career advancement in the library field" and "being interested in LIS" are the two most influential factors, which students at HKU, TNNU, and UC viewed as the top factors, whereas "want to change into a profession that gives more job security" and "want to stay competitive in the LIS field" were ranked as the top factors for amongst the PKU students for entering the LIS filed (see Table 6). Such results reflect that there are significant cultural differences in the selection criteria when it is coming to making decision on career choices.

When we look further into the impacts of factors in details, we note that both intrinsic and extrinsic factors are having significant and yet distinctive influences. Based on our U-test, we note that the ranking of these two types of factors were indifferent amongst the participants at HKU, TNNU, and PKU. However, intrinsic factors (i.e., factors related to achievement, growth, recognition, advancement, and the work itself) were considered to be more important for the UC students. As we do not observe that extrinsic factors are having more significant impact (i.e., our Danish participants prefer intrinsic factors over extrinsic factors, while our Hongkonger, Taiwanese, and Chinese subjects are indifferent between the intrinsic and extrinsic factors), we can say that intrinsic factors are important factors, which echoes the Theory of Vocational Personalities and Environments proposed by Holland (1973). In this

study, we observed that people are entering into the career of LIS not for the money or benefits, but rather they feel it matches their interests. As highlighted by Ard, Clemmons, Morgan, Sessions, Spencer, Tidwell and West (2006, p. 241), "the (librarianship) profession will benefit from the inflow of intrinsically motivated people who enjoy the nature of the work, and will likely stick with the profession even, if the salaries and the public image of librarians do not improve dramatically in the next few years."

The significant impacts of the intrinsic factors in our U-Test for the UC students can be explained by the Hofstede Cultural Dimensions as regions with lower power distance index are known to be in favor of using intrinsic factors in the career-related decision marking (Phatak, Bhagat, & Kashlak, 2005), whereas the three other regions are having high power distance values and are less likely to use intrinsic factors in the career-related decision making. In particular, the power distance index value for Danish is more than about two standard deviations lower from the mean power distance value of all 110 countries surveyed (see Table 2) and can be considered as a country with very low power distance value, the corresponding value for Hong Kong, Taiwan and China are within the range between the mean power distance value and one standard deviation above the mean value and could be considered to more than the average values. Plus, Fisher and Yuan (1998) reported that Chinese tended to rely more on the extrinsic in their career-decision making Therefore, it is very likely that the cultural background of Hong Kong, Taiwan, and China influenced the responses of our participants (and therefore, they are more relying on extrinsic factors in their career decision-making compared with Europeans) and contributed to the indifferent results when we compare the impacts between the intrinsic and extrinsic factors for these three countries.

Last but not least, extrinsic factors also play some important roles in motivating our subjects to study for MLIS programs. The results of this study indicated that the participants were more concerned about "job security", "stable working environment", "library environment/atmosphere", "career

advancement in library field", "desire for a career change", and "being interested in LIS" when it came to their career decision-making.

Based on our above findings, we would like to propose some important issues that our co-workers in the Fast East should consider when we develop our MLIS curriculum, which can motivate more young people to pursue for the librarianship career. First, our result shows that prior working experience in the library is an important factor to attract people to pursue as well as prepare them for the career. Therefore, we would suggest that the MLIS curriculum should have an internship and/or work placement arrangement. It is because students provided with internship and work placement experiences will further strengthen their skills, a sense of work ethics, and confidence in job performance (Kane, Healy, & Henson, 1992), which would be helpful for them to build up the passion and engagement with their career. This arrangement can also build up their leadership in the field before they enter into a professional position, as these factors are perceived as an important attribute of blooming their career (Graybill, 2014).

To help better communicate the importance of the LIS career and the correct understanding of the intrinsic and extrinsic influence factors of the career to the next generation, we are of the view that mentoring programs are also important. Mentoring offered during the internship and work placement provides guidance to students for their professional development and training. It enables both students and mentors to make long-term decisions regarding their career goals, work performance, ethics and potential long-term performance (Eby, Durley, Evans, & Ragins, 2006; Godshalk & Sosik, 2003; Ragins, Cotton, & Miller, 2000). This echoes with the latest finding by Lorenzetti and Powelson (2015), who suggested the positive impacts of mentoring programs on the career development of academic librarians.

Conclusion

Theoretical Contributions and Practical Implications

The respondents of all the four groups indicated similar and yet distinctive reasons for choosing LIS as a profession. The survey results revealed that many students at HKU and TNNU were purposing the MLIS degree for career-advancement purposes. Meanwhile the majority of those at PKU and UC had little or no previous LIS-related work experience. Also, because of their varying educational and occupational backgrounds, we could expect the students at HKU to bring a much more diverse set of occupational skills and knowledge to the LIS profession, as 40% and 83% of the HKU MLIS students were working for a full-time job other than library science before they pursued for the MLIS degree and having a first degree outside of LIS major, respectively, compared with 12-26% and 19-69% of the other three universities, respectively as shown in Tables 3 and 4. Together with their diverse educational backgrounds, the HKU MLIS graduates would not be limited to just work in libraries or information centers, but also for other organizations that are complementary to LIS or require LIS skills. The ability to navigate and manage information is indeed a very useful skill, and there are many non-library jobs which the degree qualifies graduates for. According to Gordon (2008), an increasing number of LIS graduates are working for corporations and organizations outside the traditional library and archival environments, or are starting their own businesses, for example, by building or supporting technology infrastructure, conducting research, creating and maintaining a Web presence or an Intranet, designing databases, assessing consumer information needs, or training users on software or other products, and so on. Through LIS programs, these career changers gain LIS knowledge and currently attempt to apply it in a much "wider library, information, and knowledge management context" (Missingham, 2006), which is also in line with the view of Chartered Institute of Library and Information Professionals (CILIP). Employers of LIS graduates are highly diversified and could also vary substantially in both size and nature.

Due to such expanding service scopes, rapid technological changes, and the globalized knowledge economy, the LIS community needs to gather data from MLIS students on a continuing basis to understand the backgrounds and needs of MLIS students and help ensure that the supply of LIS professionals can adequately meet the demands in the job market. The findings of this study would also enable inferences to be drawn about the educational needs of those changing careers into LIS.

The MLIS program is often the first step in preparing professionals for entering the field of LIS. Although this research is not comprehensive, it provides a snapshot of particular groups of soon-to-be LIS professionals. Libraries and the LIS profession have evolved over time, and LIS does not exist outside the general social framework.

Designing an LIS educational program for the diverse needs and expectations of employers nowadays could be difficult. LIS programs also have to compete with other programs (for example, archival science, information systems, IT management) to attract applicants, and have been forced to change its nature and scope of curriculum dynamically. The approach of the HKU program, which offers different specialist areas of study (including librarianship, information management, knowledge management, and archival studies) through a systematic planning of core and elective subjects is probably a viable solution.

To meet the demands of prospective students and the industry, LIS programs should be constantly reviewed and updated according to the developments in society, the workforce, and information technologies. Furthermore, there has been a trend in LIS research to investigate LIS workforce issues to enable better planning for recruitment and retention in the light of changing age demographics, pending recruitments and employee turnover (for example, Noh and Moran (2011), Lo et al. (2015)). For these reasons, LIS administrators and others responsible for hiring LIS professionals will

find MLIS students' reasons for entering the field, their preferences, perceptions of the LIS profession, and interests in various subfields of interest in workforce planning.

Limitation of this Study and Future Research Direction

Similar to other research, this study has several limitations. First, there are many ways to discover the motivation of individuals to choose a career path. However, this study was based solely on questionnaire data. Therefore, it is our plan to continue this research project using both the quantitative (survey) and qualitative (in-depth interviews) methods to probe into this research topic, i.e., using the mix-methods research methodology (Bryman, 2007). Second, the participants recruited in this study were based on convenient sampling. Thus, the sampling process may not be randomized. Third, although some countries only require a bachelor's degree, the MLIS degree is the basic entry-level requirement for most professional librarian positions in Hong Kong. On the other hand, given the sheer number of bachelor's degree holders in LIS in Taiwan and China, an MLIS degree is preferred but not mandatory to be employed as an LIS profession. For the reason of comparability and consistency, only master's-level LIS students were invited to take part in this study. That might have an impact to our analysis. Despite such limitations, the findings of this study are interesting in relation to the students' personal and professional journeys to an LIS career. Furthermore, the relatively small sample size (approximate 50 per university) hinders us from performing some detailed statistical analyses in some of the issues (say, the impact of prior library working experience in relation to our Chinese participants).

For future research directions, we plan to continue to collect data from universities from other countries so that we can further test our H3 and H4, which are aimed to study the moderating effects of culture. Plus, it is also our plan to collect more data from these four universities for conducting a time-series analysis to see if the improvement of the program by adding internship / placement arrangement would indeed affect the students' career development. We also plan to develop a qualitative research

study on a smaller number of MLIS students to gain more intimate details of the individuals' career choice that the survey instrument could not measure in detail. Interaction by conducting open-ended interviews and discussions with the MLIS students could also provide additional information on their career choice.

Final Remarks

This research focused on studying the career and learning motivations of MLIS students at HKU, TNNU, PKU, and UC by looking at their cultural, career, and educational backgrounds, via which identifying the different motivational factors for choosing a career in LIS. This study highlights the need of MLIS students in exploring their interests, their abilities, and their own value concept before they make their career decisions, as well as the call for gaining a better understanding of the impact of culture on the career development of LIS.

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TABLE 1.   Definition of Hofstede cultural dimensions.

Cultural dimension	Definition
Power distance (PDI)	It expresses the degree to which the less powerful members of a society accept and expect that power is distributed unequally.
Individualism (INV)	It can be defined as a preference for a loosely-knit social framework in which individuals are expected to take care of only themselves and their immediate families.
Masculinity (MAS)	It represents a preference in society for achievement, heroism, assertiveness and material rewards for success. The society at large is more competitive.
Uncertainty avoidance (UAI)	It expresses the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity.
Long term orientation (LTO)	For societies score low on this dimension, they prefer to maintain time-honored traditions and norms while viewing societal change with suspicion. For societies score high in this dimension, they take a more pragmatic approach.
Indulgence (IND)	It stands for a society that allows relatively free gratification of basic and natural human drives related to enjoying life and having fun.

Note: The definitions are extracted from The Hofstede Centre (http://geert-hofstede.com/national-culture.html).

TABLE 2.   Hofstede cultural dimensions for Hong Kong, Taiwan, China, and Denmark.

Cultural dimension	Power distance	Individualism	Masculinity	Uncertainty avoidance	Long term orientation	Indulgence
Hong Kong	68	25	57	29	61	17
Taiwan	58	17	45	69	93	49
China	80	20	66	30	87	24
Denmark	18	74	16	23	35	70
Range	11-104	6-91	5-110	8-112	0-100	0-100
Average	59.31	45.17	49.53	67.64	45.48	45.42
Standard Deviation	21.11	23.82	19.20	22.85	24.11	22.17

Note: There are a total 110 countries covered in the Hofstede Cultural Dimensions. We also report the range and the average of each of the dimensions in this table based on the raw data provided at http://www.geerthofstede.nl/research--vsm.

TABLE 3.   Demographic background of subjects.

Demographic	Hong Kong (n = 48)	Taiwan (n = 57)	China (n = 42)	Denmark (n = 53)	Total (n =200)
Gender					
Male	18 (37.5%)	13 (22.8%)	18 (42.9%)	17 (32.1%)	66 (33.0%)
Female	30 (62.5%)	44 (77.2%)	24 (57.1%)	36 (67.9%)	134 (67.0%)
Age					
< 30	30 (62.5%)	25 (43.9%)	35 (83.3%)	31 (58.5%)	121 (60.5%)
30-39	15 (31.3%)	19 (33.3%)	7 (16.7%)	15 (28.3%0	56 (28.0%)
40-49	3 (6.2%)	11 (19.3%)	0 (0.0%)	7 (13.2%)	21 (10.5%)
≥ 50	0 (0.0%)	2 (3.5%)	0 (0.0%)	0 (0.0%)	2 (1.0%)
Education Background					
High school graduate	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (1.9%)	1 (0.5%)
With Undergraduate degree	28 (58.3%)	44 (77.2%)	39 (92.9%)	47(88.7%)	158 (79.0%)
With graduate degree	20 (41.7%)	13 (22.8%)	3 (7.1%)	5 (9.4%)	41 (20.5%)
Major					
LIS	8 (16.7%)	46 (80.7%)	13 (31.0%)	38 (71.7%)	105 (52.5%)
Arts	10 (20.8%)	3 (5.2%)	5 (11.9%)	4 (7.6%)	22 (11.0%)
Business	4 (8.3%)	0 (0.0%)	12 (28.6%)	1 (1.9%)	17 (8.5%)
Education	4 (8.3%)	1 (1.8%)	0 (0.0%)	0 (0.0%)	5 (2.5%)
Engineering (incl. IT)	12 (25.0%)	4 (7.0%)	7 (16.7%)	5 (9.4%)	28 (14.0%)
Law	1 (2.1%)	0 (0.0%)	2 (4.8%)	0 (0.0%)	3 (1.5%)
Science	5 (10.4%)	1 (1.8%)	1 (2.4%)	1 (1.9%)	8 (4.0%)
Social Science	3 (6.3%)	1 (1.8%)	1 (2.4%)	2 (3.8%)	7 (3.5%)
Not reported	1 (2.1%)	1 (1.8%)	1 (2.4%)	2 (3.8%)	5 (2.5%)

TABLE 4.   Occupation of subjects

Occupation	Hong Kong (n = 48)	Taiwan (n = 57)	China (n = 42)	Denmark (n = 53)	Total (n =200)
Occupation status when the subject joined the MLIS program (Note: Some subjects have more than one occupation)					
Working full-time in a library	23 (47.9%)	26 (45.6%)	2 (4.8%)	1 (1.9%)	52 (26.0%)
Working part-time in a library	2 (4.2%)	5 (8.8%)	0 (0.0%)	3 (5.7%)	10 (5.00%)
Volunteer in a library	1 (2.1%)	3 (5.3%)	0 (0.0%)	0 (0.0%)	4 (2.00%)
Full-time worker in another area	19 (39.6%)	14 (24.6%)	5 (11.9%)	14 (26.4%)	52 (26.0%)
Part-time worker in another area	2 (4.2%)	1 (1.8%)	0 (0.0%)	7 (13.2%)	10 (5.00%)
Student	3 (6.3%)	17 (29.8%)	33 (78.6%)	36 (67.9%)	89 (44.5%)
Stay-home / unemployed	0 (0.0%)	0 (0.0%)	3 (7.1%)	6 (11.3%)	9 (4.5%)
Decision for taking MLIS program					
First career choice	14 (29.2%)	3 (5.3%)	13 (31.0%)	9 (17.0%)	39 (19.5%)
Active / personal choice	22 (45.8%)	43 (75.4%)	14 (33.3%)	32 (60.4%)	111 (55.5%)
Compromised choice	6 (12.5%)	8 (14.0%)	13 (31.0%)	5 (9.4%)	32 (16.0%)
Only option / last resort	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Never thought about it	1 (2.1%)	0 (0.0%)	2 (4.7%)	2 (3.8%)	5 (2.5%)
Others	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (3.8%)	2 (1.0%)
No response	5 (10.4%)	3 (5.3%)	0 (0.0%)	3 (5.6%)	11 (5.5%)

TABLE 5.   Prior library work experience

Occupation	Hong Kong (n = 31)	Taiwan (n = 38)	China (n = 5)	Denmark (n = 17)	Total (n =91)
Did your previous library work experience contribute to your decision to pursue your MLIS?					
A great deal	5 (16.1%)	7 (18.4%)	1 (20.0%)	5 (29.4%)	18 (19.8%)
Much	8 (25.8%)	16 (42.1%)	1 (20.0%)	1 (5.9%)	26 (28.6%)
Somewhat	11 (35.5%)	12 (31.6%)	2 (40.0%)	4 (23.5%)	29 (31.8%)
A Little	6 (19.4%)	3 (7.9%)	0 (0.0%)	4 (23.5%)	13 (14.3%)
Not at all	1 (3.2%)	0 (0.0%)	1 (20.0%)	3 (17.6%)	5 (5.5%)

TABLE 6.   The top seven factors motivate subjects to undertake MLIS in general

Factor	Hong Kong (n = 48)	Taiwan (n = 57)	China (n = 42)	Denmark (n = 53)
Career advancement in library field	27 (56.3%)	25 (43.9%)	–	20 (37.7%)
Career change (active decision; personal choice or decision)	22 (45.8%)	–	–	14 (26.4%)
Want to stay competitive in the library field	18 (37.5%)	43 (75.4%)	14 (33.3%)	11 (20.8%)
Want to change into a profession that gives more job security	16 (33.3%)	13 (22.8%)	15 (35.7%)	–
It was all job related	13 (27.1%)	13 (22.8%)	8 (19.0%)	–
Allows opportunities to transfer my skills & knowledge to library work	16 (33.3%)	18 (31.6%)	11 (26.2%)	10 (18.9%)
Being interested in LIS	21 (43.8%)	25 (43.9%)	13 (31.0%)	34 (64.2%)
Already earned a BA in LIS, hence, it is only natural that I get my Master's in the same field, too	–	25 (43.9%)	11 (26.2%)	28 (52.8%)
Wanted to earn an MA related to education immediately after completing my Bachelor's degree	–	13 (22.8%)	–	10 (18.9%)
Did not want to work, just wanted to stay in school & study more after finishing my BA	–	–	15 (35.7%)	–

Note: For the case in Taiwan, there are three factors with equal scores (i.e., 13) ranked at 6 to 8. Therefore, we include all three factors in our analysis.

TABLE 7.   The extent of the importance of a factor affecting a subject's choice in pursuing the LIS program

Factor	Hong Kong (n = 48)	Taiwan (n =57)	China (n = 42)	Denmark (n = 53)
Ranking of extrinsic factor				
E1:Opportunities for advancement	4.05 (1)	3.54 (10/11)	3.02 (8)	2.81 (11)
E2:Alternative to teaching	2.68 (16)	2.83 (16)	2.41 (15)	1.93 (16)
E3:Availability of jobs / good job market	3.65 (4)	3.50 (12)	3.15 (5/6)	3.45 (5)
E4:Desire for career change	3.73 (2)	3.59 (7/8)	3.07 (7)	2.21 (15)
E5:Need for a marketable job skill	3.45 (9)	3.57 (9)	2.85 (10)	2.88 (10)
E6: Personal skills that could be used in LIS professions	3.50 (8)	4.04 (1)	3.41 (4)	3.19 (6/7)
E7: Previous library work experience	3.33 (12)	3.96 (2)	2.12 (16)	2.40 (13)
E8: Satisfactory earnings	3.68 (3)	3.61 (5)	2.49 (14)	3.14 (8)
E9: Variety of career opportunities	3.63 (5)	3.33 (15)	2.63 (13)	3.57 (3)
E10: To supplement / complement another degree	3.05 (15)	3.54 (10/11)	4.27 (1)	2.38 (14)
Ranking of intrinsic factor				
I1: Importance of information in modern society	3.55 (6/7)	3.35 (14)	3.15 (5/6)	4.17 (1)
I2:Numerous & diverse areas of specialization	3.38 (10/11)	3.59 (7/8)	2.71 (12)	3.55 (4)
I3:Opportunities to serve others & the community	3.23 (13/14)	3.61 (6)	3.68 (2)	3.19 (6/7)
I4: Previous library use experience	3.38 (10/11)	3.87 (3)	2.76 (11)	3.10 (9)
I5: Helping people to find information they need	3.55 (6/7)	3.85 (4)	2.95 (9)	3.76 (2)
I6: To participate in information policy making	3.23 (13/14)	3.37 (13)	3.56 (3)	2.48 (12)

Notes: (1) 5-point Likert scale was used for collecting the data; and (2) The parentheses show the ranking of that factor within a particular country among all sixteen factors.

TABLE 8.   Result of Mann-Whitney test for the extent of the importance of a factor affecting a subject's choice in pursuing the LIS program

Ranking	Hong Kong (n = 48)	Taiwan (n =57)	China (n = 42)	Denmark (n = 53)
1	E1	E6	E10	I1
2	E4	E7	I3	I5
3	E8	I4	I6	E9
4	E3	I5	E6	I2
5	E9	E8 / I3 (Rank 5.5)	E3 / I1 (Rank: 5.5)	E3
6	I1/I5 (Rank: 6.5)			I3/E6 (Rank: 6.5)
7		E4/I2 (Rank: 7.5)	E4	
8	E6		E1	E8
9	E5	E5	I5	I4
10	I2/I4 (Rank: 10.5)	E1/E10 (Rank 10.5)	E5	E5
11			I4	E1
12	E7	E3	I2	I6
13	I3/I6 (Rank: 13.5)	I6	E9	E10
14		I1	E8	E4
15	E10	E9	E2	E7
16	E2	E2	E7	E2
n_1: The number of members of E	10	10	10	10
n_2: The number of members of I	6	6	6	6
T_1: The sum of ranks of E	75	89	93.5	101.5
T_2: The sum of ranks of I	61	47	42.5	34.5
U_1: $n_1 n_2 + \frac{n_1(n_1+1)}{2} - T_1$	40	26	21.5	13.5
U_2: $n_1 n_2 + \frac{n_2(n_2+1)}{2} - T_2$	20	34	38.5	46.5
Minimum of U_1 and U_2	20	26	21.5	13.5
Critical U ($\alpha = 0.10$)	14	14	14	14

Notes: Please refer to Table 7 for the abbreviation of the factors.

APPENDIX: Survey Questionnaire

The survey was conducted online using Survey Monkey[1]. It consists of the following two sections.

Section 1: Demographic information
Information collected including gender, age, ethnicity, academic background,

Section 2: Reasons for pursuing MLIS

1.   What was your occupational status prior to starting the MLIS program? (choose all that apply)
        ✧   Employed full-time in a library
        ✧   Employed part-time in a library
        ✧   Student
        ✧   Full-time housewife / stay-at-home father
        ✧   Volunteer in a library
        ✧   Unemployed
        ✧   Employed full-time in other profession
        ✧   Employed part-time in other profession

2.   Your decision to undertake the MLIS program was based on your:
        ✧   First career choice
        ✧   Active/personal choice
        ✧   Compromised decision (e.g., decision-making outcomes that not fully met your original
             expectations)
        ✧   The only option available / last resort
        ✧   Never thought about it
        ✧   Other (please specify)

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[1] https://www.surveymonkey.com/r/MLIS_DAN

3.   Did your previous library work experience contribute to your decision to pursue your MLIS?
  ✧   Not at All
  ✧   A Little
  ✧   Somewhat
  ✧   Much
  ✧   A Great Deal

4.   Please indicate your main reasons for undertaking the MLIS program. (please choose all that apply)
  ✧   Career advancement in library field
  ✧   Career change (active decision ; personal choice or decision)
  ✧   Made redundant in my OLD non-library job – needed career change
  ✧   Want to stay competitive in the library field
  ✧   Want to change into a profession that gives more job security
  ✧   It was all job related
  ✧   Difficult to find a job in my chosen / preferred field (e.g., art history, music, museum studies, etc.)
  ✧   Allows opportunities to transfer my skills & knowledge to library work
  ✧   Being interested in library & information science
  ✧   MLIS is NOT too demanding & allows me time to take care of my family
  ✧   MLIS is NOT too demanding & allows me time to take care of my other business (e.g., a bookstore)
  ✧   MLIS is less expensive (tuition), compared to other MBA, EMBA, etc.
  ✧   Already earned a BA in library science, hence, it is only natural that I get my Master's in same field too
  ✧   Wanted to earn an MA related to education immediately after completing my Bachelor's degree
  ✧   Did NOT want to work, just wanted to stay in school & study more after finishing my BA
  ✧   Could NOT find a job after finishing my Bachelor's Degree, & I decided to study MLIS
  ✧   Could NOT find a job after finishing my Master's Degree & I decided to study MLIS
  ✧   Could NOT find a job after earning my PhD & needed a profession that allows me to use my research skills
  ✧   Someone told me that MLIS is easy & doable.
  ✧   Just following the trend, because many people I know are getting MLIS nowadays
  ✧   I do NOT want to continue to work as a school teacher & MLIS is related to education
  ✧   Social status & prestige of the profession
  ✧   Satisfactory earnings
  ✧   Other reasons (please specify)

5.	Please indicate to what extent the following reasons are important to your choice of the MLIS program. (5-point Likert Scale)

- ✧ Opportunities for advancement
- ✧ Alternative to teaching
- ✧ Availability of jobs / good job market
- ✧ Desire for career change
- ✧ Importance of information in modern society
- ✧ Need for a marketable job skill
- ✧ Numerous & diverse areas of specialization
- ✧ Opportunities to serve others & the community
- ✧ Personal skills that could be used in LIS professions
- ✧ Previous library use experience
- ✧ Previous library work experience
- ✧ Helping people to find information they need
- ✧ Satisfactory earnings
- ✧ To participate in information policy making
- ✧ Variety of career opportunities
- ✧ To supplement / complement another degree