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Chinese Curriculum Design and Motivation of Chinese Background Students in Australian Tertiary Education

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Abstract

This study explores the need for a change in the current Chinese curriculum for Chinese-background students at the University of Newcastle (UoN). It examines the motivation behind the learning behaviour of Chinese-background students enrolling in the discipline of Chinese at the UoN as well as Chinese curriculum design at other Australian universities. The data from two sources were collected and analysed, Chinese-background students in the Chinese discipline at the UoN and lecturers in the Chinese discipline at six Australian universities. The findings of this study can be used to assist in the curriculum development for the Chinese program at the UoN.

Keywords: Chinese background students, Chinese curriculum design, Motivation, Mainland China, Hong Kong, Singapore, Malaysia

1. Introduction

There is a rapidly growing demand for Chinese language and culture units in Australia, especially since 2002 when China became the largest source of international students in Australian education. In recent years, with China becoming the largest trading partner of Australia, and more Australian students being engaged in Chinese learning, some Chinese-background students venturing into Australian education are also tending to take Chinese units as a means to better understand their own language and culture.

In this paper, Chinese background students are defined as those who are of Chinese ethnicity and grew up in a Chinese language environment. In general, these students can be classified into two groups. One group is comprised of students from mainland China, the other group of students comes from Chinese ethnic groups in Asian countries or regions, mainly Malaysia, Singapore, Taiwan and Hong Kong. The common feature of the two groups of students is that they all speak fluent Chinese. There are three aspects of differentiation between the two groups: written Chinese, spoken accent, and the degree of fragmentation of Chinese culture. These students are significantly different from Chinese descendants who were born in western countries such as Australia. For these Australian-born Chinese students (ABC students), English is their first language at home, indeed, some of them might not be able to speak Chinese, or if they do, they are not able to read Chinese fluently. This study does not focus on these students.

Australian Education International (AEI) reports for 2007 indicate that Chinese-background students made up one third of all international students in higher education in Australia (AEI 2008; McGowan and Potter 2008; AEI 2009). It was reported, regarding the five main sources of Chinese-background students in higher education pursuing coursework, that 24.9% were from mainland China (32424 visas granted), 5.5% from Malaysia (7098 visas), 2.7% from Hong Kong (3517 visas), 2.6% from Singapore (3441 visas), and 1.5% from Taiwan (1921 visas). So, 37.2%, or over one third, of all Australian higher education coursework visas is held by students of Chinese background.

Another snapshot from AEI makes a more manifest and striking presentation about the contribution Chinese background students make to the Australia economy through export income from education services. The latest Australian Bureau of Statistics (ABS) International Trade in Services data (AEI 2009) shows international education activity contributed \$14.2 billion in export income to the Australian economy in 2007. Onshore students from China

made the largest contribution to export income with \$3.1 billion, accounting for 21.9%, followed by Malaysia at \$723 million or 5.1%, Hong Kong at \$574 million or 4%, Singapore at \$278 million or 2% and finally Taiwan at \$239 million or 1.7%. The total value of export income from the five countries of origin for Chinese-background students was \$4.9 billion, accounting for over one third (34.7%) of the total education export income.

A curriculum is the set of units offered at a school or university. A major focus of the practice of internationalisation at Australian universities over the last decade has been an increasing emphasis on internationalizing the curriculum, reflecting public recognition that tertiary students require international skills and competencies in the new global order (Hayward and Siaya 2001). Internationalization of the curriculum is also defined as the process of designing a curriculum that meets the needs of international students (Haigh 2002).

Inter-institutional competition has been identified as a major influence on the curriculum (Colbeck 2002). Increased numbers of Chinese-background students, especially mainland Chinese students in Australia, has brought with it a substantial evolution in the curriculum design at many leading Australian universities. The University of Sydney (USYD 2009), University of Melbourne (UNIMELB 2009), University of Queensland (UQ 2009) and some other Group 8 universities are now providing a specific Chinese stream of electives catering for the needs of Chinese-background students. Even some non-Group 8 universities, such as Deakin University (Deakin 2009) and Macquarie University (MQ 2009), have a Chinese stream for Chinese-background speakers. A rapid increase in the number of students from mainland China at the UoN commenced in 2007. Within one year (June, 2008) the number of students soared from 255 to 756 due to the implementation of new joint programs between the UoN and China (Services 2008). Given the global economic downturn, the pace of competition inter-institutionally is likely to accelerate; “[t]he presence of Chinese background students fuels the impetus to internationalize the existing curriculum” (McGowan and Potter 2008, p.188). In June 2008 the Chinese program at the UoN had, out of 78 enrolments, only 11 from Chinese background students. This ratio of one in seven enrolments being of Chinese background students was quite low compared with the one in three ratio at the six universities in which telephone interviews were conducted with lecturers in Chinese. It is evident that the enrolments of Chinese background students in the Chinese discipline at the UoN fall behind this trend.

Therefore, a new curriculum needs to be created that takes into account characteristics of these Chinese background students, paying particular attention to their language limitations and cultural backgrounds. Revitalising and updating curricula accords with good academic practice in general but there are also very real and practical economic gains to be had from such a step. Financially, an increase of Chinese-background student enrolments will boost the School of Humanities and Social Science which offers fewer industry-related units.

Motivation on education perspective is defined as having two dimensions: interest in reading, and instrumental motivation which refers to external rewards such as praise for good performance or improved job prospects (OECD 2003). Such motivations are reflected in comments such as “I study to get a job”. Internally generated motives, such as interest in subject areas, are called interest in reading (Deci and Ryan 1985; Schiefele, Krapp et al. 1992), and are reflected in comments such as “when I read, I sometimes get totally absorbed”. According to research findings regarding approaches to learning, there are some differences in motivation among these groups of Chinese background students:

With regards to motivation, although there were no manifest differences identified in instrumental motivation and interest in reading through the quantitative data analysis, the qualitative data analysis indicated that mainland Chinese students showed a very stronger preference for instrumental motivation such as migration rather than interest in reading. Conversely Hong Kong students showed stronger interest in reading than instrumental motivation, while Malaysian Chinese student’s preferences fell in between. (Li 2007)

Identifying motivation as the driving force behind learning, this paper seeks to discover the motivation of Chinese-background students in taking Chinese units at Australian universities with the view to redesign the Chinese curriculum at the UoN. To achieve this aim, this research also looks at the currently-operating curricula of Chinese programs at other Australian universities to draw some ideas shedding light on the UoN.

2. Chinese curricula at Australian universities

The enrolment of Chinese-background students at Australian universities makes a major contribution to the education export of Australia. Competition for Chinese-background students, especially from China, has been intense among Australian universities and takes various forms, including, for example, joint programs with China university partners. This is reflected in rapidly increasing numbers of Chinese-background students as well as the number of Chinese language and cultural units (Note 1) offered by most Australian universities, especially those in capital cities.

2.1 Universities offering Chinese units for Chinese background students

Information obtained from the official websites of all 39 Australian universities in April 2009, shows that 29 are offering Chinese units (Note 2) for Chinese-background students, and 4 universities are offering Chinese units through blended

models with other universities at both undergraduate level and postgraduate level. Within the 29 universities, 10 universities offer more than 10 units (see Table 1).

All the universities of this group are located in capital cities, which suggest that this cohort of students is more attracted to study in metropolitan universities, resulting in a large number of Chinese-background students in the larger Australian cities.

8 universities offer 6 to 9 units (see Table 2). Two universities from regional areas—the University of New England and Bond University—have edged into the group of the capital universities. The University of New England presents its offerings as the only comprehensive Chinese program by distance education in Australia, while Bond University, in part, takes advantage of its location on the Gold Coast, a popular holiday resort.

11 universities offer 1 to 5 units independently (see Table 3). Most universities in this final category are situated in ‘regional Australia/low population growth metropolitan areas’ (Immigration 2009). This is the reflection of their shortage of attraction to Chinese background students and also the less development of Chinese programs at some of these universities to some extent. However, one point that needs to be made is that Newcastle is classified as a ‘metropolitan area’ by the Department of Immigration and Citizenship, which, along with the sharp increase in the number of Chinese background students in 2008, indicates some potential for further development of its Chinese program.

Currently, the Chinese program of the UoN has four Chinese literacy units available for Chinese-background students, these being *Intermediate Spoken Chinese*, *Intermediate Written Chinese*, *Advanced Spoken Chinese*, and *Advanced Written Chinese* (shifted to be *Advanced Chinese Via Translation* in the second semester), together with a translation unit at postgraduate level. There are no units on Chinese literature, Chinese culture or Chinese arts in the program.

There are also 4 universities offering units for Chinese background students through their partner universities in either an internal mode in the same city or an external mode, see Table 4.

2.2 Chinese units on offer for Chinese background students at these universities

The Chinese units for Chinese-background students offered by Australian universities can be classified into five categories: Chinese literacy, Chinese literature, Chinese arts, Chinese culture and society and translation/interpretation. Each category is commonly divided into different subcategories, for example, under ‘Chinese literature’ at Macquarie University, units include *Chinese Literature from Hong Kong and Taiwan*, *Modern Chinese Literature*, *Contemporary Chinese Literature*, *the Chinese Martial Arts Novel*, and *The Traditional Chinese Novels*. A unit about Chinese films at the University of New South Wales is called *Chinese Cinema*, while a similar unit at Macquarie University is called *Chinese Film and Literary Texts*. Units are sorted into these categories thus:

Chinese literacy: *Intermediate Chinese*, *Advanced Chinese*

Chinese literature: *Classical Chinese*, *Modern/Contemporary Chinese*, *Chinese Novels*

Chinese arts: *Chinese Calligraphy*, *Chinese Cinema*

Chinese culture and society: *Chinese Culture*, *Chinese Society and Culture*, *Business Chinese*

Translation/Interpretation: *Chinese/English Translation/Interpretation*

3. Methodology

3.1 Research questions

Three general research questions were formulated to guide the collection of data from students:

What motivation affects your decision-making in the selection of Chinese units?

What Chinese language unit in the current curriculum interests you most?

Regardless of the availability, what Chinese units would best meet the needs of your study in Australia?

Another three research questions were formulated to guide the collection of data from lecturers in Chinese:

What units are operating most successfully in the Chinese program for Chinese background students?

Briefly explain the rationale behind the curriculum design?

What aspects of the program could be improved?

3.2 Data collection

Quantitative data in the form of information on Chinese units offered to Chinese-background students at the selected universities was obtained by perusing the universities’ official websites. These data were then analysed to provide an overall picture of the Chinese curriculum design in Australian tertiary education, and shedding light on the design of the Chinese curriculum of the UoN. Units were counted across the identified categories of typical units at Australian universities to find out how many of them are offered to Chinese-background students with a consideration for their

marketing value for the UoN. Each unit, despite various similar names, was counted only once for each university. For example, three units at Macquarie University—*Chinese Literature from Hong Kong and Taiwan*, *Modern Chinese Literature*, and *Contemporary Chinese Literature*—could only be counted as one typical unit in *Modern/Contemporary Chinese Literature* to avoid obscuring the pattern of offerings because of fragmentation.

It is claimed that subjective data gained through interactive modes, such as in-depth interviews, will yield rich and productive insights into the understandings of curriculum design (Mackay, Burgoyne et al. 2006). In this study, subjective data on curriculum design was sourced from two stakeholders, Chinese-background students and lecturers in Chinese at Australian universities. Eleven Chinese-background students in the Chinese discipline from the UoN were selected and separately involved in a semi-structured face-to-face interview for the research.

Face-to-face and semi-structured telephone interviews were conducted to obtain qualitative information expanding on the key issues emerging from the findings of the quantitative analysis in the Chinese programs of the thirty-nine Australian universities. The questions were designed to prompt individual reflection on these issues. Thematic analysis was chosen for analysis of the qualitative data as it is particularly effective in dialogic or interactive methodologies such as interviews (Sarantakos 1998).

All the 11 student participants interviewed were from one university, the UoN. In Semester 1, 2008, eleven Chinese-background students were enrolled in Chinese units. Among the eleven participants, five were from mainland China (all majoring in Accounting), two from Hong Kong (both in Accounting), two from Malaysia (in Accounting and International Business), and two from Singapore (in Psychology and Finance). The individuals were asked to reflect on the Chinese curriculum design and articulate their needs in order to strengthen their Chinese language and cultural knowledge and skills. The subjective responses gained from interview provide useful information for triangulation with the data collection instruments used in this study.

Telephone interviews of 20 minutes each were held with lecturers in Chinese in the Chinese programs of six Australian universities. Among those participants, three were from the Group 8 universities—University of Sydney, Monash University and University of Western Australia—and three from non-Group 8 universities—Deakin University, La Trobe University and University of New England. The rationale of this arrangement lies in that, on the one hand, some examples of good practice from the Group 8 universities could prove useful in informing the experience of the UoN, and on the other hand, universities at similar rankings to the UoN would have more comparative significance to the UoN. To gain representative samples across universities would require a much larger sample of data than possible within the scope of this research project, but, even with a larger sample, such an undertaking would remain fraught (McGuirk 2001).

4. Findings and discussion

It was found that the most popular subjects were *Intermediate Chinese* and *Advanced Chinese* under the category of Chinese literacy. Such units were offered by 23 universities, indicating that Chinese language teaching has been made central by most Australian universities. The third most popular unit was *Chinese Culture and Society*, being offered at 21 universities with some universities expanding this into two, or even three units, such as *Introduction to Chinese Society and Culture*, and *Issues in Chinese Culture for Chinese Speakers* at the University of Adelaide. These categories were followed by Modern Chinese Literature (14) and Translation/Interpretation (14), Classical Chinese (9), Chinese Cinema (6), Chinese Novels (3), and Chinese Calligraphy (3).

It is clearly seen from this data that, apart from traditional Chinese subjects under the category of ‘Chinese literacy’ for Chinese background students, the category of ‘Chinese culture and society’ is the most prominent out of the other three categories of ‘Chinese literature’, ‘Chinese/English translation/interpretation’ and ‘Chinese arts’, with the category of Chinese arts being the least popular in this sequence.

Principles of good practice may function as components of good curriculum development models (Mackay, Burgoyne et al. 2006). The collection of good practice models in the literature review is important, as it is a strategy in itself that can be used to inform the Chinese program of the UoN. The units of good practice identified in the literature review are *Chinese Culture and Society*, *Modern/Contemporary Chinese Literature*, *Translation/Interpretation*, and *Classical Chinese*. The four units were also verified by the results of the data analysis of the interviews with lecturer participants and the student participants who had a variety of motivations.

The interviews with students concerning their motivation for learning Chinese verified some of the foregoing findings to some extent. It was found that there was a strong interest in attending Chinese language and culture units seen as relevant to Chinese identity, especially for university students with Chinese-language background enrolled in undergraduate level units following their completion of high school study in Australia. However, when Chinese-background students from mainland China and Malaysia were asked whether this was the only purpose of their choosing Chinese units, they all smiled and then admitted a hidden reason; that taking Chinese units could considerably alleviate the stress and pressure imposed on them by the coursework delivered through English instruction. As a result,

it is seen that to obtain high marks with greater ease will considerably help these students achieve their very practical goal of the completion of course in due time with creditable grades.

Given this motive, it was natural to find that students in *Intermediate Chinese* and *Advanced Chinese* were all happy with their choice, as the unit did not require much effort from them. When asked what unit they would love to take regardless of its availability at their university, all the five students from mainland China and Malaysia and one from Hong Kong expressed strong interest in learning *Contemporary Chinese literature*. As one of the interviewees from mainland China said: "I am fond of contemporary Chinese literature, if I have a chance to learn them, I will." Four of the five mainland Chinese, Malaysian Chinese students showed strong interests in learning *Classical Chinese*; one mainland Chinese student said that "classical Chinese is the essence of Chinese language; it is more profound and beautiful." All the mainland Chinese students majoring in accounting made manifest a strong interest in doing Chinese culture related to business:

If there is Chinese Business Culture in our school, I will definitely take it. As I am planning to work in a Sino-Australian company after graduation, I do need that part of knowledge and skills. And I am pretty sure if you have this course (unit) soon, there would be a lot of Chinese background students coming to enrol.

The interviews with student participants also revealed that students from Hong Kong showed strong interest in learning standard Chinese, Mandarin. The Chinese literacy units of intermediate Chinese and advanced Chinese are also quite popular with this group of students because Hong Kong Chinese students are Cantonese speakers, a dialect of Chinese. Cantonese adopts traditional Chinese characters, while Mandarin, namely standard Chinese, uses simplified characters. Cantonese differs little from Mandarin as a written language, but is completely different as a spoken language. Given that Hong Kong has become part of China and China has maintained a strong growth in its economy, being only able to speak Cantonese appears to be a severe limitation in the Hong Kong students' new situation.

Telephone interviews with lecturers at six Australian universities further confirmed the findings of the literature review and the student interviews. Chinese culture and society and Chinese literature units, such as *the Analects of Confucius*, *Chinese Business Culture*, *Chinese Language and Culture*, and *Chinese Literature from Hong Kong and Taiwan*, have large numbers of enrolments. While Chinese arts units (for example *Chinese Cinema*, *Chinese Film and Literary Texts*, and *Chinese Calligraphy*) also draw a considerable number of Chinese background students, it is also evident that units such as *Chinese Culture and Society* have also attracted many non-Chinese background students and are often a first step in arousing their interest to learn Chinese language.

These findings indicate which Chinese units need to be established in order to cater for the needs of Chinese-background students and suggest possible changes in the curriculum design at the UoN.

5. Conclusions

In designing a curriculum, it is a foremost requirement to identify target markets, namely, student groups in the context of higher education. A 'target market' is a term meaning the market segment to which a particular good or service is marketed. As one of the most famous regional Australian universities, it is important to identify the student groups who will potentially be interested in learning Chinese units at the UoN.

Given a large increase in the number of Chinese-background students at the UoN, and the universities location only 200 km north of Sydney, the research findings suggest that the Chinese discipline at the UoN should establish three Chinese streams in which two new units on Chinese culture and society, Chinese literature, and Chinese arts need to be established. The three streams are proposed as follows:

Non-background stream for people learning Chinese as a second language;

General background speakers' stream for dialect Chinese speakers unable to speak the standard Chinese, Mandarin and Australian born Chinese able to speak but unable to read Mandarin;

Advanced Background speakers' stream for Chinese native speakers able to speak standard Chinese but having an additional interest in Chinese literature, etc.

Chinese-background students wishing to undertake Chinese can start at the two higher levels of the three stream entry points and will have the chance to be placed at the appropriate entry point according to their language ability and their interest. Apart from the current units of Chinese literacy (such as the beginner, intermediate and advanced Chinese), units in the first stream are for non-background students majoring in Chinese in a Bachelor of Arts program. In the second stream for general background students with a minor in Chinese, it is suggested that some new units be established for Chinese-background students. Based on the findings from this study, for this cohort of students units on Chinese culture and society, Chinese literature, and Chinese arts need to be considered. In line with the sequence of popularity of these three fields, the researcher suggests that one unit out of each of the three fields be put into the agenda in the first stage. (Note 3)

This study is a preliminary study that aims to provide information to the policy makers at the UoN in the hope of expanding the enrolments of Chinese-background students in the university's Chinese program. Some limitations of this study are obvious; for example, the researcher did not have access to the numbers of Chinese-background students in the Chinese program at each Australian university and in the university as a whole, which would have enabled identification of the proportion of Chinese-background students in the Chinese program out of the total number of university enrolments. Such data could contribute to establishing targets for the UoN. Some other issues, such as differences in the content of some units under a category, are worth further exploration. In addition, statistically the data collected may not represent the needs and the views of all the Chinese teachers and Chinese-background students in Australian tertiary education. The researcher does not claim that these findings reflect the experience of all Chinese-background students, and remains mindful of making claims owing to the small sample captured in the study. However, the findings can be used to assist in curriculum design. The validity of these findings is strengthened by the very good overall internal consistency between the clear themes emerging from the literature and the findings from the analysis of the data collected from the interviews with students and lecturers. The findings support the suggestion that the Chinese curriculum in the Chinese discipline at the UoN needs to be redesigned.

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Notes

Note 1. at the UoN, 'course' is used to refer to 'unit'. This is to say, 'course' used by the UoN does not refer to a program of study leading to a degree or certificate, but a unit in educational program, used at most of other Australian universities, one of several distinct units that together form a program of study leading to a qualification such as a degree. To avoid confusion, this paper only uses the term 'unit' to refer to a subject.

Note 2. regarding Chinese literacy unit, two units at one level are counted as one in this paper, for example *Intermediate Chinese 1* and *Intermediate Chinese 2* are counted as one unit. It is common that one language literacy unit of a level always spans one year long and splits into 2 units for two semesters.

Note 3. regarding Chinese arts, the establishment of a unit, *An Appreciation of Chinese Films*, is strongly recommended due to the feedback of a survey in May 2008 conducted by the researcher. The unit, *An Appreciation of Chinese Films*, was designed by the researcher and sent to all the Chinese background students at the UoN by bulk email for expressions of interest, as a result, 35 students in reply expressed their intention to enrol in this unit if it could be put in place in the following semester.

Table 1. 10 universities offer more than 10 units

State	University	Number of Units
NSW	University of New South Wales	12
	Macquarie University	19
	University of Sydney	17
South Australia	University of Adelaide	14
Tasmania	University of Tasmania	15
Victoria	La Trobe University	11
	Monash University	15
	University of Melbourne	11
Western Australia	University of Western Australia	11
	Murdoch University (BCom)	12

Sourced from these universities' websites

Table 2. 8 universities offer 6-9 units

State	University	Number of Units
NSW	University of New England	7
	University of Western Sydney	9
Victoria	Victoria University	9
	Deakin University	8
Queensland	Griffith University	8
	University of Queensland	7
	Bond University	6
Western Australia	Curtin University	9

Sourced from these universities' websites

Table 3. 11 universities offer 1 to 5 units

State	University	Number of Units
NSW	University of Newcastle	5
	University of Technology Sydney	5
	University of Wollongong	1
ACT	Australia National University	5
	University of Canberra	1
Northern Territory	Charles Darwin University	4
Victoria	RMIT University	4
	Swinburne University of Technology	1
	University of Ballarat	1
Queensland	University of South Queensland	4
	Queensland University Technology	3

Sourced from these universities' websites

Table 4. 4 universities offering units for Chinese background students through their partner universities

State	University	Partner University
South Australia	The Flinders University	University of Adelaide
	University of South Australia	University of Adelaide
Queensland	James Cook University	University of New England
At all the states	Open University	Griffith Universs of thisity

Sourced from these universities' websites



Discussion on Strategies of Development and Application of Human Resources

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Abstract

Establishment of a great power with human resources is one of the major strategies in China. To strengthen development and application of human resources is an important task China is currently faced up with. In this article, the author attempts to discuss strategies of development and application of human resources from several aspects, such as education, market, enterprises and the government, etc.

Keywords: Human resources, Development and application, Education, Talents, Countermeasures

To develop education with priority and to establish a great power with strong human resources is the significant strategic decision made by the Party Central Committee to further carry out the strategy of rejuvenating the country through science and education and the strategy of reinvigorating China through human resource development in a new historical stage. Human resource is the first source for development of a country, and establishment of human resources has become a key factor in realizing development of China.

Human resource refers to the total population with the competence of labour which can promote development of the entire economy and society. Generally speaking, development and application of human resources in China is still at a low level, incomprehensive and imbalanced, as a result of which supply of human resources with high quality is inadequate. There also exist some problems to be dealt with in the aspect of education which is the major channel for human resource training. For example, the aspect of basic education is weak, quality of higher education, adult education and vocational and technical education is open for improvement, and financial educational expenditure is open for increase, etc. The issue of human resource is connected to the rise and decline and the destiny of a country. How to sufficiently and effectively strengthen development and application of human resource, transform the quantity of population into advantages of human resource, and encourage China to switch from a country with large population into a great country with strong human resources is an important issue encountered at present. Therefore, we should attempt to discuss and strengthen strategies about development and application of human resources from several aspects, such as education, market, enterprises and the government, etc.

1. To intensify strategies of human resources in which education is the subject

1.1 To adjust the structure of talent training, strengthen practical aspects and improve education quality

Economic construction of China is badly in need of a large majority of technical talents with professional knowledge. Starting from actual requirements of economic construction, we should make an adjustment on design of professional courses, change training of research-based and communication-based talents in the past into training of skill-based and science-and-technology-based talents, so as to form a gradient pattern of talents and satisfy demands of different industries and different regions on talents of different levels. In terms of teaching schedule, we should change the status quo of weak practical aspects and vigorously intensify each practical teaching process; in terms of the structure of the teaching team, we should change the situation of inadequate application-based talents, establish a teaching team

centered by teaching and a teaching and research team centered by scientific research, vigorously development scientific and technical industries and produce a benign system with combination of teaching, scientific research and production.

1.2 To rationally optimize scale and pattern of schools at all levels to improve the overall efficiency of running a school

In recent years, according to development trend of the population of entering the school at a school age, and through distribution of elementary and secondary schools, especially reconfiguration and adjustment on distribution networks of rural elementary and secondary schools, we have merged those elementary and secondary schools seriously inadequate in sources of students, have optimized allocation of teachers and have improved teaching quality to a large extent. Starting from actual requirements of the personnel market, and according to their own conditions, those universities and technical secondary schools with low application rate of education resources take measures of large-scale mergence, etc, and readjust design of some departments and majors, which gradually enables those universities and colleges to go towards appropriateness and enables their discipline structure to go toward rationality.

1.3 To strengthen vocational education

Making a general survey of any economically powerful nation in the world, it is not difficult to discover, their developmental history has indicated vocational education and in-job training is the fundamental channel to cultivate industrial main forces with high quality. Training and education of laborers, and their skill development and improvement are significant factors to promote sustained and rapid growth of the economy.

Influenced by the idea of traditional education, to enter colleges and universities has become a general target of those who pursue learning, and vocational education has become a weak aspect in the educational structure. Both the supportive strength of the government education budget and such aspects as materials and facilities of training employees have always been in a laggard state. Therefore, we should adjust educational structure, regard vocational education as focus of education and further enlarge investment strength and training strength of vocational education so as to satisfy demands of a province on such a sort of talents. We can adopt corresponding measures to strengthen strength of publicity, change the concept of thoughts and intensify recognition of the whole society in vocational education; we should enlarge investment in vocational education, provide support in terms of policies, and lead social investment into vocational education on the basis of educational expenditure investment by the government; we should keep abreast with the personnel market, and adjust in good time design of majors and the structure of talent training; we should impart skills, guarantee teaching quality, strengthen practice and intensify innovational consciousness and market competition consciousness so as to satisfy demands of the society on all sorts of skilled talents.

2. To try to increase the proportion of the national financial educational expenditure

2.1 To ensure strength of expenditure investment and to realize diversification of the subject of investment

Sufficient education budget investment is the precondition to guarantee high quality development of education. In China, the government is the major source for educational investment, and the proportion of the total amount of financial educational expenditure to the domestic GDP is 4% lower than the target. Therefore, on one hand, we should attempt to increase the proportion of financial educational expenditure to the total financial expenditure in the future, and enlarge the total scale of educational investment; on the other hand, we should broaden sources and channels of educational budget, realize the multi-channel educational investment mode in which the government financial educational expenditure is the major channel with the diversified channels of investment from social associations, enterprises, schools, collectivity and individuals, and also clearly partition obligations of the central and local financial educational expenditure. The direction of the national financial educational expenditure places particular stress on basic educational investment, but for non-compulsory education, a mechanism should be gradually established that is rationally shared by the government, the society, the family and individuals. However, for higher education, the principle of equal value exchange is adopted, in which individuals should burden corresponding part of educational expenses and they are the direct beneficiary of education. Due to high higher education cost, the system of school loan for university students should be gradually established and made perfect, which, on one hand, may resolve the problem of having difficulties in paying for tuition fee for university students from poor families, and on the other hand, may realize circulation of assets in the education field and relieve the contradiction of tight educational budget to a certain extent, which in turn may relieve the burden of the national financial educational expenditure and increase the benefit.

The high quality of corporate employees originates from education. Therefore, in addition to investment by the government and residents themselves, the enterprise is also the beneficiary of educational investment, and should also assume its social responsibility for education. Thus, the government should adopt preferential policies, encourage enterprises to invest and set up schools, and encourage alliance between schools and enterprises. For example, they can establish educational funds, donate for schools at all levels and set up scholarship at schools of all levels, etc. All the above can not only enlarge sources and channels of educational budget, but also can reserve talents for enterprises.

2.2 To optimize the structure and to strengthen management of educational budget

The economic structure decides the educational structure, which in turn affects adjustment and optimization of the economic structure, whereas the educational structure determines the structure of educational expenditure. Therefore, establishment of scientific and rational educational expenditure distribution and application structure is the necessary condition to increase the benefit of educational expenditure.

Considering the levels of education, educational budget should be inclined to basic education, and should enable the proportion of educational expenditure at schools of all levels to go towards rationalization. Development of basic education determines the overall quality of a nation or a region, and is the fundamental scale for the overall level of human resources in a society, so it is in a fundamental status. Considering the conditions of China in which there is a large population base, a large quantity of school-age population, unstable educational expenditure in grass-root town and village elementary and secondary schools, we should appropriately increase the extent of investment in basic education in order to ensure popularity rate of basic education, especially the proportion of educational expenditure for the nine years of compulsory education.

3. To perfect the market of human capital and to strengthen management of human resources

The primary targets of macro-control in the field of labor are, on one hand, the total quantity and structure of supply and demand of labor force, and on the other hand, cost of labor force and salary level. The macro-control that is at a developmental stage of the labor force market, is not only aimed at activities in the market, but also includes regulation and control made up for imperfections in the market, also including some direct control over enterprises.

3.1 To formulate the plan of development and application of labor force resources

The plan of human resource development and application includes development of education and training, improvement of labor force quality and improvement of the structure of labor force. According to prediction on economic development, we should plan approaches and methods of application of labor force, guide adjustment of employment structure, improve employment level, reduce waste of human resources and strengthen the organization and plan of investment of assets used for development of human resources. "Bottleneck" in development of human resources is vocational and technical training, whereas development direction of vocational training is to form open and market-oriented vocational training system, socialized management system of occupation skill appraisal, vocational training legislation and administrative laws and regulations system. All the above should be reflected in the plan of development of human resources. We should reinforce the strategic status and important role of human resource development in the national economy and social development and list the plan of development and application of labor resources into the plan of the entire national economy and social development.

3.2 To establish the system of minimum labor standard so as to provide evidence for the country to intervene in the market of labor force

The minimum labor standard system is the basic requirement to standardize labor conditions, including minimum wage, maximum time standard, minimum requirement of vocational training and minimum requirement of security and sanitation, etc. Establishment of the minimum labor standard system is not only positive intervening measure to the market of labor force, but also provides indispensable evidence for supervision on labor.

3.3 To perfect the running order of labor market

We should bring the movement-oriented effect of market information into full play and establish a price-oriented mechanism with flow of talented people. We should bring into play the functions of the personnel market, and make standardized investigation, collection, classification and release of the market price of all sorts of talents regularly or in time. We should in good time release information about the market price of all sorts of talents with reliability and authority, and form a scientific and sound mechanism with orientation of talent allocation and an average salary mechanism with the orientation of average price of the market. As for issues that emerge in development of the personnel market, we should immediately give guidance, coordination and management, and use legal, economic and necessary administrative means to ensure the positive role of the personnel market in the aspect of leading flow of talents.

4. To intensify introduction of talents and to reinforce their innovative competence

4.1 To strengthen guidance and management of policies and to create good environment for introduction of talents

From the perspective of the natural environment, implementation of establishment of humanistic environment and improvement of the ecological environment can provide laborers with good working and living environment. according to the theory of the second stage of Growth Pole Theory by Perroux, when "polarization" of human capital is centralized to a certain degree, then the effect of "polarization" will transfer to the effect of "drip" as a result of spatial constraints and influences of such factors as increase of cost and transaction expense. Speed of the transfer is determined by gap between economic development and external environment of the central area and surrounding areas.

We should continue to strengthen establishment of the humanistic environment and ecological environment, narrow gap between different areas, save opportunity costs of flow of talents and create good external conditions for introduction of talents.

From the perspective of system, we should reform the system of talent employment, realize the Each-Member Contract Employment System of talent employment, promote the contract of relationship between subjects of talent supply and demand, enlarge the scope of the contract system of talent employment from part of enterprises to all enterprises and from enterprise units to public institutions, so as to ensure that constraints of subjects of staff relation can go towards of track of contract and legalization. To deepen reform of urban social security system, establish and perfect rural social security system and gradually realize separation of employment, social welfare and social security. To attach great importance to speeding up establishment of endowment insurance, unemployment insurance, medical insurance and reform of housing system, set up social unemployment system through social overall planning, gradually realize commercialization of housing, reform personal information records and household registration system and alleviate worries behind caused by flow of talents, so as to ensure that flow of talents will not be influenced by housing, household registration and archives, etc, and to enable all sorts of talents to make an independent option on a fair, equal and competitive condition.

4.2 To establish the strategy of reinvigorating China through human resource development and to promote scientific innovation in a comprehensive way

To reinforce the competitiveness as a breakthrough, to simultaneously support cultivation of new and high technology industries and renovation of traditional industries with new and high technology industries, simultaneously support scientific innovation and conversion of scientific achievements, establish sound technical innovation system based on economic construction and structural adjustment, bring into full play potentials of high-tech talents, continuously strengthen vigor of scientific development and improve rate of contribution of scientific progress to economic growth. To intensify treatment and development of important fields and critical technology, strengthen the subject position of corporate technical innovation and improve technical innovation competence of enterprises in a comprehensive way. Large-and-middle-sized enterprises should enlarge investment in technical development, set up technical research and development center for research and development of leading products with proprietary intellectual property rights, add to technical reserve and strengthen developmental potential of enterprises. Construction of research and development bases should be made perfect on the basis of universities and scientific research institutions. A batch of science and technology service agents should be development, for which the supportive vigor should be intensified in terms of policies and assets so as to industrialization of scientific achievements. In those technical fields with comparative advantages, great industrial relevancy degree and optimal market prospect, which are in favour of resolving important and difficult issues in economic and social development, attempt should be made with concentration for technical development and treatment. New breakthrough should be made in development of high and new technical industries, cultivation of leading industries, renovation of traditional industries, promotion of agricultural science, urban construction and environmental protection, and the fields of new materials.

5. To perfect functions of the labor department of the government and to strengthen macro-control

5.1 To standardize guidance so as to create conditions for development and running of the labor force market

5.1.1 To intensify functions of labor department and to improve its consciousness of service

In addition to a sound and perfect social service system, management function of the labor department should also reflect the spirit of service. The primary task of grass-root municipal and county labor departments is to provide service for employing units and laborers, such as, occupational counseling, occupational introduction, information guidance and management of retired persons, etc. In order to develop service industry, the labor department should set up intermediary organizations and service entities adapting to demands of the market, form a network according to the requirements of professionalization, industrialization and integration under the direction of labor administrative organs, and offer high-quality service for both of the two parties. Correspondingly, the labor department should make great efforts to train a labor cadre team proficient in knowledge of market and familiar with skills of market running. Then, labor supervision should be comprehensively strengthened, which is the primary aspect for the labor department to changes functions, and supervision on functions of the labor department should be timely and effective.

5.1.2 To provide asset support for construction and running of the labor force market

In the process of cultivating the labor force market, reinforcing basic construction of the market and perfecting service means, there should be stable assets as conditions of support and insurance. In order to generate normal sources and channels for investment of assets and resolve sources of assets, there are mainly the following three approaches: central and local financial allocation and self-financing of the labor department. As for assets invested, the first step should complete the following projects: (1) Rational arrangement of employment agency, vocational training center, social security center and self-help production base above the level of county, so as to attempt to set up all sorts of service

agencies in each county with one occasion and certain working means; (2) Allocation of establishment strength in various social service agencies and training of employees to improve their overall quality; (3) Allocation of equipment in all sorts of social agencies so as to complete the network project of employment agency and social security administration system. In addition, On the basis of establishing the macro-control system, quite a large amount of assets are required for investment, including establishment of information system and supervision and analysis system of important indices.

5.2 To change functions of the government and to gradually make perfect the system of export of labor service

Urban and rural labor force resource pool for migrant workers is established according to such aspects as flow of labor force, its quantity, age structure, degree of education and aspiration of employment, etc. We should strengthen guidance to those migrant workers who return to their hometown. For example, we can provide service for migrant workers who start an undertaking when they return their hometown, establish normal information feedback system, lead them to use the capital, skills and experiences accumulated during the period of migrant working to undertake an enterprise in their hometown so as to absorb more people for employment and form a benign running mechanism of export of labor service and starting an undertaking when returning to the hometown.

We should reinforce obligations for training export of labor service that should be assumed by such training institutions as employment training center, etc, and improve the overall quality of workers. We should develop training for specific posts and order training. Considering demands of the market, we should continually adjust design of majors and content of training and broaden new fields of labor service cooperation. By means of various forms, we can apply modernized means of communication to continually open up new fields and channels of export of labor service and to establish cooperative labor relationship with areas in great demand of labor workers. We should set up a normal working mechanism and establish benign labor cooperative relationship. We ought to reinforce different sorts of special fairs, increase the quantity of export of labor service in economically developed regions and improve their quality.

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Do Interactive Theories Really Explain Public Sector Managerial Decision-Making?

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Abstract

"The facility to predict decision-making performance of individual managers is of significance, not only for executives and scientists, but for society itself" (Streufert & Swezey, 1986). Some managers make good decisions in complex environments, others do not. Recent criticisms of public sector managers suggest that their capacity to make decisions may be impeded by an increasingly complex working environment, a product of public sector reform.

Despite decades of research in this area, behavioural prescriptions for success or failure in decision-making have provided inconsistent results, especially when attempting to transfer those prescriptions from one context to another. If so, it may be that individual decision-making depends upon a specific context. However, it may not be the objective nature of the environment in which decisions are made. It may be that individual decision-making performance is more influenced by the individual manager's subjective interpretation of the environment. That subjective interpretation may in turn depend upon the individual's integrative complexity (information processing characteristics) and other self-regulatory mechanisms.

Keywords: Decision making, Cognition, Public sector, Middle managers

1. Introduction

This introduction briefly charts theories, developed over more than three decades, about relationships amongst influences on managerial decision-making within environments of varying complexity. Whilst doing so, the main issues are identified and summarised for later review.

If some managers make good decisions in working environments of varying complexity, yet others do not, examining the underlying reasons for these differences may provide significant benefits to organisations and their stakeholders. The focus of this study is to examine cognitive characteristics and decision-making effectiveness of public sector managers within differentially complex environments, because the stakeholders of the public sector include the country's population and its subsequent generations.

Criticisms in the press during the last decade (Breusch, 2000; Hepworth, 1999) suggest that the capacity of public sector managers to make decisions may be impeded by their increasingly complex working environments. Breusch (2000) argues that the complexity of their working situations and their cognitive capabilities may not be well matched. This increasing workplace complexity is reported to be a product of public sector reform (Wood, 1997; Clark, 1997). These reforms have included stringent economic rationalism; mandates that demand customer orientation; and the decentralisation of traditional managerial authority. This era of public sector reform has also included a reassessment of problems and their frames of reference; a revision of operating procedures; and sometimes a radical reformulation of organisational objectives.

Public sector environments are differentiated from others by:

The political environment of the public sector which structures the role of public sector management;

Community related programmes rather than profit motives;

Recognition of interaction between different public sector activities;

Definitions of efficiency, effectiveness and productivity that are exclusively related to the equity and accountability of public sector activities (Savas, 1990).

Anecdotal evidence suggests that public sector organisations have different cultures from those in the private sector (Weller et al., 1993; O'Malley, 1995). If so, any transfer of research conclusions about decision-making from the private sector to the public sector, with those environmental contextual differences, may be invalid, (Hogarth, 1981; Rowe, 1989; Hickson et al, 1986; Cook, 1990).

There are conflicting issues here. Although historically, public organisations had high vertical, horizontal and spatial complexity, people working within them had highly formalised jobs and limited decision-making scope (Weller et al, 1993; Savas, 1990).

Because organisational outcomes are achieved through the concerted efforts of others, managerial decisions are concerned with how to use human talent and how to guide and motivate human effort. But, the reductions in hierarchical status in the Public Sector means that managers do not enjoy traditional unquestioning structural authority but need to adopt alternative and more complex social strategies to achieve work performance through their employee teams. Crowe (1997) cites that one in four managers reports suffering stress because of excessive information load at work, the very definition of environmental complexity. In an era of government outsourcing, where, according to Breusch, (2000), government officers are asked to undertake functions well beyond their experience, qualifications and skills. This results in problems for decision-makers being frequently perceived as ambiguous and complex. "The lessons of these disasters are most likely to be ignored until enough of them occur to awaken political interest in public sector competency" (Breusch, 2000, p17).

To understand how managers make good decisions, researchers have examined what successful executives do, what decisions they make or do not make, and what they do differently compared with managers and organisations that fail. These studies of managerial decision-making have centred on the content of managerial thought (Peters & Waterman, 1982), rather than the processes by which the content came about (Streufert & Swezey, 1986). But if the performance of individual decision-making depends upon its specific context, it may not be the objective nature of the environment that contributes to differences in individual decision-making. It may be the individual manager's subjective interpretation of the environment. This is an argument for research into the processes by which decisions come about.

From an extensive range of alternatives, an emerging trend in the literature includes theories that individual information processing is primarily based on two main cognitive functions, differentiation and integration (Stabell, 1978; Streufert, 1986; Tetlock & Suedfield, 1988; Mandel, Axelrod & Lehman, 1993; Walker & Watson, 1994; Guttieri, Wallace & Suedfield, 1995; Streufert & Satish, 1997). Differentiation reflects the degree to which people recognise different aspects of an idea or problem. Undifferentiated thought, reflecting cognitive simplicity, relies on simple evaluative rules. Integration involves drawing conceptual connections between differentiated aspects of an issue so they can be segregated into categories. An integratively complex thinker might, for example, in addition to identifying a number of potential aspects of a problem, describe how such factors have interacted over time to produce the problem.

This approach, focussing on mutual influences between person and environment, suggests that for optimal productivity, individuals should be compatible with their environments. For example, early researchers in this field, Streufert & Schroder (1965), concluded that decision-making performance reaches an optimal level when an individual's cognitive capability matches the complexity of their environment. More than two decades later, Jaques' (1989) stratified systems theory also argues that for optimal productivity, organisations should be designed in terms of person-environment fit based on individual cognitive capacity at every level of the organisation. These "Person-fit" researchers (Jaques, 1989; Meijer, 1996; Meijer, Muijtens & van der Vleuten, 1999) argue that individual decision-making performance reaches an optimal level when the decision-maker's cognitive complexity matches the complexity of the decision environment.

A contrasting school of cognitive capability theories argue that that more cognitively complex managers have a repertoire of styles and are able to make more effective decisions, compared with less complex managers, within all levels of environmental complexity up to the limit of their cognitive capacity (Streufert & Satish, 1997).

If individual information processing characteristics are a determinant of decision-making performance, different managers may then exhibit similar decision-making performance within differentially complex environments. It also follows that a manager with high information processing capacity (integrative complexity) and another with low information processing capacity may demonstrate similar decision-making performance within an environment of low complexity because neither is overly challenged by the information load.

However, individual managers may exhibit different optimal decision-making performance within environments of different complexity. For example, if the same two managers, one of high and one of low information processing capacity are making decisions within a highly complex environment, the manager with high information processing capacity (integrative complexity) is expected to outperform the manager with low information processing capacity. The latter may be overwhelmed by excessive information load and not have the capacity to cope, whereas the more highly

integratively complex manager would be making decisions with a more comfortable environment, one that was compatible with their information processing capacity.

Unfortunately, the mechanisms and outcomes of managerial decision-making do not lend themselves readily to experimental analysis in real organisational settings. There are usually too many interacting factors that are difficult to identify and over which it is even more difficult to exercise experimental control (Wood & Bandura, 1989). This study addresses these weaknesses by a novel design that compares measures of individual cognition with decision-making performance within a computerised workplace simulation and varying levels of organisational complexity.

Review of the literature suggests that integrative complexity may best be measured through self-elicited constructs, preferably related to elements of a relevant environment (Hinkle, 1965; Landfield, 1980; Chambers, 1985a). These self-elicited constructs are seen as a reflection of the individual decision-maker's perception of the environment, including the available resources that may impact upon decision-making. This study includes self-elicited constructs as an integral part of the main experiment.

In this experiment, the decision-making performance of public sector managers within a computerised workplace simulation is examined in relation to the previously discussed interactive theories, "person-fit" and cognitive capability.

1.1 Research Question

Do public sector managers whose integrative complexity levels are more closely matched to the complexity of their work environments make more effective decisions than managers whose integrative complexity levels are less closely matched to the complexity of their working environments?

This question focuses on an intuitively comfortable notion that individuals of higher order cognitive structure and processes will make better decisions within more complex situations (Streufert and Swezey, 1986).

1.2 Research approach

In order to examine relationships between information processing and decision-making performance within environments of varying complexity, consistent and manipulable measures of environmental complexity are required. Advances in this complex field have been achieved by experimental analyses of decision-making in simulated and often computerised organisational environments that allow systematic variation of theoretically relevant factors whilst controlling for naturalistic influences (Wood & Bandura, 1989).

Simulations or research "games" can provide a compromise balance of realism for the subject and control for the researcher (Wood & Bailey, 1985). Part of this compromise, though, is that games typically fail to provide many of the responses that an individual decision-maker experiences from choices at work. To address these arguments, organisational simulations have been developed with complexity levels more closely matching those of naturalistic environments (Jin et al, 1995; Vakilzadian, 1995; Barton & Schruben, 1994). This study replicates the conditions of a 1999 version of "The Furniture Factory" (Wood & Bailey, 1985) within three different levels of environmental complexity of a simulated decision-making exercise. Subjects' decision-making performance is provided as a continual feedback over twelve (simulated one-day) trials and is automatically recorded as a percentage of 100% benchmarked target. In this study, a "game" simulates a novel and complex decision-making organisational environment within three pre-programmed levels of complexity.

The simulation addresses both quantitative and qualitative aspects of decision-making including the opportunity to evaluate and refine situational options like choice of employees, motivation tools, feedback to employees, and goals to set individual employees. The experimental design reduces the effects of presenting problem situations in different ways by standardising the information environment and its mode of presentation.

2. Results

The integrative complexity levels of the sample of public sector managers was $\bar{x} = 8.84$, (S.D.2.13, n=203) compared with $\bar{x} = 11.79$, (S.D = 2.13, n=34) by Chambers & Grice (1986), in a comparable, though statistically not significant, study of 6x6 matrix implications grid design. A t-test shows that the mean integrative complexity level of the subject group was significantly lower than in Chambers & Grice's (1986) study ($t = 19.7$, $df1, 202$, $p < .001$, 2-tailed).

Table 1 (attached on page 20). tabulates the raw measures from the decision making simulation.

The distribution of decision-making performance across all levels of environmental complexity of this sample was lower than expected. Although no directly comparable studies are available from the literature, the decision-making performance of this sample overall was $\bar{x} = 80.5\%$, (S.D.=5.0, n = 203), significantly less than Wood & Bailey's (1985) 100% decision-making standard within the computer simulated organisation ($t = -55.7$, $df1/202$, $p < .001$, 2-tailed). Repeated measures t-tests also showed that the decision-making performance of all subjects (n=203) within each of the three levels of the environmental complexity conditions of the simulation was significantly lower than Wood & Bailey's

(1985) decision-making standard. (In Low EC, $t=-27.1$, in Medium EC, $t=-26.7$, in High EC $t=-50.5$. All df 1,202, $p<.001$ 2-tailed).

This result provides significant support that integrative complexity is positively related to decision-making performance overall, that is, across all levels of environmental complexity. This initial result shows that more highly cognitively complex subjects outperformed those of lesser complexity regardless of the level of environmental complexity. This initial result is consistent with Streufert & Satish's (1997) cognitive capability theory where more cognitively complex managers outperform those less cognitively complex managers, by virtue of a repertoire of adaptive styles to suit all levels of environmental complexity.

Although relationships between integrative complexity and the decision-making performance of this sample of subject managers within unrestricted situational complexity provides an answer to the research question, the results may mask differences in relationships between different levels of subjects' integrative complexity and their decision-making performance. Dividing subjects into three arithmetically equal groups of rank ordered high, medium, and low integrative complexity scores provides increased insight into relationships between individual levels of integrative complexity and their decision-making performance within unrestricted situational complexity.

2.1 Performance of High IC managers overall

The group of high integratively complex managers with integrative complexity (IC) scores of $\bar{x} = 11.2$, (S.D. = 1.07, $n=68$) recorded decision-making performance at $\bar{x} = 83.44\%$ (S.D. = 3.5, $n=68$). A Pearson correlation of $r = .243$ ($n=68$, $p = .023$, 1-tailed) showed a weak yet significant correlation between subjects' IC scores and their decision-making performance when the level of environmental complexity is ignored. This performance was significantly higher ($t = 22.6$, $df1, 67$, $p<.001$, 2-tailed) than the mean score for all subjects within unrestricted environmental complexity at $\bar{x} = 80.5\%$, (S.D = 4.98, $n=203$).

2.2 Performance of Medium IC managers overall

The medium integrative complexity group recorded integrative scores (IC) of $\bar{x} = 8.7$, (S.D. = 0.61, $n=68$). A Pearson correlation of $r = 0.280$ ($n=68$, $p<.01$, 1-tailed) provides modest support for the hypothesis, that within a group of medium integrative complexity subjects, their IC relates positively to decision-making performance when there is no restriction on environmental complexity. Decision-making performance achieved by this medium integrative complexity group was $\bar{x} = 80.2\%$, (S.D. = 4.52, $n=68$), similar to $\bar{x} = 80.5\%$, (S.D. = 4.98, $n=203$) for all subjects within unrestricted environmental complexity.

2.3 Performance of Low IC managers overall

The group of subjects with lowest integrative complexity (IC) scores, $\bar{x} = 6.58$, (S.D. = 1.20, $n=68$), achieved a decision-making performance of $\bar{x} = 76.9\%$ (S.D. = 4.7, $n=68$). The low integrative complexity group's decision-making performance was significantly lower than for all subjects, $\bar{x} = 80.5\%$ (S.D. = 4.98, $n=203$) ($t = -6.25$, $df1, 67$, $p<.001$, 2-tailed).

A Pearson correlation of $r = 0.481$ ($n = 68$, $p, 0.01$, 1-tailed) provides support that within a group of low integrative complexity subjects, IC relates positively to their decision-making performance within environments of unrestricted complexity.

Amongst subjects categorised in the main experiment as relatively high, medium or low in integrative complexity, results are less clear about differences in relationships between subjects' integrative complexity and their decision-making performance. For managers of medium and high integrative complexity, their cognitive capabilities related weakly with their decision-making performance. For subjects of low integrative complexity, their cognitive capabilities related moderately with their decision-making performance, albeit their absolute performance was marginally lower than their more cognitively complex colleagues.

However, this study is concerned with examining relationships between managers' integrative complexity and their decision-making performance within different levels of environmental complexity rather than just overall. To examine these situational effects, relationships between integrative complexity and decision-making performance were analysed within three levels of environmental complexity, pre-set at three arithmetic means from the range of Wood & Bailey's (1985) computer simulation, i.e. (high environmental complexity, $\bar{x} = 46$, medium $\bar{x} = 28$, and low $\bar{x} = 9$).

Table 2 (page 21) displays decision-making performance overall, i.e. across all levels of environmental complexity, and within three levels of environmental complexity (EC) by three subject groups, divided arithmetically according to their ranked integrative complexity (IC) scores.

The mean decision-making performance of all subjects within high environmental complexity ($\bar{x} = 72.05$) was significantly lower than their decision-making performance overall, ($\bar{x} = 80.52$), ($t = -15.27$, $df1, 202$, $p<.001$, 2-tailed). Worthy of note here is that subjects' decision-making performance was significantly better in medium environmental complexity ($\bar{x} = 85.77$), than their performance overall ($\bar{x} = 80.52$), ($t = 9.88$, $df1, 202$, $p<.001$,

2-tailed). Subjects' performance within low environmental complexity ($\bar{x} = 83.75$) was also significantly better than their decision-making performance overall ($\bar{x} = 80.52$), ($t = 5.41$, $df1, 202$, $p < .001$, 2-tailed).

These results, where performance was better within medium environmental complexity than low, high or overall environmental complexity may be a result of the relative difficulty of the three levels of environmental complexity in the simulation and is worthy of further examination. These results are graphically illustrated by Figure 1. (page 22)

A two-way ANOVA confirms very significant differences in the decision-making performance of subject groups by integrative complexity, within low environmental complexity, $F(2,200) = 164.23$, $p < .001$. No significant differences were shown in the decision-making performance of subjects grouped by integrative complexity within medium environmental complexity, $F(2,200) = 0.388$, $p = .252$. Within high environmental complexity, small but significant differences were apparent, $F(2,200) = 5.45$, $p = .005$. As previously, subjects were divided into three arithmetically equal groups of high, medium, and low integrative complexity to provide further insight into relationships between integrative complexity and decision-making performance within discrete levels of environmental complexity.

2.4 Decision-making performance within high environmental complexity by IC grouping

The decision-making performance of the group of high integrative complexity managers within high environmental complexity was $\bar{x} = 73.66\%$, ($s = 6.5$, $n = 68$) only marginally more effective than for all subjects $\bar{x} = 72.05\%$ ($S.D = 7.89$, $n = 203$). For the group of high integratively complex managers (IC: $\bar{x} = 11.2$, $S.D. = 1.07$, $n = 68$), a non-significant Pearson correlation between subjects' integrative complexity and their decision-making performance, $r = 0.055$ ($n = 68$, $p = .327$, 1-tailed) showed no support for the hypothesis.

For the group of medium integratively complex managers, (IC: $\bar{x} = 8.7$, $s = 0.61$, $n = 68$), a Pearson correlation of $r = 0.120$ ($n = 68$, $p = .166$, 1-tailed) between subjects' integrative complexity and their decision-making performance in high situational complexity, provides no support for the hypothesis.

For the group of subjects with lowest integrative complexity scores (IC: $\bar{x} = 6.58$, $s = 1.20$, $n = 67$), a Pearson correlation of $r = 0.331$ ($n = 67$, $p = .003$, 1-tailed) provides moderate support for the hypothesis that for subjects of low integrative complexity, their IC relates positively to their decision-making performance within high environmental complexity.

2.5 Summary of results in high complexity

Despite limited support for the hypothesis that subjects' integrative complexity relates positively to decision-making performance within high environmental complexity, a curvilinear relationship is in evidence. An examination of subjects categorised by levels of integrative complexity shows that relationships between subjects' IC scores and their decision-making performance within high environmental complexity were inconclusive.

This result appears inconsistent with main theories in this field, and may be a result of other effects to be discussed later. That discussion also requires analysis of relationships between managers' integrative complexity and their decision-making performance within situations of medium and low environmental complexity, which follows.

Results show a non-significant Pearson correlation of $r = -0.031$ ($n = 203$, $p = .664$, 1-tailed) between IC and decision-making performance, providing no support that subjects' integrative complexity relates positively to their decision-making performance within environments of medium complexity, although a strong curvilinear relationship was in evidence between managers' IC and their decision-making performance. Analysis of relationships between subjects' levels of high, medium, and low integrative complexity and their decision-making performance provide further insight.

2.6 Decision-making performance within medium environmental complexity by IC grouping

The group of high integratively complex managers achieved similar though marginally lower decision-making performance of $\bar{x} = 85.17\%$, ($s = 5.92$, $n = 68$) compared with $\bar{x} = 85.77\%$, ($s = 7.60$, $n = 203$) for all subjects within medium environmental complexity. A Pearson correlation of $r = -0.145$ ($n = 68$, $p = .238$, 1-tailed) provides no support for the hypothesis of a positive relationship between integratively complex managers and their decision-making performance within medium environmental complexity.

The group of medium integratively complex managers achieved decision-making performance of $\bar{x} = 87.10\%$ ($s = 8.00$, $n = 68$), however a non-significant Pearson correlation of $r = 0.071$ ($n = 68$, $p = .281$, 1-tailed) provides no support for the hypothesis of a positive relationship between IC and decision-making performance within medium environmental complexity.

The group comprising the lowest third of subjects by IC scores, achieved decision-making performance of $\bar{x} = 85.03\%$, ($s = 8.54$, $n = 68$), and a Pearson correlation of $r = 0.138$ ($n = 67$, $p = .133$, 1-tailed) provides no support for the hypothesis that IC relates positively to their decision-making performance within environments of medium complexity.

2.7 Summary of results in medium complexity

As the performance of all subjects by IC grouping was not significantly different, $F(2,200)=1.388$, $p=.252$, 2-tailed) within medium complexity environments, this result provides no support for the hypothesis.

These results provide no evidence for positive linear relations between integrative complexity and decision-making performance within medium complexity environments. However, a curvilinear relationship between integrative complexity and decision-making performance was evident. An analysis of these relationships within low complexity situations is required to address the remaining scope of the main hypothesis.

Results displayed evidence of a strong positive relationship between IC and decision-making performance. A Pearson correlation of $r=.877$ ($n=203$, $p<.01$, 1-tailed) provides marked evidence of a positive linear relationship between subjects' IC and their decision-making performance within environments of low complexity. Decision-making performance for the total sample within low complexity environments was $\bar{x}=83.75\%$ ($s=8.55$, $n=203$).

2.8 Decision-making performance within low environmental complexity by IC grouping

Subjects' scores were again divided into three groups of high, medium, and low integrative complexity for further analysis. The group of high integratively complex managers, the upper third of the total sample, achieved decision-making performance of $\bar{x}=92.45\%$ ($s=4.67$, $n=67$), higher than the performance of all subjects within low complexity environments, $\bar{x}=83.75\%$. A Pearson correlation of $r=0.63$ ($n=67$, $p<.01$, 1-tailed) provides strong support for the hypothesis that, within this group of subjects, IC relates positively to their decision-making performance within low environmental complexity.

The medium integrative complexity group achieved decision-making performance of $\bar{x}=82.67\%$, ($s=4.55$, $n=67$) similar to the performance of all subjects within low complexity environments $\bar{x}=83.75\%$. A Pearson correlation of $r=0.481$ ($n=67$, $p<.01$, 1-tailed) provides strong support for the hypothesis.

The low integrative complexity group achieved decision-making performance of $\bar{x}=75.98\%$ ($s=6.35$, $n=67$) lower than the performance of all subjects within low complexity environments $\bar{x}=83.75\%$. A Pearson correlation of $r=.642$ ($n=68$, $p<.01$, 1-tailed) shows a strong positive relationship between subjects IC and their decision-making performance within situations of low complexity.

2.9 Summary of results in low complexity

Results from managers' decision-making performance within low environmental complexity are in stark contrast to results within high and medium complexity environments from the main experiment. A strong positive relationship is in evidence between the integrative complexity of subjects and their decision-making performance. Analysing results after dividing managers into three groups according to their integrative complexity scores also provides consistent support for the hypothesised positive relations between subjects' integrative complexity and their decision-making performance within low environmental complexity.

A 3x3 ANOVA of the data was used to test whether integrative complexity is positively related to decision-making performance at all levels of environmental complexity. Significant effects were shown for decision-making performance (DMP) and integrative complexity scores (IC) within low environmental complexity (EC), $F(2,200)=164.23$, $p<.001$. However, similar effects were not in evidence within medium levels of environmental complexity $F(2,200)=1.388$, $p=.252$. Within the high environmental complexity condition, small but significant differences in decision-making performance were registered amongst subjects, based on their levels of IC, $F(2,200)=5.45$, $p=.005$. Across all levels of environmental complexity, subjects' decision-making performance differed significantly based on differences in their integrative complexity $F(11,191)=9.357$, $p<.05$).

Within the environmental complexity conditions of the "Furniture Factory" simulation, low IC people did not perform better in low complexity environments, and their results within medium complexity environments were not significantly different from other subjects. High and medium IC subjects performed marginally better than lower IC subjects within high complexity environments.

Some variation in results may be explained by the possibility that high IC individuals did not need to learn the rules of the game and thus excelled in the first (low environmental complexity) trial. This appears consistent with results within medium environmental complexity where there were no significant differences in decision-making performance amongst subjects.

Analyses of these results are generally consistent with interactive and cognitive capability theories, although inconsistent with person-fit theories. Person-fit theories argue that higher integratively complex subjects would make better decisions in high complexity environments and lower integratively complex subjects would make better decisions in low complexity environments. All evidence is to the contrary in the analysis of this study's main experiment.

Whilst the hypothesis that subjects' integrative complexity is positively related to decision-making performance is well supported within unrestricted environmental complexity and within low environmental complexity, it is not supported within high and medium complexity environments

Analysis of the results identifies differences in relationships between subjects' integrative complexity and their decision-making performance within each level of situational complexity. For example, within high environmental complexity, analysis revealed no support for positive relationships between IC and decision-making performance for subjects of high or medium integrative complexity, but significant albeit weak support for relationships between IC and decision-making performance for subjects of low integrative complexity.

In medium environmental complexity there was no support for positive relationships between subjects' IC and their decision-making performance for any subjects regardless of their integrative complexity scores. In marked contrast, within low environmental complexity, subjects' integrative complexity and their decision-making performance correlated strongly and significantly ($p < .01$) for all groups of subjects, categorised by IC, providing significant support for the hypothesis.

These results show that relationships between the integrative complexity of subject managers and their decision-making performance do not consistently satisfy established theories at all levels of environmental complexity. These results do not support the previously described main theories from the literature.

3. Discussion

Whilst the elements of information load and urgency are examined extensively in the literature, it has been mainly in pursuit of improving decision-making in the military and private sectors, and primarily motivated by demands for improved operational performance. As there is ample reference to differences between public and private sector structural and cultural environments (Savas, 1990; Weller et al; 1993; O'Malley, 1995), findings from the military and private sectors may not be transferable to managers within public administration.

Problems of matching complexities between decision-makers' cognitive complexities and environmental complexities to achieve optimal organisational performance, the factors of information load, noxious (potentially unfavourable outcomes), and eucity (favourable outcomes), are compounded by time urgency, especially for longer-term decisions (Streufert & Streufert, 1981; Roberto, 2002). This has obvious implications for decision-making, particularly at a strategic public management level.

There are implications for public sector practices where "ministerials", short-term urgent demands for decisions, frequently come from senior levels of political structures and require short-term responses. Unfortunately, many such decisions may have long-term legislative and societal implications and decisions made in urgency may have adverse longer-term repercussions. The better matching of managers to the complexity of their working environments, at various levels of the public sector, then becomes critical.

Anecdotal evidence suggests a world of increasing complexity so the facility to effectively assess and select suitable managers has implications for organisational productivity, occupational health and safety, and the selection and recruitment of public sector managers.

As concluded by Ree & Earles (1994), Highhouse (2002), and echoed by Clark-Murphy (2003a,b) current practises are not holding up to scientific scrutiny. Many government organisational structures and behaviours are still based on the theories and fads that emanated from theories of the 1970s-2000. Although more recent developments in research related to cognitive capability, cognitive task analysis and naturalistic decision-making seem promising; they are in their relative infancy and have yet to be developed in application and to impact on organisational structures and decision-making.

As environmental complexity is publicly identified and proposed as a factor influencing public sector managerial decision-making performance, advances in understanding these relationships are warranted to provide more empirical evidence. The results could contribute to the development of a predictive model of managerial decision-making performance providing subsequent benefits to managers, their organisations, and society at large.

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Table 1. Raw measures from the decision making simulation. (from page 11)

Main Experiment	Mean	S.D.	min	max	n=
Critical thinking ability	34.4	1.7	30	37	203
Integrative complexity	8.8	2.1	3	14	203
Decision making performance across all levels of environmental complexity	80.5%	5.0	56	112	203
Decision making performance in low environmental complexity	84%	8.6	59	100	203
Decision making performance in medium environmental complexity	86%	7.6	65	112	203
Decision making performance in high environmental complexity	72%	7.9	56	87	203

Table 2. (ref page 13) Decision-making performance (DMP) by integrative complexity (IC) grouping within three levels of environmental complexity (EC).

Dependent variable: decision-making performance (DMP)

IC level	EC level	Mean	s.d.	N
low	low	75.98	6.35	67
	medium	85.03	8.54	68
	high	69.57	7.67	68
	overall	76.87	4.71	203
medium	low	82.67	4.55	67
	medium	87.10	8.00	68
	high	72.93	8.84	68
	overall	80.21	4.52	203
high	low	92.45	4.67	67
	medium	85.17	5.92	68
	high	73.66	6.51	68
	overall	83.44	3.46	203
total	low	83.75	8.55	67
	medium	85.77	7.60	68
	high	72.05	7.89	68
	overall	80.52	4.98	203

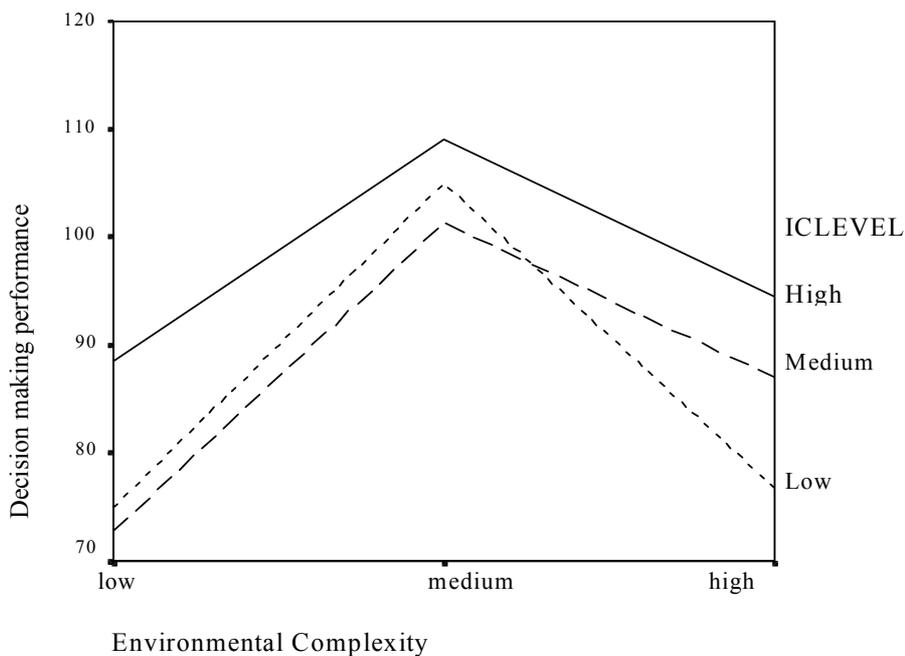


Figure 1. Decision-making performance (DMP) by integrative complexity (IC) grouping within three levels of environmental complexity (EC). (Ref. p13)



Discussing the Enlightenment of *Zhou Yi* Credit on Modern Enterprise

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Abstract

Zhou Yi is a philosophy book, as well as a divining book. It is one of the earliest academic books of China. The content is also care about morals. In this book, 'credit' is considered seriously, the mind is very helpful to construct the 'credit' of modern enterprise; it reminds us that credit is the key of enterprises' success.

Keywords: *Zhou Yi*, Credit

Zhou Yi is of extensive knowledge and profound scholarship, and being paid much attention of officer, politician, ideologist, philosophy. That is because this book provides the principle of setting down and getting on with one's pursuit. *Zhou Yi* contains two parts. That is *Yi Jing* and *Yi Zhuan*. *Yi Jing* is mainly about the sixty-four hexagrams and three hundred eighty-four lines on a trigram, it also has explanation part. *Yi Zhuan* has ten chapters, said wings. Ten wings has *Tuan Zhuan*, *Xiang Zhuan*, *Xi Zhuan*, *Wen Yanzhuan*, *Shuo Guazhuan*, *Xu Guazhuan*, *Za Guazhuan*. 'In Chinese history, there are about two or three thousand, now there are almost one thousand available nowadays.' In pre-Qin days' books, there are only two books are respected-one is Confucian, the other is Taoist school. Confucian is considered as the head of six meridians and Taoist school is considered as one of the top three'. After Han dynasty, people usually argue based on *Zhou Yi*, *Zhou Yi* is a book which has very profound impact. '*Zhou Yi* is a root of Chinese culture, and is the headstream of Chinese traditional thought and ethos. It profoundly represents Chinese ancient times economy, policy, culture structure, also lifestyle, ethos, customs, mental structure, it influences Chinese culture and maybe even all over the world.' *Zhou Yi* is a philosophy book, as well as a divining book. It is one of the earliest academic books of China. The content is also care about morals. The analysis is as follows.

1. The explanation of 'honest' from *Zhou Yi*

Zhou Yi admonishes that: People could set down when they are honest, and realistic. 'Bi' hexagram's explanation illustrated that the relationship between people are built on the help from tolerance and aid of each other. It's 'kun' is the earth, it's 'kan' is the water; the water is on the earth, so it is similar as good relationship. *Za Guazhuan* claims: that means in the sixty-four hexagrams, 'Bi' hexagram represents good things, it makes people more happy than the war in 'Shi' hexagram.

The words show one's credit. *Yi Zhuan* is also explained the relationship between language and dharma. For example, as the *Zhou Yi-Xi Ci* illustrates, another example is that the words in *Zhou Yi-Wen Yan*, We can see from it that the relationship between 'moral', 'language' and 'living and working in peace and contentment'. It shows the importance of the credit. Honest is the root of being a people, keeping word is the root of success. Honest, for one self, is the open of one's heart, is the respect of one. For other people, it is moral of association, and a kind of confidence.

Otherwise, if one doesn't be honest, even if he or she gets benefits, he will lose finally, destroy his or hers life. As *Zhong Fu* claims, According to the position of lines on a trigram, three is the solar position, six three is solar based on moon, the improper position. Now we face six four, because it shows envy in this position. When the position is

improper, the root will be affected, and the will may be frailness. At the same time, the envy emotion exists, so one may show disorder words and behavior. This means that if one doesn't have honest heart, he or she will be affected by the environment or distracting thought. The results will be that the trust would lose and finally may not have good results.

2. The explanation of 'credit' from *Zhou Yi*

The word 'credit' does not show up many times in *Zhou Yi*, but according the explanation from *Zhou Yi*, we could tell that there are the thought of credit anywhere in *Zhou Yi*. The *Zhong Fu* is considering about credit, let's see the explanation, We could tell that prewarned is peace. it is the corresponding of ninth and six four. But the explanation is that on the position of the first lines on a trigram means it is lucky when one is honest; one will not peace if he or she have other desire. It reminds people that if you want to be trusted by others, firstly you can bear the feel of lonely, work honestly and step by step, that is because that the credit never obtains from speculation and good words. It must be earned from hard practicing, from improving the moral level, from the credit from the bottom of one's heart. By doing this, trust and recognition will be obtained.

Wang bi *Zhou Yi* claims, , means upsoaring. If one loses credit and want to deceive, the results will be bad. That means that deceive is big enemy of credit, it may destroy one's future. Credit is a kind of virtue, if you improve the self-cultivation, when you have credit, you have a good future.

3. The Enlightenment of *Zhou Yi* Credit on Modern Enterprise

'Credits, as a moral of economy, culture, society ethos in nowadays, is one of the core ethos of the marketing economic society.' It is greatly related to the coordinate relationship of nature person, main market players, group organization team, industry, and even all the country. It will affect the development of a country if this has not been dealing well.' 'You treat others honestly, others will treat you honestly'. We could tell that the collaboration based on credit is much stronger, higher level, longer, deeper than the collaboration based on money. People could not set down without credit, enterprise could not live long. The enterprise could not only focus on money, the law of value, but also could focus on the credit, honesty. The latter is the base of prestige. It Is right and proper to pursue money for a company, in the market environment, where the profits is higher, where there accumulates the money. These are the rules of the market economy. The key is that how a company pursues profits. It has some relationship with the moral. At least, the company should not affect the profits of the whole society, should not affect the profits of others, and should not use fake products and advertisements. In addition, enterprise should not only make products, but also should convert human resource, management, culture to product. Thus, enterprise not only makes products, but also makes brand, moral. These are intangible assets. The procedure of a company's development is from product management to capital management, and then to prestige management. This is the objective requirement of the development of economy; this is also the corollary of the management improvement. The competition in the future is the competition of brand, credit, and commercial moral. It is not enough for products competition, products have lifecycle, but there lies unlimited power from the brand and moral.

Honest is the root of being human, keeping words is the root of success. Honest and keeping words, for one self, is the open of one's heart, is the respect of one. For other people, it is moral of association, and a kind of confidence. For a company, it is a kind of spirit; it is a kind of virtually capital; and it is the effective improvement of the management value. For example, Haier is a company which cares about honest very much. This company regards the costumers at the first. In old days, the testing is classified to several levels, such as level one, level two, level three, and out of level. So all the products can be classified to one level, that equals it is not a big problem to make a mistake for a person. But Haier only pick out the level one products, and then let there employee destroy the products those are not level one. It impressed employee so much. They thought it was not a big problem to make a small mistake, when the products were destroyed, the impact is very strong. They destroyed careless mind, and built the honest to the customers.

Prestige is a confide relationship formed form many transactions, it represents the unification of microeconomic benefits and macroeconomic results in the realization process of the value of products. Prestige is not only belongs to the area of ethnics, but also shows the overall quality of a company, is the combination of the enterprise management and technical level, it is a very important factor in the transactions.

It is hard to obtain prestige, it need a long time to create prestige, it required strictly testing, high technology, good selling, proper price, it requires better in all the aspects, and then provide good service, keep the quality from the beginning to the end. Keeping words makes costumers trust your company. Once a company has prestige, more costumers come to the company, the products will be sold well. So obtain credit means obtain money.

Focus on credit and quality is not told only by *Zhou Yi*, but also the experience of the successful companies. Because of the credit, some companies is developing more time. Credit is also value.

Treating people honestly is virtue of a company, and is necessary quality of the leader in companies. No matter inside or outside the company, no matter for the leaders or workers, it is all necessary to treat honestly. Some experiences tell us that companies treat their workers well, but treat other company dishonest. The final result will not be good.

What should be kept in mind is that, a company should focus credit, but should keep clear mind, do not be treated. As an entrepreneur, he or she should have the knowledge on the subjects of economy, engineering, technology, information, and law. But they should be aware, should tell many kinds of treaty.

So when contract is signed, careful examination should be made. And pay much attention on the words on the contract. Don't use the word such as 'generally', 'basically'. Don't use ambiguous words; don't be different in the beginning and the end of the contract. Be honest, don't deceive other peoples, but don't be pedantic. As claimed in "*Zhou Yi*" tells us: people cannot set down without credit, we have to treat others honestly so that others would treat us honestly, get help from others and the blessing from the god. In this way, everything will be fine.

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Research on Early Korean Independence Movement and the Patriotic Movement against Japan in Northeast China

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Abstract

On March 1, 1919, in Seoul of Korea the independence movement broke out, which is of great significance in Korean modern history. Two months later, in Beijing China, the May 4 Movement broke out, which is of great sense of enlightenment in Chinese modern history. These two great movements had produced profound influences on Fengtian, even on the whole Northeast China. However, if explored in some specific aspects, the former seems have more direct and durable effects.

Keywords: Korean Independence Movement, Patriotic Movement against Japan, March 1st Movement

It is well known that since 1920 the quantity and quality of the patriotic movements launched by the people in Northeast China against Japan had increasingly developed. For example, in 1920, they protested against the Japanese invasion in Hunchun (Note 1). In 1921 they were against Japanese to forcefully repair the railway from Tianbaoshan to Tumen. In 1923 they recovered Luda (Note 2) and in 1924 took back the AnQian Railway (from Andong to Qiantian) and the education right of the subsidiary property to the South Manchuria Railway. In 1925 they supported the May 30 Movement (Note 3). In 1926, Dalian Fukushima textile workers held a strike against Japan. In 1927, Northeast Chinese people protested against Japan to set up consular branch in Linjiang. On November 9, 1928, they fought against Japanese invaders to construct the Jihui Railway (from Jilin to Huining) (Note 4). And in 1929, they held the first anniversary to memorize the anti-Japanese demonstrations. In 1930, the opium-abolition movement was held in Xiaoheyuan, Shenyang. In 1931, they held a protest against Wanbaoshan Incident made by Japan and the Anti-Chinese Tragedy in Korea, which produced more influences. There are numerous local protests held by the ordinary Chinese people against Japan's unlawful infringements, great many strikes launched by the workers in Japanese-owned factories and mining laborers, and a lot of boycott movements against Japanese goods. The outbreak of anti-Japanese patriotic movements of course has their own internal factors and various complicated external reasons. But if examined carefully, they are found to some degrees to retain the traces of March 1st Movement in Korea. There are some effects brought by the March 1st Movement on the Northeast China in its patriotic anti-Japanese movement. They are at least displayed in the following four aspects.

Firstly, the March 1 Movement had a direct influence on the Northeast region in China, and sowed the seeds of anti-Japanese patriotic movement in this region.

Just after the independence movement in Seoul, in Dongbiandao of the Fengtian Province, the Yanbian region of Jilin Province and Harbin, Ning'an, Tumein and other places, there were independence movement to echo the Korean independence movement by some Korean-Chinese.

Similar independence movement took place in the north and east parts of Manchuria and all over the Northeast China. The March 1 Movement, which aimed at fighting against the Japanese colonial rule, striving for independence and freedom did not only in less than a month swept the Korean peninsula like a storm, but also affected the northeast China. Those Korean patriots exiling in northeast China gave an active respond to their home independence movements. Furthermore, they took the northeast China as their rear base to re-assemble their forces and continue their struggles

after suffering severe repression from Japan and the local authorities of China. At the same time, the patriotic Koreans also actively participated in northeast China's anti-Japanese patriotic movements and became the activists of initiating and participating in such activities.

Secondly, the March 1 Movement makes all sectors of Northeast people in China feel urgent in the national salvation. The Anti-Japanese patriotic movements in the Northeast developed to a higher stage.

Japan implemented the "mainland policy" and the Korean peninsula and northeast China became their first targets. There is the saying that if lips are gone the teeth will be cold. However, some Northerners had lacked the awareness for quite a time. Zhang Zuolin wanted to dominate the Northeast and enter into the central plains even at the expense of selling the sovereignty of the northeast in exchange for Japanese financial and military support. The March 1 Movement completely pierced Japan's lies of coexistence and mutual prosperity. Their vicious heart in treating the suppressed could be found by all people.

In this period, one of the slogans for the Northerners in their anti-Japanese movements was "never be successors to the occupied Korea". For example, the proclamation of recovering Luda movement wrote "Japan took its traditional policy of aggression to North as the aggressive means and wanted our Republic of China to be a second Korea. The results of doing so "would not only hinder the progress of the friendly relations between China and Japan but also ignited the fuse of the world war", showing a remarkable foresight.

In order to wake up Chinese people, in this period a large number of books were published and introduced about the occupied Korean history and the independence movements. On the cover and title page there were eye-catching words like these, "please view the tragedy of the trapped occupied Korea!" "The status quo in China is similar to that of Korea. If measures are not quickly sought for self salvation, China will become successor to Korea", and so forth.

Mr. Du Zhongyuan, when the anti-Japanese movement was made to protest the construction of consulate in Linjiang, also pointed out that, "Everyone should know it is the moment of life and death. The disaster is around the corner. People should wake up from the long dream to seek for self existence."

Due to this understanding and enlightenment, the anti-Japanese movement has developed in content and nature. In terms of the boycott of Japanese goods, there were several times in the early Republic. However, after Luda was recovered in 1923, a general boycott of Japanese products developed into the breaking-off of economic relations with Japan, which led to the first trade surplus in the Sino-Japanese trade in history.

Similar to the March 1st Movement in Korea, a great number of anti-Japanese patriotic groups turned up in the northeast China. And they remained some traces of the March 1st movement. For example, Chinese Engineering Society in Dalian, Chinese Self-determination Committee in Shenyang, 10-people Group Against Japan, Liaoning National Council on Foreign Relations, Liaoning Union against Opium, Liaoning National Association for Arousing the Common Sense of the People, Wake-up Group for Saving China in Harbin and other groups demonstrated the spirits of fighting against the Japanese aggression to safeguard national sovereignty and independence. Although they might adopt different measures to struggle for national independence and prosperity of China, they still had one in common. That is to say, they believed that salvation was the first and foremost event. Some good cases in point are Du Zhongyuan's Industrial Salvation, Che Xiangchen's education for national salvation, Kuomintang's three principles and the Communist Party of China's socialism.

The upsurge of popular patriotic movements also led to the subtle changes in the mentality of the ruling class. Zhang Zuolin sometimes needed to get Japan's aid, but he adopted a perfunctory way to refuse a variety of requirements of interests made by Japan, and was finally killed by the Japanese in Huanggutun. His son, General Zhang Xueliang, had an attitude of standing on the side of the patriotic movement against Japanese in sympathy and gave a secret support.

Thirdly, the March 1st Movement aroused all the people in the northeast China, especially the young generation to devote themselves to the cause of national liberation. Their spirit of struggle and sacrifice promoted the emergence of the pioneers of the patriotic movement and the growth of the team.

The March 1 Movement is an extremely tragic patriotic movement. Hundreds of thousands of Korean patriots struggled against the enemy's army and police in bare hands and never hesitated to give their life for the national independence and the people's freedom and happiness. How noble they were! After failed the bare-handed revolution, Jin Zuozhen, the leader of the Korean independence movement led thousands of soldiers to station in the northeast China and carried out guerrilla warfare along the border of China and Korea. The great victory of Qingshanli left a deep impression to the northeast Chinese. Such heroes as An Chonggen, who killed Shi Yi Tengbo, and Yin Fengji, who bombed general Chuchuan dead, were known by every household in northeast China. They were admired and imitated. The noted Seven Northeast Fighters, Yan Baohang, Du Zhongyuan, Gao Chongmin, Che Xiangchen, Wang Zhuoran, Lu Guangji and Wang Huayi were all enlightened by the Korean heroes and their patriotic experiences.

Fourthly, the March 1st Movement reveals that it is necessary for China and Korea to unite to fight against the mutual

enemy, and enhance the national unity and friendship in the anti-Japanese patriotic movements in the Northeast China.

One of the important reasons that led to the failure of the March 1st Movement is the shortage of the international assistance. In view of this, the Northeast anti-Japanese movements sought for assistance from the international community. Especially the Korean patriots were united to fight shoulder by shoulder.

However, it was not smooth for the two nations of China and Korea to achieve the unity and solidarity in anti-Japanese movement. First, the Japanese imperialists continued its policy to make troubles of disputes or assassinations in China-Korea relations. For example, the Hunchun event, Wanbaoshan event and the Korean anti-Chinese incident were all made by Japan. Second, Fengtian authorities succumbed to pressure from Japan put down and banned the Korean-Chinese independence movements. They together with Japanese Mitsuya Miyamatsu signed Twelve Articles of Ways to Ban Korean Movements, and promised to repress Korean-Chinese independence movement in Yanbian and Dongbiandao. Third, contradictions among the anti-Japanese groups or within one group often occurred. Pioneers of the Northeast anti-Japanese movement learned lessons from the March 1st Movement. They denounced that it was foolish for Zhang's government in Fengtian in suppressing the Korean-Chinese independence movement. It was like destroying the fence or getting rid of the hands or feet of oneself. They gave moral and material supports for the Korean fighters. Many local officials were also aware of the interdependent relations between China and Korea. They did not obey the orders of their superiors or met the Japan's requirements but managed to protect the leaders of the Korean-Chinese independence movement. As for the disputes among the anti-Japanese patriotic movement parties, a policy of "seeking common in differences" approach was taken to resolve contradictions and misunderstandings as far as possible to achieve the unity. From the early of 1920s to the Sep. 18 Incident in 1931, leaders of the Northeast anti-Japanese patriotic movement and such local leaders of the KMT and the CPC as Yan Baohang, Gao Chongmin, Chen Weiren, Liu Shaoqi, Chen Tanqiu, Luo Dengxian and so on all made vital attributions to unite the Korean patriots to fight against the mutual enemy, the Japanese imperialists. Those who showed sympathy for and gave support to the Korean independence movement and formed friendship with the Korean patriots were numerous like stars in night sky. The following are two cases in point.

Wang Tongxuan, from Xinbin of Liaoning province, belonged to Han nationality. He was a headmaster in an elementary school in Wangqingmen and the honorary president of the Huaxing Middle School. Mr. Wang repeatedly funded or protected the Korean fighters and made a profound friendship with Liang Shifeng, the commander of the Korean Revolutionary Army. After Sep. 18 Incident, he organized the volunteer army and together with Mr. Liang fought against the Japanese side by side.

Guan Junyan, from Kaiyuan of Liaoning province, belonged to Xibo nationality. From 1919 to 1921 he served as minister of Maosen Mining Company. He together with tens of his men, the forest policemen, protected Huang Jinlong, Jin Yuting and other Korean independent revolutionists and escorted them out of the danger places. In 1924, the Korean Independence Party of the east Pingandao in Korea met in Gumu Mountain and decided to dispatch 20 people to Seoul to launch movements. But they could not afford the travel. Subsequently they sent someone reliable to seek urgent help from Guan Junyan. On the same day Mr. Guan extracted 300 gold tickets from Chongxin Company and personally rushed to an old man with the family name of Sun in Hepushangou near Gumao Mountain to meet the urgent needs. At that time, the old Mr. Sun claimed a souvenir of a poem. And Mr. Guan presented him.

He wrote, "it was late when we got to Hepu. The bitter tea is what the host can do to treat us. The village girls are busy with the field affairs and what the old talk about is those about corps. The tyranny is harsher than a tiger and the refugees have lost their homes. I am glad to hear that Chinese and Korean have cooperated and I hope to see a bright future soon."

Such stories as Gong Tongxuan and Guan Junyan, who made close friends with Korean patriots to cooperate each other have been spread widely in the Northeast China.

To sum up, the March 1st Independence Movement in 1919 inherited and promoted the upsurge of anti-Japanese patriotic movement in the northeast region of China, while the anti-Japanese movement in northeast China and its development and the launch of the anti-Japanese armed struggles have created the necessary conditions for the foundation of the future Sino-Korean Anti-Japanese United Army, the Northeast Anti-Japanese Forces, the formation of the international anti-fascist united front in the Northeast Asian region, and the final realization of the national independence of the Korean Peninsula.

The March 1st Independence Movement, as the most tragic scene in Korean history took place 90 years ago. Today, the colonial and semi-colonial people's struggle for national independence has won a decisive victory all over the world. This shows that justice will triumph over evil and peace will replace war, as is an irresistible trend of the world. We memorize the March 1st Movement in order not to forget history and the difficulty of the hard-won peace and independence. Especially in the early 21st century, we must always grasp the theme of the times of peaceful development, adhere to peaceful coexistence, and make great efforts to maintain the friendly cooperation among the

nations or states to create a happy future for mankind.

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Notes

Note 1. In October 1920 borrowing the excuse of that the Korean independence party members attacked Hunchuan city and burned the Japanese Consulate, Japan dispatched troops to invade the five counties including Hunchun, as led to the protests and demonstrations of the students and people from other social circles of the northeast China.

Note 2. On March 26, 1923 the leased territory of Lushun and Dalian, which were subleased by Japan from Russia, was due. The Chinese Ministry of Foreign Affairs together with the people of Jilin Province requested the return of Luda. But Japan refused. Chinese people were in great anger and held demonstrations.

Note 3. On May 30, 1925 in Shanghai, Japan and the United Kingdom repressed the striking workers to create May 30 Tragedy. Workers in Shanghai held a large-scale protest and demonstration. Students and people from other social circles in Shenyang, Changchun, Dalian, Harbin and other places launched patriotic movement to express their support for the May 30 movement.

Note 4. In October 1929 Fengtian Transportation Conference approved project advanced by Zhao Zhen, the bureau head of Jichang railway and Mudun railway. It was about the mergence of the two railways and the loan from Japan. The Japanese side proposed to extend Ji-Dun railroads to be Ji -Hui railroad as an exchange, which caused a strong opposition from all social circles of China. On November 9, students from Harbin schools held a grand procession and were put down by the police. Some students were wounded. This is the famous Nov. 9 Railway Protection Movement.



Entrepreneurial Orientation and Business Performance of Small and Medium Scale Enterprises of Hambantota District Sri Lanka

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Abstract

Entrepreneurship has played an important role in economic growth, innovation, competitiveness and in poverty alleviation. This study investigated the degree of Entrepreneurial Orientation (EO) of twenty five manufacturing Small and Medium scale Enterprises (SMEs) in Hambantota District, Sri Lanka (HDSL) and the effects of EO dimensions including proactiveness, innovativeness, and risk taking to business performance. Interviews were used as the main instrument for data collection. Qualitative and quantitative techniques were applied for data analysis. Findings showed about 52% of SMEs in HDSL represented moderate level of EO. Proactiveness, innovativeness, risk taking and overall EO were significantly correlated with market share growth. Results further indicated there were positive correlations among proactiveness and EO with business performance. This study could be useful for policy makers to plan their activities towards entrepreneurship development of SMEs in HDSL.

Keywords: Small & Medium Scale Enterprises (SMEs), Entrepreneurial Orientation (EO), Business performance, Hambantota District, Sri Lanka

1. Introduction

Enterprise development is almost universally promoted in developing countries, and is often justified on the grounds that the emergence of entrepreneurs is an important mechanism to generate economic growth (Kodithuwakku and Rosa, 2002 and Landes, 1998). Entrepreneurship in developing countries is arguably the least studied significant economic and social phenomenon in the world today (Reynolds et al., 2004). Sri Lanka is a small, but openly developing economy with a land area of 65, 610 sq km, with a population of 19.9 million, and a labor force of 7,488,895 in 2007. Despite the tsunami of 2004 and the civil conflict in the Northern and Eastern Province, Sri Lanka has achieved reasonably stable

economic growth, which was 6% in 2003, 5.4% in 2004, 6% in 2005, 7.7% in 2006 and 6.8% in 2007 (International Labor Organization [ILO], 2009). The country's per capita income exceeded US \$ 1,500 in 2007 which is higher than that of most of its South Asian neighbors. In the year 2007, the agriculture sector grew by 4.7 % contributing 11.1 % to the overall growth while the industry sector grew by 7.2 % contributing to 27 % to the overall growth. Contribution from the services sector had been the highest at 62.6 % as the sector grew by 8.3 % during the year 2007 (Department of Census and Statistics Sri Lanka [DCSSL], 2008).

Small and Medium Enterprises (SMEs) play a vital role in the economy of Sri Lanka. SMEs have been recognized as an important strategic sector in Sri Lanka for generating high economic growth, reducing unemployment, inequality and poverty (Ministry of Enterprise Development, 2002). Sri Lanka's economy is predominantly a Small and Medium Enterprise economy where over 50 % of GDP is produced by the SME sector. SMEs are found in all sub-sectors of the economy, with a large concentration in manufacturing, and a further concentration of the small ones with 5 – 10 workers. They are widely spread across urban, rural and estate sectors (International Labour Organization [ILO], 2002).

The Government having recognized the importance of this sector in achieving a balanced economic growth, equitable regional distribution and increasing employment and productivity levels, has adopted various policies for the development of SMEs in Sri Lanka. The launching of the SME Bank and the establishment of the SME Authority to function as the apex body for the development of the SME sector, are expected to be the catalyst for SME led growth. (Ministry of Enterprise Development, 2005). The economic rationale for assisting SMEs is that they often use resources more efficiently than larger enterprises that market imperfections and prevent them from maximising the benefits of their efficiency advantages, that they can be an important contributor to pro-poor growth, and that they have potential for growth and employment generation that the micro enterprises cannot match. Compared with large firms, SMEs have greater backward linkages to micro-enterprises, and forward subcontracting links to large businesses, making them an important driving force in the economy. They face higher capital costs and pay lower wages. The salaries paid by SMEs reflect more accurately the true social costs. Consequently, SMEs should in principle use less capital and more labour per unit of output produced, at least so long as they avoid the labour costs implied by excessive union controls and labour law requirements. A second argument regarding efficiency is that most SMEs are managed by their owners and therefore have a greater incentive to manage the capital efficiently (Norwegian Agency for Development Co-operation [NORAD], 2002).

According to an industrial census conducted in 2003/2004 there were 121,426 industries having less than 10 employees with total employments at 285,623 and 9961 industries with more than 10 employees having 747,823 employments in total. Among them, the number of industries with less than five employees accounted for 84.3% of the total, contributing 7.5% to the total production value, 7.0% to Gross Value Added (GVA), and 28.4% to the total employment of the manufacturing sector. Considering the large number of employments by SMEs, and the fact that many SME units, unlike factory industries, are located in the rural areas where unemployment levels are higher. It is pointed out that there are a number of problems associated with SMEs in Sri Lanka, and one of the major problems is lack of entrepreneurship (Sri Lanka Chamber of Small Industries, 2005).

The current research was performed for the selected established manufacturing SMEs in Hambantota district of southern Sri Lanka (HDSL). The Southern Province of Sri Lanka consists of three administrative districts namely, the Galle, Matara and Hambantota. In the deep south of Sri Lanka, Hambantota District boasts a prosperous past civilization and is endowed with many natural resources. These resources offer opportunities for valuable income generation for the District and for the overall development of the country. Hambantota District has a population of 525,370 of whom 96% are considered rural residents. Some 13.4% of the labor force of 244,847 is unemployed - in comparison to the national average of 8.3%. Of those employed, 42.2% are in the agricultural sector, 23.3% in industry with the remaining 34.5% working in the services sector. (Department of Census and Statistics Sri Lanka [DCSSL], 2004).

Hambantota District is clearly a gateway to profitable investment, playing a crucial role in the development of the southern region of Sri Lanka and presenting exciting opportunities for the responsible, visionary investor. Recently the Sri Lankan government has recognized the southern region as an entrepreneurial hub and proposed to establish a new harbor and airport in the Hambantota district because of accelerated progress. These large scale projects, primarily aimed at developing the infrastructure of the area, indicate a move towards the development of the district into a hub of economic development. When assessing the progress of the programs implemented and the sums of money spent for the development of SMEs, the Chamber of Commerce in Hambantota has achieved some remarkable successes and when taken into account the growth of the enterprises in numbers, the growth percentage in Hambantota was slightly higher (Fernando, 2001).

Therefore, it is essential to upgrade the level of entrepreneurship and existing SMEs to be entrepreneurial orientated. This will reflect their innovativeness, pro-activeness and risk-taking qualities, which are particularly important for the growth and business performance of SMEs in the area.

Until recently we have understood little about entrepreneurship in developing countries. To date, a limited understanding of why rates of entrepreneurship vary cross-nationally (Oswald, 2008). Essentially, scholars have a limited understanding about why entrepreneurial oriented firms are more successful in one country than in another (Shane, 1992). Further, there has been limited research devoted to the field of entrepreneurship and growing interest of EO of SMEs, particularly in developing countries. Studies of entrepreneurship in the southern region of Sri Lanka are rare and still in their nascent stage and much remains to be understood of the level of EO of SMEs especially in HDSL. Hence, more in depth studies emphasizing entrepreneurship should help in enhancing SME performance towards achieving local and regional development. Currently, large-scale development projects are being implemented and the present study gives valuable information for policy makers towards entrepreneurship development of SMEs in HDSL. Therefore, proper studies are needed to better understand the degree of Entrepreneurial orientation (EO) and how EO impacts the business performance of SMEs in HDSL.

There are some debates in the literature as to whether or not the dimensions of EO are independent or co-vary under certain conditions. Some have argued that the entrepreneurial orientation construct is best viewed as a unidimensional concept (Covin and Slevin, 1989; Dess et al., 1997; Wiklund 1999). Lumpkin and Dess (1996) advocated that the dimensions of EO may vary independently, which implies that the influence of individual dimensions of EO on firm performance should be emphasized. Each EO dimension affected firm performance differently (Kreiser, et al., 2002; Lumpkin and Dess, 2001). High innovativeness shows positive relationship with sales growth, while proactiveness is positively related to sales level, sales growth, and gross profit (Kreiser et al., 2002). Entrepreneurial firms may exhibit all or some of the entrepreneurial orientation dimensions but they may differ in strength and direction of relationship (Lumpkin and Dess, 2001).

Therefore, it is essential to apply both a unidimensional and a multi-dimensional approach to EO to understand whether each dimension as well as overall EO is differently related to business performance. Thus, the theoretical contribution of this paper focuses on both the unidimensional and multi-dimensions approach of EO and building relationships between individual EO dimensions of proactiveness, innovativeness, risk taking and overall EO with selected business performance variables in a developing economy context.

This study explored to understand the degree of entrepreneurial orientation (EO) dimensions of twenty five established manufacturing SMEs in HDSL and its relationship with performance. There is evidence that SMEs and their performance was importance to the owner/ managers as well as the policy makers and society, there is lack of knowledge on which entrepreneurial factors influence SMEs performance and how they influence the performance (Awang et al., 2009). Specifically, this research attempts to contribute by addressing the following research questions;

- (1) To what extent do EO dimensions of proactiveness, innovativeness, and risk taking were demonstrated by manufacturing SMEs in HDSL?
- (2) To what extent do EO dimensions of proactiveness, innovativeness, and risk taking impact business performance of manufacturing SMEs in HDSL?
- (3) What is the relationship between overall EO and business performance of manufacturing SMEs in HDSL?

2. Literature Review

Contemporary entrepreneurship stressed the importance of a new entry for business innovation referring to the process of creative destruction (Schumpeter, 1936). Miller (1983) clarifies the construct of entrepreneurial orientation and defines an entrepreneurial firm as one that “engages in product marketing innovation, undertakes somewhat risky ventures, and is first to come up with proactive innovations, beating competitors to the punch.” According to Miller firms are entrepreneurial if they are innovative, risk taking, and proactive. In general, entrepreneurial orientation refers to top management’s strategy in relation to innovativeness, proactiveness, and risk-taking (Lumpkin and Dess, 1996; Miller, 1983; Khandwalla, 1977; Covin and Slevin, 1989). Entrepreneurial orientation (EO) has been suggested as an essential attribute of high performing firms (Covin and Slevin 1989; Lumpkin and Dess 1996; Dess et al., 1997; Lee and Peterson, 2000). A number of studies indicate that entrepreneurial organizations should be conceptualized as possessing the three main characteristics—innovativeness, risk-taking, and proactiveness to assess a firm’s entrepreneurial orientation (Covin and Slevin, 1989; Miller and Friesen, 1983). Today’s dynamic, global, and challenging business environment requires a firm to be entrepreneurial if it is to survive and grow. Rapidly changing technology and shortened product life cycles support the need for a firm to be innovative and develop new ideas, products, and processes, and be willing to take risks to cope with rapid change. Increased domestic and global competition amplifies the need for a firm to stay ahead of competition.

The innovativeness reflects the propensity of the firm to engage in new ideas and creative processes that may result in new products, services or technological processes (Wiklund, 1999). Proactiveness refers to the extent to which a firm is a leader or a follower and is associated with aggressive posturing relative to competitors (Davis et al., 1991). Risk-taking is the extent to which a firm is willing to make large and risky resource commitments (Stewart et al., 1998;

Covin and Slevin, 1991). Lumpkin and Dess (1996) argued that EO dimensions include innovativeness, proactiveness, risk taking, autonomy, and competitive aggressiveness. Where, autonomy is defined as independent action by an individual or team aimed at bringing forth a business concept or vision and carrying it through to completion. Competitive aggressiveness reflects the intensity of a firm's efforts to outperform industry rivals, characterized by a combative posture and a forceful response to competitor's actions.

Lee and Lim (2009) adopted innovativeness, risk taking, autonomy, and competitive aggressiveness dimensions proposed by Lumpkin and Dess (1996) to examine the relationship between each dimension to business performance in Japanese food restaurants in South Korea. This study suggests that EO dimensions have positive impact on business performance. Wiklund and Shepherd (2005) applied a configurational approach to investigate the relationship between EO dimensions of innovativeness, risk taking, and proactiveness to measure small firms' performance in 413 Swedish firms. They studied the effect of financial capital and environment as moderators of EO. The results showed that EO positively influences small business performance.

Wiklund and Shepherd (2003) focused on the relationship between knowledge-based resources, EO and the performance of 384 Small and Medium Sized Enterprises in Sweden. Findings supports that EO enhances the positive relationship with performance if the firm has a bundle of knowledge-based resources. Miller (1983) and Covin and Slevin (1989) adopted EO as a one-dimensional construct. They insisted that these three dimensions can be combined into a single scale. On the other hand, Lumpkin and Dess (1996) and Kreiser et al., (2002) claimed that dimensions of EO can vary independently of each other. Particularly, a strong positive relationship between EO and performance is found in dynamic and hostile environments (Covin and Slevin, 1989; Dess and Beard, 1984; Miller, 1988; Zahra, 1993). High EO is closely related to first-mover advantages and the tendency to take advantage of emerging opportunities, which ultimately has a positive influence on performance (Wiklund, 1999). Keh et al., (2007) examined the relationship between EO and market information on performance of SMEs in Singapore. They found that EO plays an important role in enhancing firm performance and it has both direct and indirect effects on firm performance. Also information acquisition is not positively related to firm performance, but information utilization has a positive impact on firm performance. Wang (2008) surveyed 213 medium-to- large UK firms in order to investigate the relationship among EO, learning orientation (LO) and business performance. The findings of this study suggest that EO is important for performance. LO is an important mediator in the EO-performance relationship and the EO-LO link is stronger for the prospector than the analyzer type of strategy.

Runyan et al., (2008) examined entrepreneurial orientation (EO) versus small business orientation (SBO), and their impact on small business performance, as well as whether these effects are moderated by longevity of 267 small firms in USA. Firms are grouped based on the age as younger and older firms. Findings revealed that EO and SBO are unique constructs and performance is not the same in these groups: for the younger group, only EO significantly predicts performance while for the older group, only SBO significantly predicts performance.

Based on literature review, most of the studies used only dimensionality of EO or overall EO to show a relationship with business performance. Furthermore, the majority of studies focused EO and overall business performance and not often used each of the EO dimensions in relation to each business performance variable. Therefore, this study from HDSL contributes to the literature by employing both the unidimensional and multi-dimensional aspect of EO with each business performance variables as well as overall business performance to understand the relationship between EO and business performance.

3. Research Methodology

3.1 Sample design and Data collection

Hambantota District Chamber of Commerce (HDCC), leading local organization towards the success of its member small business in Hambantota District. Members of HDCC receive support for their business development through guidance, advice, provision of business information services, financial advice and help for documentation such as reports to be submitted to lending organizations and financial institutions.

At first interviews were conducted with the economic development planner and the manager of handling SMEs of HDCC to plan the study using membership data base and registry. As a first step, considering the data and information from HDCC, manufacturing sector was selected to examine EO in Hambantota District. Sample of manufacturing firms were chosen with total fixed assets of 20 Million Sri Lankan Rupees (LKR) or less, excluding land and building and the number of employees' ranges from 5 to less than 150 in accordance with the definition of SMEs by the National Development Bank of Sri Lanka. Total 125 manufacturing SMEs were registered at HDCC and most of them concentrate around or closer to urban areas, therefore 25 manufacturing SMEs were selected to represent all the sub geographic location including city and rural areas within Hambantota District that established more than five years.

Semi-structured interviews were conducted as a primary data collection method during October 2008 to April 2009 for all selected SMEs. The selection of this method was due to the unwillingness of respondent's to provide information

through other communication methods such as mail survey (Swierczek and Ha, 2003). Owners/managers of SMEs were target respondents for evaluating entrepreneurial activities and business performance of the firms. Prior to data collection, we conducted a pilot study with owner/managers of three manufacturing SMEs in the study area to confirm the understandability and content validity of the survey. The interview with each respondent lasted about one to two hours.

3.2 Measures

All measures of EO dimensions and business performance variables were drawn from the literature. We adopted only three dimensions of EO-innovativeness, proactiveness and risk taking in order to understand the entrepreneurial orientation of SMEs in HDSL. Competitive aggressiveness dimension was eliminated, because some measurement statements are compatible with proactiveness and competitive aggressiveness dimensions. Moreover, proactiveness better describes the entrepreneurship posture of a firm than competitive aggressiveness. Autonomy dimension has been left out, because it has several meanings in organizational context and it is difficult to put appropriate measures in EO context. In addition, proactiveness, innovativeness, and risk taking dimensions have been documented at high levels of reliability and validity in numerous studies (e.g., Kreiser, et al., 2002; Barringer and Bluedorn, 1999; Knight, 1997). EO is measured by nine items, which were developed and tested for reliability by Khandwalla (1977), Miller (1983), Covin and Slevin (1989) by using five point likert- scales ranging from "Strongly disagree" (1) to "Strongly agree" (5). The study was used three items to measure proactiveness, three items to evaluate innovativeness, and three items to gauge risk taking (Appendix 1).

Performance is a multidimensional concept and that the relationship between EO and performance may depend upon the indicators used to assess performance (Lumpkin and Dess, 1996). Thus, single performance indicators likely produce biased results. In previous studies, growth is used as a proxy for business performance (Brush and Vanderwerf, 1992). Growth as a measure of performance may be more accurate and accessible than accounting measures of financial performance (Zahra, 1991). Performance is multidimensional in nature, and it is therefore advantageous to integrate different dimensions of performance (Wiklund and Shepherd, 2005). Business performance of SMEs can be measured by both objective and subjective measures (Murphy et al., 1996; Gupta and Govindarajan, 1984). Therefore, to capture different aspects of small business performance, we combined financial and non-financial performance measures for this study. Sales growth, employment growth, profit (pre-tax), market share growth and owner/managers' satisfaction were used to evaluate business performance. Sales, profit, and employment information were obtained through interview with respondents and calculated the average growth rate from year 2006 to 2008. Market share growth was measured based on self reported performance by the respondent from each SME. Self report measure was appropriate and reliable when the objective data is not available (Dess and Robinson, 1984).

The five categories used to capture sales growth were: (1) less than 1%, (2) 1–3%, (3) 3–6%, (4) 6–10%, and (5) more than 10%. Employment growth was measured as: (1) less than 1%, (2) 1 – 3%, (3) 3 – 6%, (4) 6 – 10%, and (5) more than 10%. Pre-Tax profit was sorted by: (1) negative profit, (2) less than 200,000 LKR (3) 200,000 – 600,000 LKR (4) 600,000 – 1000, 000 LKR and (5) more than 1000,000 LKR. Five categories used to measure market share growth were: (1) stable, (2) less than 1% (3) 1 - 2%, (4) 2 - 3%, and (5) more than 3%. Owner/managers satisfaction was assessed on a five-point likert scale ranging from "very low" (1) to "very high" (5).

3.3 Analysis of data

Both qualitative and quantitative methods were used to analyze data. Multiple regression analysis was used to determine the relationship among EO dimensions and business performance variables. At first, the degree of EO of SMEs was determined by the mean value. Significance of the relationship among variables was established based on the results of Pearson correlation analysis.

Reliability analysis was performed in order to ensure the internal consistency and reliability of measures. Cronbach's alpha was calculated to confirm the reliability of constructs. As the coefficient alpha exceeds the 0.70 level, the reliability of the measurements were achieved as recommended by Nunnally (1978). The alpha values for all items used to measure EO dimensions and business performance variables were 0.745 that are represented in Table 6. Considering the alpha values of the measures used in this study, the internal consistency and reliability were acceptable.

4. Results

4.1 Profile of Respondents

The background characteristics of owner /managers were given in Table 1. As can be noted, 68% of the respondents were both founders and owners of SMEs. Most of the respondents were between 30 and 35 years old. Levels of education among respondents indicate that only 04% have University degrees and 40% have advance level qualifications. Considering the experience of the entrepreneurs, approximately 56% were belong to less than two years of previous experience and 24% of them belong more than ten years experience.

Table 2 presents the profile of manufacturing SMEs in HDSL. The manufacturing industries are varied and almost 56% of SMEs are from food and beverages, 02% from machinery & equipment, 02% from jewelers, 04% from building & constructions, and 3% from others; furniture, herbal products and agriculture. In terms of ownership, 76% of the firms were sole proprietorship, 08% were partnership, and 16% were limited liability companies. The age of the SMEs shows that majority (44%) of them being more than 10 years old. In terms of firm size, 52% of firms had number of employees between 10 and 20.

4.2 Descriptive statistics of EO and business performance of manufacturing SMEs of HDSL

In terms of average turnover growth in the last 3 years, 68% of the firms recorded a growth more than 5%. All firms recorded positive pre-tax profit for the period of three years (from the year 2006 to 2008). Approximately 84 % of SMEs recorded more than 5% of average employment growth in the respective period.

Mean values and standard deviation of EO dimensions and business performance variables were shown in Table 3. The data in Table 3 indicate that innovativeness was higher than proactiveness, and risk taking of SMEs of HDSL. According to Table 4, SMEs have been classified as high, moderate and low in all EO dimensions and overall EO according to their mean value. Five SMEs represent the higher level of innovativeness, three firms represent higher level of proactiveness and two firms represent as relatively high risk takers. Only two firms were shown higher degree of EO. The majority of SMEs (52%) reported moderate level of EO. Inter-correlations among dimensions of entrepreneurial orientation and business performance variables were shown in Table 5. Proactiveness, innovativeness, risk taking, and overall EO had a positive significant relationship with market share growth ($p < 0.05$). Proactiveness was significantly correlated with overall business performance ($p < 0.05$) and also positive correlation showed between EO and overall business performance ($p < 0.10$). Quantitative results imply that SMEs in HDSL should improve proactiveness, innovativeness, and take risks in order to protect and increase their market share against competitors and to increase business performance. Results further indicate that firms that adopted high entrepreneurial orientation achieved higher sales growth, higher profit, and increased market share compared to those with low entrepreneurial orientation.

5. Discussion

Quantitative analysis of this study showed that the degree of EO was moderate in the majority of SMEs in HDSL. Only two firms reported higher degree of all EO dimensions; one was a manufacturer of machinery and equipments, the other was a manufacturer of ceramic products. These two firms were received national and district level best SME entrepreneur awards. Most of the firms produced incremental innovations rather than radical innovations.

The most important factor that determines the degree of EO was depending on owner/managers innovativeness. Those owner/managers who possess creative ability, adequate technical skills and industry experiences were supported to be innovative. The majority of SMEs in HDSL started with a very low level of skills and expertise especially managerial and technical know-how, take a while to acquire proficiency and adapt to the firm's environment. This may also cause an indirect impact on EO of the firm. Availability of financial capital was important to initiate research and development, capture efficient technology, introduce innovations, and expand domestic and export markets. Most SMEs in HDSL were lacking awareness of alternative sources of finance, and limited opportunity for inter-organizational networks to cope with financial constraints. However, SME's subjected to present study were operating their businesses by understanding customer needs and value addition to their products and services in an eventual innovative approach. This was obvious that firms operating in a relatively low technology environment. In addition incremental improvements were easy to capture and operate rapidly.

Generally, SMEs in HDSL were established based on availability of raw materials. Owner/managers reported that regional focus was extremely important for cost reduction and access to resources such as raw materials *i.e.* clay, mineral sand, water etc for ceramic products. Although infrastructure and resources were important for EO of SMEs in HDSL, entrepreneurs with positive attitudes, strong vision, and growth motivation could overcome barriers and go ahead, despite the resources constraints. The important role of the entrepreneur of firm innovativeness also confirmed the work of Mel et al., (2009), which investigated the factors determining innovation of micro, small and medium scale enterprises in Sri Lanka. Their study indicated that owner's ability, personality traits, and ethnicity played a significant and substantial impact on the likelihood of a firm innovating, thus confirming the importance of the entrepreneur in the innovation process.

In order to improve the degree of EO, SMEs in HDSL need to develop their skills and capabilities, as well as internal and external networks with educational institutions, technical colleges, financial institutions, and other small and large firms to acquire financial, human, and information resources to exploit and initiate new business opportunities from their external environment. In summation, this study points out the importance of SMEs to improve owner/managers innovative abilities, attention to create entrepreneurial climate, and confront with external competitiveness as a means to be more entrepreneurial to improve business performance.

6. Conclusion

This study was a first-step to investigate SME's entrepreneurial orientation in HDSL. The degree of EO was moderate in the majority of SMEs in HDSL and there was a significant relationship between proactiveness, innovativeness, risk taking and overall EO with market share growth. Significant positive relationship also reported between proactiveness and business performance similar to prior studies (Lumpkin and Dess, 2001; Yang, 2008). Further, EO positively related to business performance of SMEs in HDSL, this relationship also found in several other works (Covin and Slevin, 1989; Lumpkin and Dess, 1996; Wiklund and Shepherd, 2005). It was important for SMEs to be entrepreneurial in order to increase their market share and business performance and further indicated that owner/managers were more innovative, and risk takers of SMEs with high EO than firms with low EO.

In addition, results showed no significant relationship among innovativeness, proactiveness, risk taking and overall EO with sales growth, profit, employment growth and owner/manager's satisfaction. These results, partially consistent with some studies (Moreno and Casillas, 2008) indicated no direct relationship between EO and growth of a firm. This study also confirms that multidimensionality of EO and the independence effect of innovativeness, proactiveness, and risk taking are distinctly correlated with business performance (Lumpkin and Dess, 1996; Yang, 2008; Lee and Lim, 2009). The findings further suggest that it may be better for SME owner/ managers in HDSL to improve entrepreneurial posture towards identifying business opportunities and adopt appropriate entrepreneurial strategies to enhance entrepreneurial orientation and business performance to challenge competition by other firms in Sri Lanka.

7. Implication

The findings of this study have some implications for theory, and practice particularly for development of SMEs in HDSL. The theoretical contribution of this study provides new insights in small business research concerning the southern region of Sri Lanka to follow up similar studies, which may provide more reliable data and interpretations in SME development.

Some points highlighted herein were for the government and non-government sector to focus on promoting the level of EO by directing research and development activities, providing financial resources, training package and consultancy services etc. Also contains some information useful in collaborative work among governments agencies, the chamber of commerce as well as Business Development Services (BDS) to direct more resources and energy to promote, and encourage entrepreneurial culture towards enhance the entrepreneurial orientation of SMEs. Further, the present study may also provide useful information for SME owner/managers in relation to their individual level of entrepreneurial orientation as an assessment in developing their skills.

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Table 1. Background characteristics of SME Owner/Managers in HDSL

Age of the Owner/manager (in Years)	Frequency	Percentage (%)
31-35	7	28
36-40	5	20
41-45	6	24
46-50	3	12
51-55	3	12
Above 55	1	04
Level of education		
Graduate	1	4
Advanced level	10	40
Ordinary level	7	28
Below ordinary level	7	28
Previous business experience		
More than 10 years	6	24
5-10 years	3	12
2-5 years	2	8
Less than two years	14	56
Current position of the respondent		
Founder and owner	17	68
Owner	5	20
Manager	3	12

Table 2. Characteristics of manufacturing SMEs in HDSL

Types of business	Frequency	Percentage (%)
Food and beverages	14	56
Machinery & equipment	2	8
Jewelers	2	8
Building & construction	4	16
Others	3	12
Age of the firms		
6-10 years	6	24
11-15 years	11	44
16-20 years	6	24
21-25 years	1	4
26- 30 years	1	4
Type of ownership		
Sole proprietorship	19	76
Partnership	2	8
Company	4	16
Number of employees		
5-10	2	8
10-20	13	52
21-30	4	16
31-40	4	16
41-50	1	4
51-60	1	4

Table 3. Mean and standard deviation of EO variables & performance indicators of SMEs in HDSL

EO Variables	Mean	Std. Deviation
Proactiveness	2.81	0.69
Innovativeness	3.25	0.56
Risk taking	2.98	0.51
EO	3.02	0.51
Business performance Variables		
Sales growth	2.84	1.84
Profit	3.32	0.74
Employment growth	3.88	1.51
Market share growth	3.24	0.96
Owners/managers satisfaction	4.88	0.33
Overall business performance	3.48	0.58

Table 4. Classification of manufacturing SMEs based on degree of EO dimensions in HDSL

Dimensions of EO	Group by EO	Number of firms
Proactiveness	High	3
	Moderate	9
	Low	13
Innovativeness	High	5
	moderate	15
	Low	5
Risk taking	High	2
	Moderate	13
	Low	10
EO	High	2
	Moderate	13
	Low	10

Table 5. Correlations among dimensions of EO and business performance variables of SMEs in HDSL

Business performance Variable	Entrepreneurial Orientation Dimensions			Overall EO
	Proactiveness	Innovativeness	Risk taking	
Sales growth	0.129	-0.038	-0.120	0.004
Profit	-0.067	-0.169	0.122	-0.051
Employment growth	-0.010	0.104	0.266	0.122
Market share growth	0.360**	0.343**	0.480**	0.444**
Owner/manager satisfaction	0.203	0.095	0.154	0.176
Overall business performance	0.369**	0.207	0.206	0.308*

** $P < 0.05$; * $P < 0.10$

Table 6. Reliability analysis of EO dimensions and Business performance variables

Cronbach's Alpha	Standard Deviation	Number of items
0.745	5.405	14

Appendix I

Entrepreneurial Orientation (EO) measurement statements

Dimensions of EO		Description of EO items
Innovativeness	IN 1	In general, my firm favor a strong emphasis on Research & Development, technological leadership, and innovations.
	IN 2	In the past 5 years, my firm has introduced many new lines of products or services.
	IN 3	In the past 5 years, changes in our products or service lines have been quite dramatic.
Proactiveness	PR 1	In dealing with competition, my firm often first to initiate actions to competitors, for which the competitors then respond
	PR 2	Very often, my firm is the first to introduce new products/services, processes, technologies, & administrative techniques.
	PR 3	In general, my firm has a strong tendency to be ahead of others in introducing novel ideas or products
Risk taking	RT 1	I have a strong preference for high-risk projects (with chances of very high return).
	RT 2	I believe that, owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm's objectives. When confronted with decision-making situations involving uncertainty,
	RT 3	my firm typically adopts a bold, aggressive posture to maximize the probability of exploiting potential opportunities.

Notes: Respondents were given instructions to circle a number (ranging from 1, “strongly disagree” to 5, “strongly agree”) that corresponded to their agreement to each of the above statements.



Study on the Avoidance Measures of the Audit Risk of Project Item

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Abstract

The connotations and characteristics of the project item audit risk are studied in this article, and the measures to avoid the audit risk of project item are concretely analyzed by further strengthening the management, and the research result could offer theoretical bases for enhancing the audit management of project item.

Keywords: Audit risk, Project item, Avoidance

1. Introduction

The project item audit risk means the risk that the auditor shows improper auditing opinions for the financial report with important mistakes. Because the environment of the audit is increasingly complex and the task of the audit is more and more complex, and the audit should support the principle of cost efficiency, so the audit risk will exist in the audit process. The particularity of auditing also decides that the audit risk has certain objectivity, universality, potential, chanciness, and controllable characteristic. Therefore, to try to avoid and control the risk, it is very necessary to study the measures to avoid the audit risk of project item.

2. Strengthen the investment control and realize the optimal benefit

The target of the investment control is to effectively manage the project budget authorized by relative department of the country, and “make more things by less money” based on the authorized primary design budget range in the total investment control of the project, to maximize the benefits and save more capitals. The total idea of investment control is to establish the annual investment control target plan according to the total budget of the project, and follow and supervise the implementation of the target plan, and establish the annual budget management committee to implement the annual budget management, and control the contract signing, paying, and changing, and control and manage the investment implementation process by the support and cooperation among various departments, and finally feed back the management information to the investment control management department, which will form the work cycle including following stages.

2.1 Investment control in the decision-making stage

The project investment decision is the process to select and decide the investment behavior program, implement the technical and economic argumentation to the necessity and feasibility of the pre-building project, and compare and judge and decide different construction projects. Generally, the investment of the decision-making stage lacks in scientific argumentation and democracy decision, and the control of investment decision-making becomes a mere formality. Therefore, the investment control in the decision-making stage should first combine with the economic development plan of the country and the practical situation of the market to establish the middle and long-term development plan, and the construction plan should follow the principles of economy and saving, and once the construction plan is confirmed, it can not be modified at will. Second, the democracy decision-making program should be perfected, and relative experts should be consulted properly to instruct the former decision to avoid the investment waste because of wrong decision-making. Third, the construction standards should be established before hand, and the designs of various stages should be implemented strictly according to the construction standards.

2.2 Investment control in the design stage

The project design is the process to comprehensively plan and concretely describe the construction intention of the

project, which will influence above 75% of the project cost. To better strengthen the investment control of the design stage, on the one hand, the design enterprises should be selected by bidding to optimize the design process, and on the other hand, the limitation design should be pushed to ensure the effective investment control in the design stage.

2.3 Investment control in the construction contract awarding stage

In the construction contract awarding stage, the bidding of project construction not only can accord with the regulations of relative laws, but can select the construction enterprises, ensure the project quality and time limit, and reduce the project cost, so the bid making and examination must be seriously implemented, and the reasonability and reliability of the bidding cost should be judged carefully to make right selection for the bidding, which could offer guarantee for the investment control of the project. At the same time, the principle of the project list quoted price should be executed to standardize the price and embody the opening and justice, which can offer conditions for reasonable and low-price successful bid.

2.4 Investment control in the construction implementation stage

At present, many projects are supervised by the social supervision companies, and the supervision system could actively influence “three-control” of the construction projects and make for the investment control of the implementation stage. Concrete measures include perfecting the project change examination and approval system, strengthening the schedule control, and increasing the audit power.

2.5 Investment control in the late stage of the project

The investment control in the late stage of the project is an important stage to strengthen the investment control, and the balance work is the last part of the investment control, and it is very important to strengthen the importance of the examination of the clearing completion. At the same time, to strengthen the daily charge payout management could make the control management system more effective and the investment control more reasonable.

3. Establish various complete management systems

The occurrence of the audit risk of project item comes from various stages of the project, and is closely related with the perfecting level of various management systems. Various reasonable management systems could largely enhance the reasonability and validity of various aspects of the whole project. To further reduce the audit risk, the complete management system is seen in Figure 1.

3.1 Department management

The setting of the organization department of the project item is very important. First, the management mode of the project should be considered, and different management modes should accord with different department setting. Second, the main operations in the project implementation process should be considered, and these operations generally include plan, statistics, bid, contract, budgetary estimate, construction debt payment, and information management. In addition, the link and harmony among departments and the mutual balance among departments should be also considered.

3.2 Budgetary estimate management

The budgetary estimate of construction is the composing part of the technical document in the research stage, and it should be made by the survey design enterprise with corresponding certificate, and it includes the detailed materials of various parts of the project, and relatively detailed technical and economic indexes. Before the construction budgetary estimate is made, the design budgetary estimate of the project should be authorized by relative department or the investment principle. Three different concepts such as “original value”, “present value”, and “final value” should be emphasized specially. The so-called “original value” means the construction cost computed according to the price and charges when the budgetary estimate is made. The so-called “present value” means the construction cost after the original value is adjusted according to the price index when the project starts. The so-called “final value” means the construction cost adding the price difference in the annual investment into the present value after the project starts.

3.3 Budget management

The making of total budget should combine with the idea of zero-base-budget cost descending and the idea of the target management, and fully embody the advantage of the probability budget and the flexible budget reflecting the future uncertainty, and in the harmonizing stage of the budget management, the zero-based budget should be emphasized, and the rolling budget and the flexible budget should be referred, and the control stage and the assessment stage should embody the cost descending idea of the zero-based budget.

The annual budget management is one measure to control the process of the investment in the interior of the company, and the company could adopt the mode of functional department grading control management, and implement the three-level control management to the investment. Based on the organization department of the company, the annual budget management committee should be established to implement the annual budget management and confirm the responsibilities of various responsible departments, and predict and control the investment year by year.

3.4 Bidding management

Inviting public bidding in the project is the legal behavior that the construction unit (or owner) issues the announcement for the proposed project, and attracts contractor units to compete by a legal way, and selects the optimal one to complete the construction by the legal program. The bidding competition could confirm the project cost to be reasonable or descending, which could make for saving investment and enhancing the investment benefit. The bidding system could standardize the price behavior and implement the principles such as justice and opening, and save human resources, material resources and financial resources, and accordingly reduce the project cost.

3.5 Contract management

The contract management is the important part to control the project cost, and the contract could confirm both parties' responsibilities, rights, and benefits, and limit both behaviors by the legal form. Therefore, the construction unit should have professional personnel to make the contract, and the personnel should have certain professional knowledge and skills, and strictly grasp the property and programs of various contracts. In the process signing the contract, the situation going against relative policies of relative industry, department, and local government should not occur, and the target must be confirmed. Each item in the contract should be studied seriously, and the signed contract should embody the strictness and legality, and avoid the void contract or the unequal contract.

3.6 Materials management

Ordered material management could reasonably plan, organize, and control the stock, use, and repertory of materials needed in the project. Reasonable management of the materials could largely reduce the complex examination of the audit work to the materials, and form good material management system, especially, the material plan-making, the material stock, the material use, and the material repertory should be managed strictly.

3.7 Construction quality management

The quality of the project is the life of the item, and following aspects should be mainly emphasized to control the quality of the project, such as selecting excellent project quality control team by the form of bidding, controlling the quality of raw materials and avoiding the jerry-build, strengthening the project quality control in the key parts, strictly implementing the standards of construction, strengthening the management of general layout, strictly executing relative standards and the document management standards.

3.8 Construction schedule management

The construction schedule management is an important and complex task in the construction, and good management of the construction schedule could exert the investment benefits and enhance the economic benefits of the enterprise. At the same time, effective construction schedule management would also largely reduce the project audit risk and avoid the auditing of extended and extra works. The main task of the construction schedule management is to reasonably plan, harmonize, and control the schedule.

3.9 Clearing completion management

The clearing completion work means that the owner and the contractor balance the final project debts after the project is checked and accepted by relative department. The clearing completion of the construction is divided into the unit project clearing completion, the single project clearing completion, and the total construction item clearing completion. When implementing the clearing completion, the auditing should be strict, and relative auditing personnel should have deep professional base and good occupational morality. The auditing of clearing completion is one key part of the project item audit work, and its management work is the necessary part in the complete management system.

4. Consciously develop the interior audit of the project

The project item audit work must be conscious, and start from the interior audit.

4.1 Implement the audit dispatcher system in the project item department

The project item department is the cost management and control center, and the project item is the carrier of the cost. The command center should be established, i.e. the project manger of the project should be responsible for the project. The management mode to dispatch relative personnel in various project item departments could strengthen the power of audit supervision and enhance the audit covering surface.

4.2 Establish the price information system and strengthen the material stock bidding management

Generally, in the project cost control, the charge proportions of the material equipments and materials of the project ware very large, so the price information system should be established from many aspects such as strengthening the auditing of the material stock budget, strengthening the certificate auditing of both parties of materials supply and demand, emphasizing the auditing of the stock mode and stock contract, implementing the benefit auditing of the project material stock, and strengthening the auditing of the material stock capital management payment, which is

deeply meaningful for the material stock auditing work.

4.3 Perfect the design quality evaluation and cost control measures

The work of reasonably evaluating the design quality mainly includes considering the certificate of relative units, relative design experiences, awarded design works in past years, and design charges to select the design unit, examining the conclusion according to the design chart, comparing and optimizing the design projects according to the practicability and the beauty degree, and evaluating the quality of the design project. The contents of controlling the project final accounting cost mainly include evaluating the demands of construction capitals and costs, and whether the interests in the construction term will increase, whether relative policies and laws are executed strictly to fulfill the authenticity and the validity.

First, by comparing the costs in different regions, different departments and different years, the economy characteristic of the unit project cost could be evaluated.

Second, the control of the project cost should be strengthened, and the auditing of the concealed project construction and the equipment stock capitals should be emphasized, and many indexes such as capital saving amount and the capital saving rate should be adopted to evaluate the final accounting cost, and the final accounting cost should be controlled in the design budgetary estimate to promote the reasonable use of the special capitals.

Third, in the stage of construction, the payment of the scheduled debt should be strictly controlled to ensure the reasonable outflow of capitals, reduce the financial charge, prevent the financial risk because of extra payment, strengthen the project debt balance completely, and completely the investment and project cost control.

Fourth, in the stage of implementation, the concealed project, design change, engineering visa, and counterclaim should be controlled, and the visual engineering quantity increase and the over-estimation in the clearing completion should be effectively limited. According to the schedule of the project, the single project should be audited after it is completed one by one, which could largely reduce the work of the clearing completion auditing, and decrease the auditing time of the clearing completion accounting, and solve the problem that the project debt can not be paid because of too longer auditing time.

5. Enhance the quality of technical and economic personnel

The budgetary estimate and budget involves the economic benefits of various parties in the construction project, and it is not only a technical work, but an economic work. The cost engineer certificated system should be established, and the operation personnel engaging in this work should be trained and examined, and the industrial management should be checked periodically, and the occupational rules and industrial moral standards should be constituted, and cost personnel's behaviors should be standardized. The personnel who can not be competent for the work should return the work post after retraining, and the personnel who intentionally don't execute the quota and charge standards and relative human salary, material and equipment price, over-estimate or depress the price to induce one party's economic loss should be punished in discipline or compensate. The level of the technical and economical personnel's occupational morality and operation quality will directly influence the level of the cost management, so the quality training and the education of the occupational morality should be emphasized certainly.

6. Cooperate well with the local government

The company should cooperate well with the local government, which can not only quicken the schedule of the project, but reduce the payment of the project charge. The effective implementation of the project item could not only benefit the local, but increase the financial income of the local government, and drive and promote the development of relative industries. So the enthusiasm of the local government should be stimulated in time to make it serve for the project to some extent.

7. Conclusions

The audit risk management of the project item is a long-term task for the project investment control and the project management, and it needs to be continually summarized and advanced in the practice. Only the audit work adapts the market, it can be done well by grasping the management in the interior, digging the potential, reducing the cost, and increasing the profits. The responsibility, pressure, benefit, and supervision should be implemented in place, and the audit supervision network system should be established and perfected to further avoid the audit risk of the project item.

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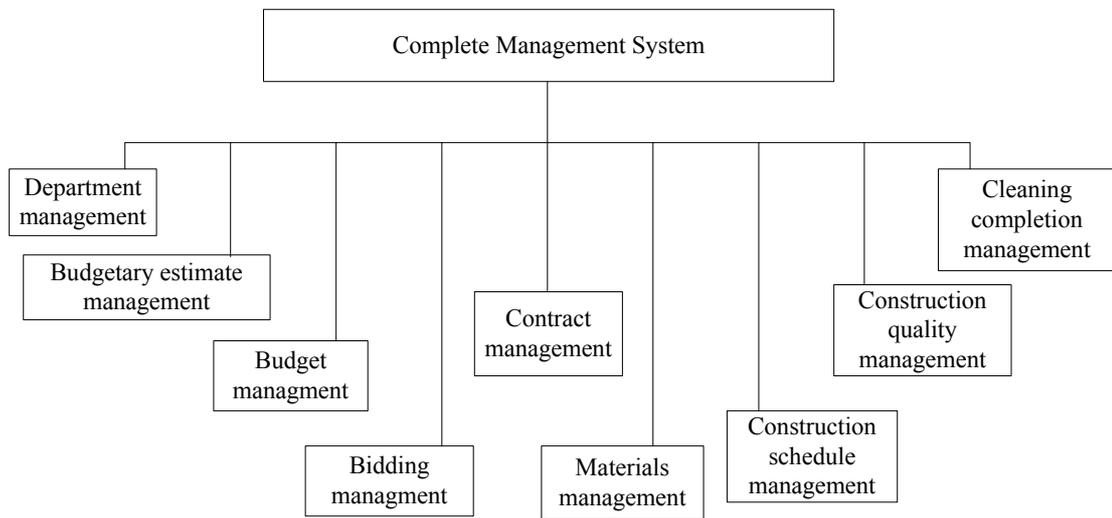


Figure 1. Complete Management System



Why Most Chinese Enterprises Fail in Deploying Lean Production

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Abstract

Since 1990s, many enterprises in Chinese Mainland have deployed lean production in consideration of its great success in other countries, but many of them failed to realize their original targets. The paper reviews the course from mass to lean, analyzes the status of lean production in Chinese mainland, points out the problems Chinese enterprises met in implementing lean production and makes a conclusion that we can't success in it without culture reform from extensive to lean. It also proposes the key points for Chinese enterprises to change to lean.

Keywords: Chinese enterprises, Lean production, Lean culture

1. Introduction to Lean Production

1.1 The definition of Lean Production

The term "Lean Production" (LP) has been discussed in many literatures frequently since early 1990's. The definition of lean is to identify and eliminate non-value-adding activities in the organization according to the APICS Dictionary. Lean production has an underlying principle: reduce or eliminate no value-adding activities and waste in the entire supply chain to realize premium prices, high quality and reliability of products.

On one side, we can say that lean is a set of tools such as 5S, value stream mapping and total production maintenance assist in identifying and eliminating wastes continuously. As waste is eliminated, product quality improves while production time and costs are reduced. On the other side, the managerial aspect of lean is just as important as or even more important than production tools or methodologies. So we define lean production as a business environment where waste is identified continuously and eliminated passionately to realize zero waste and produce products without defects, which means the change of culture.

1.2 The course from mass to lean

It is necessary to review the history of manufacturing industry from mass to lean for us to understand why Japanese and American enterprises have gotten great success in lean production.

At the beginning of 20 century, Ford Motor Company established the first assembly line in the world based on Taylor's time & motion research and Whitney's interchangeable parts, which had been the main characteristics of modern industrial production and significantly improved production efficiency. Mass production was suitable for the situation of USA of the time and made automobiles become popular vehicles rather than luxury goods for the rich. Although mass production is greatly important in the history of production technology and management, its weakness became more and more obvious after World War Two because of the diversification of consumer demand, which required multi-varieties and small batches production. Under this situation, Toyota Production System (TPS) was originated by a Japanese company named Toyota Motor, which is called "the machine that changed the world" and is the third milestone of modern production mode after mass production.

In general, lean production (LP) experience three stages during its formation as shown in figure 1.

1.2.1 The first stage - the formation of TPS

In 1950, a young Japanese Engineer Eiji Toyoda carefully investigated in the River Rouge Plant of Ford Motor in Detroit for three months, which was the largest and most efficient manufacturer in the world at the time as so many other people came from all over the world to learn mass economy, but he made a conclusion with the talented Taiichi Ohno different from the points of others that mass production was not suitable for Japan because the environment of Japan was small country and diverse needs that was completely different from that in USA, namely, big country and big needs. Therefore, they began to establish a production mode suitable for Japan. They first implemented some site management methods such as visual management, one worker-multiple machine and U-shape production cell, which were the budding of TPS and was proved effective; after this, Taiichi Ohno created more management methods such as single minutes exchange die (SMED), pull production, and finally built TPS met the case of Japan, which was spread in Japan after the oil crisis in autumn 1973.

1.2.2 The second stage-the formation of lean production

Along with the overseas expansion of Japanese auto makers, TPS was spread to USA regards to its great effect in cost, quality and product variety, and proved to be an advanced production mode generally suitable for various culture and industries.

Many foreign researchers studied TPS with enthusiasm, especially a research team initiated by Massachusetts Institute of Technology got significant achievement, and the members of the team professor James P. Womack and consultant Daniel T. Jones first put forward the term "Lean Production" or "Lean Manufacturing" after spent years analyzing the success of Japanese companies especially Toyota after World War II and summarizing their learning in a book called "Lean Thinking" published in 1989 and "The Machine That Changed the World (1990)", and lean production (hereinafter to be referred as LP) began to spread all over the world from then on.

In this stage, American enterprises and scholars learnt and studied lean production widely and put forward many new viewpoints such as combining LP with IE technology, information technology and culture to make it more applicable.

1.2.3 The third stage- the new development of lean production

In this stage, lean production was spread to various industries as a management philosophy such as construction, service industry, civil aviation, and so on. The wide spread and application of LP makes it more perfect, various new method came forth continuously such as mass customization, cell production, 5S and total production maintenance.

Insert Figure 1 Here

2. Lean Production in Chinese Mainland

2.1 The course of Chinese enterprises' deploying lean production

Chinese enterprises have been studying and learning lean production for more than thirty years since First Automobile Works (FAW), a famous large-sized state-owned enterprise, dispatched a delegation that had forty members to visit Toyota in Japan in 1978 and learnt there for half a year. We summarize the thirty years into two stages as follow.

2.1.1 The first stage – Introducing lean production

At the beginning of Chinese reform and opening to the outside world (1978), the plant manager of FAW Mr. Liu Shouhua directed an expert team to Toyota Motor in Japan to learn TPS, and then organized its senior managers to study TPS after they came back; they also invited one of the founders of TPS Taiichi Ohno to give lecture on TPS, tried out it in selected plant, built a TPS sample production line, and started two vigorous campaigns for studying TPS in 1980s and 1990s.

2.1.2 The second stage – Deploying lean production on a large scale

In the early days of 21 century, more and more Chinese enterprises in Mainland began to implement lean production, why? There are three main reasons for Chinese enterprises' enthusiasm in deploying LP, the first one: they are encouraged by other enterprises that have deployed LP successfully and learn from Sino-foreign contractual joint ventures especially Japanese and American enterprises in consideration of their great success in product quality and cost reduction by practicing lean production. The second one: various lean training organizations emerge as bamboo shoots after a spring rain; they bring new thinking of LP and make it spread in enterprises quickly. The third one: the management of enterprises is willing to deploy LP to realize their profit targets and establishes reputation in acceptance of new ideas and tools. So many Chinese enterprises deploys lean production blazingly, but they meet many problems that make them puzzled since few of them get the success that Toyota has experienced.

2.2 The effect of Chinese enterprises in deploying lean production

Some of the enterprises that have practiced LP benefit from it, but most of them haven't realized their original targets as expected. In general, we can make a conclusion that gains and losses coexist in Chinese enterprises' implementation of

LP over thirty years.

2.2.1 Positive effect in deploying LP

We have learnt and practiced LP for more than third years and gotten some achievements, on one hand, it makes lean thinking and tools spread all over the country, most enterprises know what lean production is and what it can do for them. For example, many employees in production site and managers in Chinese enterprises can make a detailed explanation of some terms and tools of LP such as 5S, total production maintenance (TPM), they also well know the benefits of LP such as improving product quality, reducing product cost by eliminating wastes, insuring the safety of machines and staffs, controlling over work site and so on. On the other hand, a few of them get some success in deploying LP, for example, the Chassis Branch of FAW reduced its work-in-process by 70% by deploying LP. Another example, Jialing Group dedicated to build a lean enterprise to overcome the adverse influence of financial crisis and got some positive effect in efficiency and manufacturing cycle: the efficiency of machining line and assembly line increased 44% and 21% respectively, the manufacturing cycle of both lines reduced 75% and 33%.

2.2.2 Problems we met in deploying LP

Although we have gotten some positive effect in deploying LP, we met so many problems that made us puzzled if LP is suitable for Chinese enterprises. In order to find out the true reasons for the failure of LP in china, we have investigated in more than twenty enterprises that ever implemented LP for two years and find that there are various reasons for their failure, for example, some of them lack the basis to deploy LP such as industrial engineering and automation, but we also discovered some wrong thinking and doing commonly made in deploying LP as follows, which we believe are main obstacles for many enterprises that implement lean tools without sustained benefit and finally make lean production a flash in the organization.

(1) Only pay attention to lean tools

Many enterprises started to deploy LP at the tool level, with no combination to business strategy and more seriously some employees don't know their business strategy at all including some leaders, not to speak of combining LP with it, which result that employees simply consider lean production as a set of tools, if they failed in one tool, they thought it didn't suitable for them and pursue other new tools but neglect the philosophy of lean that can teach employees to develop good working habits and improve personal quality through continuous improvement. In fact, the later is much more important than the former and is actually essential for enterprises to deploy lean production successfully. If we consider lean production is just a set of tools all the time, we can't get essential breakthrough in LP at all.

(2) Hope to achieve quick results

Many enterprises hope to build Rome in a day, once they can't get quick effect instantly after introducing lean production, they are suspicious of its prospect and give up. Rome can't be built in a day, Toyota had even spent almost forty years to establish TPS, together with we began to research on management late on relatively weak foundation, so the aggregation process is absolutely necessary although we can shorten it by our efforts.

(3) Indiscriminately imitate and copy the practices of others

During investigation, we found some enterprises thought they would get desirable effect by applying lean tools that others have gotten great achievements such as SMED that is proven significantly effective for improving efficiency and reducing costs. For example, a general manager of a manufacturing plant said to a lean consultant eagerly: "if you can teach us to master SMED, we are willing to pay the money satisfactory to you", but the fact is not so simple, the successful implementation of any lean tool is closely related to the management philosophy, so we can't succeed by imitating and copying practices of others indiscriminately, it must be combined with local culture.

(4) Master the superficial knowledge without understanding the essence of lean production

In April 2004, before FAW established strategic partnership with Japan Toyota Motor, Toyota dispatched Mr. Asakura Masaji, an expert in TPS, to FAW Car Company to supervise the latter to deploy TPS. After going around and inspecting the production site of FAW Car, the expert said seriously "I know what you are thinking" and wrote a sentence on the blackboard "beat down Japanese". Then he said without any emotion "I hope you can beat me down, but you must be more powerful than me, or else you must learn from me honestly". His words made the management present feel ashamed, but they had nothing to say, because FAW have learnt TPS more than thirty years, but they just learned some superficial knowledge without understanding the essence of TPS. For example, Asakura Masaji came to FAW Truck Branch on April 7, 2003, he put forward 26 problems about the site management of assembly and vehicle body plants on the spot. Why he can find out the problems and we are accustomed to them? The reason is what we learn from Japan and USA is superficial knowledge, so we can't analyze and research production site deeply to find out problems, consequently once Japanese experts came, they put forward the same problems, we are always at a standstill since we don't get the essence of lean production. So we can say lean production is a concept both familiar and unfamiliar to us.

3. Culture change to lean – the essence for Chinese enterprises to deploy lean production successfully

There are many scholars have put forward suggestions on how to deploy lean production successfully for Chinese enterprises, but we believe that culture change is the foundation for us to really master the essence of LP and establish characteristic production mode suitable for Chinese characteristics. Why we can make such a conclusion? As we all know, Toyota has gotten significantly success on TPS depending on its unique culture and American enterprises has gotten success depending on its innovation culture to make Japanese TPS grown into American Lean Production although they learnt TPS from Japanese. As a result, it is extremely necessary for Chinese enterprises to change from extensive culture to lean first. However, when facing culture reform, only 5% early adopters will embrace the change, 90% fence sitters will look for leadership, 5% concrete heads will resist it. So we have to guide enterprises to establish lean culture, which will make our enterprises success in decreasing costs and improving quality under the existing conditions.

3.1 Visible support and involvement from management in different level

Chinese people are used to follow their leaders, so management in different level should provide complete, real and visible support for lean production. Firstly, top management commitment is necessary for sustaining the program. This could be done in different ways such as visiting lean production areas, conduct LP audits, present awards for significant achievement and other ways to get involved on a regular basis. Secondly, the involvement from management in different level is also important for deploying LP because they can set good examples with their own conduct for employees, and consequently provide strong leadership and incentives to the 90% fence sitters.

3.2 All-staff involvement and change in work habits

Continuous improvement is the key of lean culture, which completely depends on the passionate involvement of all employees. In addition, employees' work habits will influence their behavior and behavior determines success or failure, so we must change employees' work habits to comply with lean standards: employees should conduct "continuous improvement" events, document results in one-point lessons and complete daily check to engage in lean production, which help build pride. How to motivate employees to conduct continuous improvement is an important task for the management.

3.3 Thinking lean and combining with Chinese culture

Thinking lean means we should keep firmly in our mind that we only do those things that create or add value, for which customer is willing to pay and all other activities are wastes. Moreover, when deploying lean production, we should break traditional concepts, overcome misunderstanding and combine it with the situation and culture in China, because Chinese is unique in the world different from Japanese and American in characteristics and working environments. Chinese are extremely clever, but some times they play petty tricks on their work. For example, when FAW deploying LP, it rebuilt the punching machine by adding a start button to require operators operating the machine with both of their hands together and thereby to avoid pressing their hands and fingers to guarantee the safety of work site, but the operators put a brick on one button to make it pressed down all the time and they still operate the machine with one hand, which not only disobeyed standardized working procedure, but also put their hands under the danger of injury.

3.4 Long-term commitment to lean production for continuous improvements

Lean production can not accomplish in one action, just as Toyota has spent scores of years in developing TPS and it is still in pursuit of perfect. So lean production is an endless journey, we must start as a long-term commitment and not as a task to realize continuous improvements and implement LP in accordance with famous PDCA cycle, which will make lean as a culture and a way of life. In order to make Chinese enterprises hand upon LP, we have a lot of work to do.

3.4.1 Make long-term commitment to lean production rather than three-minute blood

Many Chinese enterprises are used to setting off an upsurge when learn advanced tools and management mode, they ignore the effect or just do it as a show to demonstrate the advanced concepts of leaders; for example, many enterprises that have gotten Quality Certificate, but it can't guarantee the quality of their products, the result is they spent costs without quality improvement. During deploying LP, all staffs including the management and ordinary employees must prepare for a long-term battle since lean is an endless course, especially the former, without their support, it is difficult for the employees to persist in.

3.4.2 Establish the human resource management system that support LP as a long-term task

The success of TPS in Japan is closely related to the long-term employment system even if it changes somewhat, the situation in China is on the contrary, Chinese enterprises have broken the lifelong secure job since the reform and opening-up at the beginning of 1980s, many enterprises carry out last one eliminated system. The human resource management departments of Chinese enterprises are mainly engaged in assessing, punishing and firing employees, and pays little attention to staff training or makes it becomes a mere formality. The practice of Toyota is to train employees before manufacturing vehicles. They provide lots of On the Job Training including basic operation skills, multi-skills

and more important they train their staffs to find out and solve problems, which is the basis for continuous improvement. So we should on one hand improve the commitment degree of employees to their enterprises by taking them as our family members rather than profit-making tool, and on the other hand provide suitable training not only to let them master the knowledge and skills of LP, but also make them be used to working autonomously, namely, to make them find out and solve problems positively.

3.4.3 Deploy LP systematically and gradually

Many Chinese enterprises hope to achieve quick results and act rashly, which make them only stay on the surface and will not success at all. For example, in 1980s, FAW called TPS as misleading “kanban production” soon after they studied it. So we suggest Chinese enterprises to systematically deploy LP in stages and we give an example in table 1.

Insert Table 1 Here

4. Conclusion

Lean production will benefit an enterprise greatly if it is implemented correctly, especially in the current situation of financial crisis. The paper suggests a culture way for Chinese enterprises to deploy lean production successfully. But changing previous habits and establishing new culture are both long-term assignments that need the efforts of all employees, so the road to realize lean is still long. We hope to the paper will assist Chinese enterprises in deploying LP.

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Table 1. An example for deploying LP systematically in five stages

Stage	Tools	Sponsor
Stage 1: Make a comprehensive survey	Value stream mapping	Plant manager
Stage 2: Stability phase	5S Error proofing	HR manager Quality manager
Stage 3: Continuous flow phase	Setup reduction Total production maintenance Continuous flow manufacturing	Mfg. Eng. manager Maintenance manager Production manager
Stage 4: Standardized work phase	Standard work	Production manager
Stage 5: Pull production phase	Pull system (Production Kanban) Pull system (Supplier Kanban)	Production control manager Purchasing manager

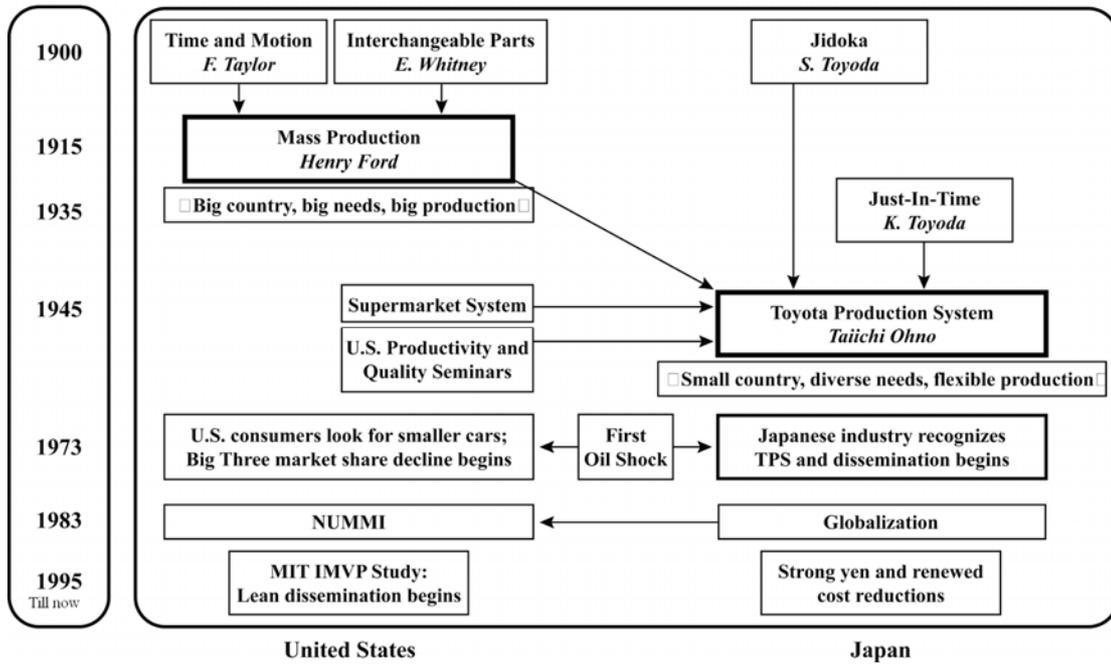


Figure 1. The course from mass to lean



Financial Wellbeing of Older Peninsular Malaysians: A Gender Comparison

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Abstract

Longer life expectancy means older persons can live longer but it also implied that they need more money to sustain their old age. Nevertheless, research on financial wellbeing of older persons in Malaysia is few and this lead to this study highlighting some facts related to financial wellbeing of older Malaysians. A total of 1,841 older Malaysians from 60 territorial divisions in Peninsular Malaysia have been interviewed. Looking at gender differences, male and female respondents have significant differences in financial literacy, monetary attitude, financial practices as well as financial problems. Multiple regressions explained 31% variance in financial wellbeing. Female in this study are more likely to be relegated because of lower education and less net worth compared to older men. It is therefore a great challenge for older women as well as other parties to increase the financial wellbeing of older women.

Keywords: Older persons, Financial wellbeing, Malaysia

1. Introduction

As we move into the 21st century, many countries in the world are experiencing an expansion in their population of older persons due to the improvement in general health care. At present, one out of every ten persons in the world is 60 years or older. By the year 2050, one out of every five will be 60 years or older and by 2150, it will be one out of every three persons (UNDP, 1999). The Department of Statistics, Malaysia estimates about six percent of the total national Malaysian population is made up of older persons aged 60 years and above in 2000. It also means that one out of every sixteen persons in Malaysia today is sixty years or older. As people expect to live longer than before, they also seek

continuing wealth throughout their extended old age (DeVaney, 1995). This is because living longer will increase the chances of experiencing poverty and outliving available income and assets.

Looking into the gender different in life expectancy, Malaysian women have consistently outlived men by four years or more in the past 20 years (DOSM, 1999). Life expectancy of the sexes may have increased over time, but women continue to live longer than men. In 2005, life expectancy at birth for men is recorded at 70.3 years but the national average for women is 75.2 years. In the 2000 Census, 958,300 persons aged 65 years or over are recorded and 512,100 of them are women (Department of Statistics, 2001). This means that 53.4% of the elderly population in Malaysia is female. When compared to 1980, the percentage of older women has increased 3 percentage points from 50.4% to 53.4%. If we use the Vienna demarcation, there are currently 1,451,665 older persons (60 years and over) in Malaysia and 52.3% or 758,541 of them are women. There are more, older women in every age and their proportion grows with increasing age.

The meaning of living longer is (referring-deleted) also changing. In fact, all these changes in (1) work (2) health status, and (3) independence to dependence cannot be carried out without money. Looking into the changes in work, people accumulate wealth over their working lives to finance consumption after retirement (Friedman, 1957). The longer the employment period, the larger return of the saving accumulated, even though some of the accumulation will be spend on marriage, car, children, house and so on. As this group of people reached to retirement age, they will be moved into dissaving stage. They still need to spend money for their daily expenses and maintain a basic lifestyle from their accumulated saving (Garmen, 1997). It would not be an exaggeration to say that the financial future of the elderly in Malaysia is directly related to, or proportionate with the proper utilization of Employees Provident Fund (EPF). EPF was launched in 1951 as a mandatory savings scheme for old age which allows early withdrawals for housing, health care and education purposes. Its active employee members grew from 1.6 million in 1966 (Malaysia EPF Annual Report 1970) to 5.7 million in 2008 (official webpage). In details, of the 5.7 million active members in 2008, only fifty-one thousand or about one percent of them are older active members aged 60 and above. This means that it only covers only a small group of the older working Malaysians.

Health is an important indicator in determining the financial wellbeing of older persons. Arokiasamy (1997) noted that "Increased longevity implies vulnerability to diseases and disabilities, with consequent increased costs of health care and created greater burden of caring for the elderly by the individual, family and the society", it means that older person may suffer from illnesses that require frequent treatment by doctors. Hence, the expenditure on health treatment will increase the cost of living in later ages. Many older Malaysians are lived with their children. In this case, the consumption needs of the elderly are covered by their children where parents invest in their children and the children will support them later in returns (Mazanah Muhamad and Mazalan Kamis, 2002). Data drawn from the Second Malaysian family Life Survey (MFLS-2) (1993) indicates that two thirds of older Malaysians co-reside in an extended family, but this figure has been decreased, where there is only 20.6 percent of extended family in Malaysia base on data drawn from Forth Malaysian family Life Survey (MFLS-4) (2004). This possibly due to older person chooses either to stay alone, stay with spouse or by the setting that lost of spouse and death of family members. This gives a greater financial pressure for this population in sustaining their consumption in old age.

2. Literature Review

In this paper financial aspects encompassed financial literacy, money attitudes, financial practices, financial problems, and net worth of older Malaysians. Financial literacy refers to adequate knowledge of personal finance facts and vocabulary for successful personal financial practices (Garmen and Fargue, 1997). According to the National Community Reinvestment Coalition Report (2004), financial literacy begins with education and understanding. When concepts are understood, basic habits will be changed. It would equip a person with necessary knowledge to make good decision with regard to spending, saving and investment choices, detect and from being cheated, as well as to enhance the efficiency in resource allocations (needs rewording). Older Malaysians need basic knowledge about money. They might have financial problems without basic knowledge about money (Chen & Volpe, 1998; Joo, 1999). For instance, most of the employee (before turning into older persons group) would invest their savings passively, entrusting some government body or the financial experts to do it for them while waiting for the gains from dividends or returns. However, recent surveys revealed that majority of retirees spend almost all of their EPF savings within a few years after retirement (Mazanah Muhamad and Mazalan Kamis, 2002). After having painstakingly saved throughout one's working life, the money is used up within a short period of time. Lack of personal financial knowledge limits personal financial practices and may cause financial problems, resulting in lower financial wellbeing. As such, financial literacy is very critical to maintain a high quality of life in their old age.

Money attitude pertain to the general attitude toward finance (Garmen et al., 1997) and older persons value their own money differently (Furnham, 1998). Meanwhile, some other researcher might define money is psychological as well as financial (Curtler and Devlin, 1996). A positive money attitude is the key to financial practices. Previous research showed that older person tends to showed a positive attitude toward money than the youth (Tang, 1992), but they will

be more worried about their future finances than younger people, possibly because they had greater financial responsibility with families, children and mortgages (Furnham, 1998). According to Ajzen and Fishbein (1980), a positive money attitude will directly influence good financial practices of an older person. Lown and Ju (1992) found a positive relationship between attitudes and practices. Looking at gender differences, Prince's (1993) found that males are more competent in handling money, while females have a greater sense of envy with money as a means of obtaining things. Furnham (1998) in his study revealed that more females are conservative and security conscious than males in terms of handling money.

Financial practices refers to the process people use in managing their financial resources to achieve financial success in the areas of retirement plans, financial planning, credit and money management (Garmen et al., 1997). Previous Studies (Joo, 1998; Marianne & Hogarth, 2003; Chan 2005) have shown that financial practices had been found to be positively associated with financial wellbeing. Simply increasing knowledge of finance principles does not ensure that a person will be more effective in financial practices. Knowledge must be applied as those who have a higher financial literacy are more likely to follow recommended financial practices (Marianne and Jeanne, 2003).

Financial wellbeing is the outcome of the financial practices (Joo, 1998). According to Tucker and Rice (1986), good financial practices effects financial wellbeing. Ross and Huber (1985) found that financial wellbeing was positively related with individual characteristic (income, education, and age) but negatively related with number of children and debts. It does mean that one knows what his or her financial resources are, and understand how the resources can best work for him or her, at now and in the future

Studying the financial literacy of older Malaysians is crucial to know whether they are equipped to make correct financial decision or not. A positive money attitude is a key to good financial practices but there is a dearth of information on money attitude of older Malaysians. The financial situation of the older Malaysians is dependent upon the financial practices while financial practices are related in financial literacy and money attitude. Consequently, the financial wellbeing of older persons can be explained by their net worth. The objective of this paper is to explore the financial aspects of Malaysia aging society, focusing on financial literacy, their money attitude, financial problems and financial practices of older Malaysians. Besides, this paper will also study the differences of certain financial aspects in gender perspectives.

3. Research Methodology

3.1 Data and Sampling

The data for this study derived from IRPA project title "Economic & Financial Aspects of Aging in Malaysia" under Quality of Life of Older Malaysians. Data for this cross-sectional study was obtained through interview with 1841 older persons (aged 55 years and above) in Peninsular Malaysia. Systematically, Seventy-five out of the national total 1173 sub-division/mukim (provided by Department of Statistic) was chosen and four Enumeration Blocks (EBs) with highest number of older persons age 55-75 were selected from each sub-division. From each Enumeration Blocks, ten households will be selected at a sequence interval of seven and the first sample must start from Point A of each EB. A 10-items scale measuring money attitude by Furnham (1999) was adopted for the study ($\text{Alpha}=0.792$). Four items measuring financial satisfaction were developed based on previous published literature. Two self created instruments in measuring financial literacy ($\text{Alpha}=0.352$) and financial practices ($\text{Alpha}=0.605$) were used in this study.

3.2 Measurement of variables

Financial literacy among the respondent was assessed using seven statements covering the aspects of investment, saving, insurance, spending, borrowing, and money management on the scale of "True" or "False". The scores for each question were then totaled to obtain the Financial Literacy Score. The highest score possible was seven and the lowest was zero. Greater score indicates higher in financial literacy for an individual.

Money Attitude refers to the general attitude toward finance and was measured by ten statements adopted from Money Ethnic Scale (Furnham, 1998). Respondents are required to express their opinion whether they agree or disagree of the ten statement. In this study, scores ranged from 10 - 20 points. Greater score indicates the more positive attitude towards money of an individual.

Financial Practices was measured by using a list of financial practices statements adapted from previous studies by Joo (1999) and Garman (1998). Respondents were asked to choose one of the three answering categories: Never, sometimes, and always. A total financial practices index was obtained by summing the coded numbers. The highest score possible was thirty and lowest possible score was ten. In this study, the scores obtained ranged from 12-30 with means score 19 points. They were then divided into three groups; poor financial practices scored 12-17 points, moderate financial practices scored 18-23 points and good financial practices scored 24-30 points.

It is important to study the financial problems of the respondents as financial problems have a negative relationship with financial wellbeing (Portal, 1999; DeVenay, 1993; Garmen, 1997). It is means that older persons are hardly to have a

good financial situation if they have a lot of problems regarding with their personal finance. This study has outlines seven financial problems cover aspect (1) borrow money from “along”, (2) been cheated from scheme pyramid, (3) Bad debt, (4) asset repossess. (5) No emergency fund, (6) Borrowed money from others for living cost and (7) cannot afford to pay bill punctually. Each respondent were asked whether they have the above problems or not during the study period and the possible score range from zero to seven. The greater value for this score indicates the greater financial problems being faced by the respondent.

Net Worth was used to measure personal financial status in previous studies (Fitzsimmons and Leach, 1994) as well as in this study. The value less liabilities of assets is the net worth of the respondent. In this study, ten assets namely land, house, vehicle, shop lot, insurance, poultry, jewellery, saving, investment and EPF were used to compute the total assets. The total of liabilities for each respondent was computed based on their monthly payment with their remaining months of installment. Since age is an important factor in determining the adequacy of net worth. The calculation equation for the adequacy of net worth is as: $(\text{Life expectancy} - \text{age of respondent}) \times (\text{RM } 510.00 \times 12 \text{ months})$. [1 USD = RM 3.80]

Financial wellbeing in this study was defined as satisfaction in personal finance. The four items were developed based on previous published literature for this study (Joo, 1998; Kratzer, Brunson, Garman, Kim and Joo, 1998; Porter, 1990; Shinn, 1992). The scales included satisfaction with present financial situation, income adequacy, debt, and saving and retirement. The responses were coded on a four point ordinal scale, 4 = agree to 1 = disagree. Negatively worded items were recorded. The average of the summed items was 13.63 ($SD = 2.874$). A sample item is “I am satisfied with my present financial situation.” Higher score indicates higher financial wellbeing.

4. Research and Findings

4.1 Profile of the Respondents

A total of the 1841 respondents participated in this study, 915 male and 926 are female. Over two-thirds of the respondents were Malay and the remaining respondents were Chinese and Indian. Sixty-four percent of the respondents were married, thirty percent were widowed and six percent were either never married or separated. About twenty-eight percent of the respondents were in “Young-Old” age group, twenty-seven percent in the range of “Old-Old” age group; the remaining forty-five percent was in “Old-Oldest” age group. Female respondents have a better health status but with lower education, widowed, live longer than male, no formal working experience and majority of them did not own house. In contrast, male respondents, with lower life expectancy but they have a higher proportion in reporting to have formal education and formal working experience as well as owning home. Indian family tends to have a bigger family size compared to Chinese and Malay. The education level attained by these respondents was relatively low. About thirty percent of the respondents reported never attended to school. One out of every three never attended school for female and one out of every nine for male.

Looking into their employment status, one of out every five of the respondents was reported as never work. Those who were reported “never work” were female and most of them are lack of formal education, committed in family responsibility, lack of skills, illiteracy, disability and other factors. When asking for the sources of income of the respondents, higher proportions of respondents received money from children. More men reported earning salaries and pensions compared to women. Men received on the average higher income from job related sources compared to women. In contrast, women received higher mean income from children.

Self perceived health among the respondents is quite negative considering 48% of them ($n=877$) rate their own health as poor. Of the 877 cases, 470 (53.6%) cases were comprised of male respondent and 407 (46.4%) female. A reverse pattern was observed when looking for those who are reported with good health status. Female 157 (17%) have a bigger percentage compared to male 127 (13.9%) in perceiving in good health status. Previous study found that house ownership is highly correlates with personal financial wellbeing. In this study, 76% of male respondents own house while 53.3% for female. This might provide explanations that female are disadvantage in financial wellbeing than male.

4.2 Gender Differences in Financial Literacy

Table 1 shows the gender differences in financial literacy. There is only 40% and 42% of the respondents answered correctly for the first statement and second statement. Those who answer “True” in the second statement “one can commit more than 20% of his/her income to pay installment credit” are committing monthly installment during the study period and they tends to be male respondent. As their source of income decreased upon retirement, it would be tough for them to commit 20% of their income for monthly installment. The third item - “The main use of credit card is to buy food” and its response was different by gender. In terms of the mean score, male respondents preferred to buy food using credit card than female respondents. Looking at those who have credit cards in this study, 66% are male and 34% female. It showed that female respondents are less holding credit card and they did deny that the main use of credit card is to buy food. Majority of the respondents answered correctly for the fifth item “The smaller monthly installment, the longer to pay off the loan” (86.5%) and the sixth item “Cutting down living expenses is one of the ways to save”

(83.7%). For the last item regarding investment concept, more than half of the respondent (51%) didn't know that buying in shares give better returns than fixed deposit and they tends to be male respondents.

Fifteen cases had scored zero in this instrument and majority are female. Not surprisingly, most of them have a lower education attainment. Of the 15 respondents, three are never to school, 10 with primary education level and two with secondary education level. Since the higher score indicates better understanding in personal finance, it implies that these 15 respondents are illiterate in their personal finance. However, a number of female respondents (n=146) who never attended school scored more than four in this instrument, meaning that their knowledge in personal finance was learned along with their accumulated experiences and others sources. Looking at gender differences, there is a significant difference in sum score of financial literacy by gender ($t=5.534$; $p=0.000$) and female respondents reported with a higher mean score than male respondents (Female: Male: 58.64: 46.49). Study found that only 37% of the respondents averagely answered four out of seven items correctly and the rest are below than mean score. This implies that most of the older Malaysians in this study are poor in financial literacy.

4.3 Gender Differences in Monetary Attitude

Money has the power to motivate persons as well as generate anxiety and unhappiness in those who do not have it (Furnham, 1996). Older persons may have a different monetary attitude and the attitude towards money will influence the practices of their financial management. A total of 10 statements with five dimensions have been used to measure the attitudes towards money among the older persons. Statement 1 and 2 refer to the first dimension which is "Money Is Good". The third statement was referred to the second dimension "Money Is Evil". The fourth and fifth statement was referred to "Money Is Achievement". Statement 6 and 7 for "Money is Respect" and the last three statements were referred to "Money Is Freedom". Of the five dimensions of money attitude, only one dimension was significantly different by gender and it referred to "money is freedom" (Table 2). Results found that more female respondents believed that money gives them autonomy; money in the bank is a sign of security and money can give the opportunity to be what they want compared with male respondents. It is acceptable as females have less source of income than male, they might be more concern than male about their money as it is essential in financial freedom in their later life. Previous research on age differences in attitudes towards money such as Furnham (1999); Lim and Teo (1997) found that younger people tend to use money more as a means of power than older persons. However, older Malaysians did not turn up to any significant differences (age group) or even relationship (age) by the five dimensions of monetary attitude. For the purpose of analyses in Multiple Regression, the scores for each question were then totalled to obtain the Monetary Attitude Score. The highest score possible was 20 and the lowest was ten. Greater score indicates the more positive attitude towards money of an individual. The mean score was twelve, indicating majority of the respondents is not having a positive money attitude.

4.4 Gender Differences in Financial Practices

In this study, the financial practices scores obtained are ranged from 12 to 30 with the means score of 19 points. A greater point indicates better in terms of financial practices. More than half of the respondent (59%) scored 24-30, 30.4 % scored 12-17 and 10% scored 24-30. This shows that majority of the respondents had moderate financial practices, indicating that the elderly population is currently not practicing good financial practices. For analysis purposes, the financial practices were assessed by four different dimensions into cash management, credit management, planning and investment. Table Three found that both the male and females have similar practices in financial management where they tend to have a lower score in investment and credit management but better off in planning and cash management. The results was matched with Godwin's findings in 1994 stated that cash management is associated with planning. It is also re-affirmed the previous findings from Gerrans & Clark (2004) where older persons, especially male married would have a lower likelihood in choosing the riskier option relative to the younger married females. For Pearson Product Moment analysis, the study found that there is weak significant relationship between good financial practices with positive monetary attitude ($p=0.00$; $r=0.089$) and age ($p=0.00$; $r=-0.118$, education attainment seems to have a stronger correlation with financial practices ($p=0.00$; $r=0.318$). This study also found that there is a significant differences in financial practices by gender ($p=0.000$; $t=7.189$) where male respondent reported to have a higher mean score than female.

4.5 Gender Differences in Financial Problems

It is important to study the financial problems of the respondents as financial problems have a negative relationship with financial wellbeing (Portal, 1999; DeVenay, 1993; Garmen, 1997). It is means that older persons are hardly to have a good financial situation if they have a lot of problems regarding with their personal finance. Overall, less than two percent of respondents reported borrowed money from "along" (n=17), cheated from scheme pyramid (n=19), bad debt (n=29) and asset repossess (n=6). However, study found that two out of every ten respondents was unable to have an emergency fund. Furthermore, one out of every ten respondents used to borrow money from others for their living cost and cannot afford to pay bill punctually respectively. Male respondents have a higher proportion in borrowing money from "along", cheated by scheme pyramid as well as assets been repossess (not shown in the table). This study found that financial problem was

not associated by respondent's education attainment. This implies that people with higher education not necessary free of financial problems. Findings also found that a significant negative relationship between the financial problems and financial literacy ($p=0.045$; $r=-0.99$). It means that respondents, both male and female, who are financially literate, have less financial problems eventually.

4.6 Gender Differences in Financial Status

Female respondents were reported not only owned fewer assets than male but also in terms of the amount of asset (Female:Male:RM60,623.50: RM 105,290.10). Meanwhile, male respondents have committed more liabilities than female respondents (male:female:1.2:1.1). Looking at the value of liabilities, female respondents have a lower mean of RM 11,422 compared to RM 13,537 for male respondents. The value less liabilities of assets is the net worth of the respondent. Study found that mean value assets calculated for the respondent was RM 91,734 ($n=1468$), mean value liabilities was RM 13,490 ($n=171$) and mean value net worth was RM 89491.68 ($n=1479$). By looking their net worth, only 41% have positive net worth to sustain their cost of living in their golden age. More male respondents reported have a positive net worth than female respondents. If looking for those who have negative net worth by employment status and gender, most of them were reported retired or never to work and they tends to be female. It proved that strong attachment to the labor force means that earnings are steady throughout a person's working life, providing a stable lifestyle, which is conducive to setting aside part of earnings for savings and investment.

4.7 Gender Differences in Financial Satisfaction

Satisfaction with personal finances has been defined as a subjective evaluation of one's personal finances. According to Kim Financial Satisfaction Scale, four items were asked to each respondent using five-point ordinal Scale. Comparing each financial satisfaction statement by gender, study found that male respondents are satisfied with their income adequacy as well as the amount of money that I am saving and investing for retirement. Meanwhile, more female respondents worry about how much money they owe than male respondents. Besides, study found that both male and females, who score high in cash management reported did not worry much in money they owe ($p=0.000$; $r=2.41$). In this study, respondent who scored 12 or below was in low financial satisfaction and. As such, high financial satisfaction category is for those who scored 13 and above. Thirty-one percent ($N=554$) are under category in low financial wellbeing while 69 percent are grouped in high financial satisfaction category.

4.8 Determinants of Financial Wellbeing

In this section, the selected variables namely: age, education attainment, gender, income, income adequacy, net worth, financial literacy, money attitude, financial practices, financial problems, family members and ethnicity were regressed on the dependent variable, financial satisfaction. As the samples of respondents were found to be distributed more or less normally over all the variables, multiple regression analysis was utilized in order to determine which of the selected independence variables would influence the financial satisfaction. Pearson Product Moment Correlations were computed on selected pairs of variables to test for direction and strength of the correlation between variables. Examination of the correlation of the variables, financial satisfaction was significantly related to education attainment ($r=0.220$), financial literacy ($r=-0.077$), money attitude ($r=0.125$), financial practices ($r=0.265$), financial problems ($r=-0.223$), income ($r=0.173$), and net worth ($r=0.201$).

In the summary table of multiple regression analyses in financial satisfaction, nine variables are significantly contribute in financial satisfaction, namely: health, income, financial literacy, money attitude, financial practices, financial problems, net worth, home ownership, and ethnic. Of the nine variables, financial problems and financial literacy showed a negative relationship with financial satisfaction. It can be explained by the more they know in finance, the higher expectation they have in their financial satisfaction. It is reasonable that those will financial satisfaction have less financial problems. Income which showed significant relationship with financial satisfaction in Pearson Product Moment Correlation but it was not significantly contributed in financial satisfaction. Radner (1989) found that older persons often have low incomes but substantial net worth as their wealth will continue to accumulate upon retirement even though earnings have decreased. Brimmer (1988) stated that racial differences in asset accumulation account for some of the weak correlation between net worth and financial satisfaction. It matched with the finding in this study and thus, it implies that older person with higher income might not necessary have financial satisfaction. Financial practices were correlated with financial satisfaction but not for financial literacy in this study. For instance, even though female respondents are more financially literate than male respondents, but male respondents tend to have a higher financial satisfaction as more men are practicing good financial practices than female respondents. Study concluded those respondents who have high financial satisfaction tends to have positive net worth, house, adequate income, positive money attitude, good financial practices and have less financial problems.

5. Conclusion

This paper studies the gender differences in certain financial aspects of older Malaysians. It found that majority of the respondents did not have enough knowledge about their personal finance as they scored low in financial literacy scale.

This means that majority of them do not know about their personal finance well, and thus, they are not able to make correct decisions in financial matter. Looking at the money attitude of the respondents, there was a positive correlation between money attitude and financial practices. It is believed that people who with positive money attitude will practicing a good financial practices. To note, majority of the respondent do not have a positive attitude towards money and that is why most of the respondents are only practicing moderate financial practices. Data showed that respondents are not managing their financial resources and money attitudes effectively and thus lead to certain financial problems.

Eventhough older female share some similarities with older male, they are more likely to be relegated because of lower education, less net worth compared to older men, less attachment to labor force. It is therefore a great challenge for older women as well as other parties to increase the financial wellbeing of older women. It is suggested that financial education programs should be addressed to older persons and also for younger generation so that they are able to make correct decisions related in financial matter. The net worth of the respondents had pictured their financial wellbeing of the older persons in Malaysia. It was found majority of the older respondents did not have enough money in their later life. It is suggested that people should start to accumulate the financial resources since young. As people accumulate wealth over their working lives to finance consumption after retirement, the earlier they start to save the larger accumulation of financial resources and lead to a positive net worth in later life.

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Table 1. Gender Differences in Financial Literacy

No	Financial literacy Item	Sex	Assessment True (%)	χ^2	P	N
1	Everyone will pay the income tax twice a year	Male	38.9	0.797	0.372	504
		Female	41.8			392
2	One can commit > 20% of his income to pay installment credit	Male	59.9	2.564	0.109	504
		Female	54.6			392
3	The main use of credit card is to buy food	Male	19.6	10.84	0.001**	504
		Female	29.1			392
4	Saving RM 100 per month in ten years> save RM 1000 per month in one year.	Male	68.7	0.234	0.629	504
		Female	70.2			392
5	The smaller monthly installment, the longer I need to pay off the loan.	Male	87.1	0.346	0.556	504
		Female	85.8			393
6	Cutting down living expenses is one of the ways to save.	Male	84.0	0.410	0.840	505
		Female	83.5			393
7	Buying in shares carry better returns than fixed deposit.	Male	47.8	0.578	0.447	506
		Female	50.4			393

* Correlation is significant at the 0.01 level of significance (2-tailed)

χ^2 = Chi-Square ; P = Correlation Coefficient ; N= Number of Respondents

Table 2. Gender Differences in Monetary Attitude

No	Dimension	Sex	Mean	t	P	n
1	Money is Good	Male	1.65	1.417	0.157	915
		Female	1.69			926
2	Money Is Evil	Male	0.96	-1.013	0.311	915
		Female	0.97			926
3	Money is Achievement	Male	1.61	-1.431	0.152	915
		Female	1.65			926
4	Money is Power	Male	1.17	0.180	0.857	915
		Female	1.16			926
5	Money is freedom	Male	2.21	2.245	0.025	915
		Female	2.11			926

Table 3. Financial Practices of the Respondents

Financial Practices	Never	Seldom	Always
Investment			
I set money aside for investment purposes ...	1466	298	77
I keep a look out for investment opportunities.	1459	314	68
I set money aside for savings.	761	711	369
Credit Management			
I make calculations to decide on the lowest loan	1126	315	400
I reach the maximum limit on my credit loan.	1306	297	238
Planning			
I compare prices at two or more stores for a product.	154	581	1106
I budget my expenses.	163	675	1003
I had a plan to reach my financial goals.	451	782	608
Cash Management			
I spend more than I earned	1161	592	88
I pay my bills late with extra charges.	903	812	126

Alpha Cronbach's Value = 0.727 , Variance = 13.545 , Standard Deviation = 3.680

Table 3 shows about 75% of the respondents never set money aside for investment (statement 1) or keep a look for investment opportunities (statement 2). Seventy percent of the older persons always compare prices at two or more stores for a product (statement 6). It indicated that most of the respondent in this study spent their money carefully. Less than five percent of the respondents spend more than they earned (Statement 9) and only ten percent always pay their late and been charges for interests (statement 10). Findings shows that older male tend to set money aside for investment and savings than older female. Older Male also tends to commit in calculating lowest loan, budgeting and financial planning than older female. However, there is a reverse observation for the statement 6, 9 and 10 where female respondents tend to compare prices at two or more stores for a product, spend more than they earned and pay bill bills with extra charges compared with male respondents.

Table 4. Gender Differences in Financial Practices

No	Variables	Male (N=915)		Female (N=926)	
		N	%*	N	%*
Investment					
1	I set money aside ...	48	5.2	29	3.1
2	I keep a look for investment	53	5.8	15	1.6
3	I set money aside for savings.	211	23.1	158	17.1
Credit Management					
4	I make calculations to.	239	26.1	161	17.4
5	I reach the maximum limit ...	153	16.7	85	9.2
Planning					
6	I compare prices at two.	549	60.0	557	60.2
7	I budget my expenses.	505	55.2	498	53.8
8	I had a plan to reach my...	353	38.6	255	27.5
Cash Management					
9	I spend more than I earned	554	60.5	607	65.6
10	I pay my bills late ...	439	48.0	464	50.1
* Percentage of total respondents					

Table 5. Gender Differences in Financial Status

Assets / Liabilities	male			female		
	N	%	Mean (RM)	N	%	Mean (RM)
Fix Assets						
Shop lot	12	1.3	150972.2	3	0.3	28333.3
House	719	78.6	61819.7	601	64.9	52336.9
Vehicle	628	68.6	17536.2	267	28.8	26899.3
Land	403	44	51512.6	306	33	37337.7
Jewellery	62	6.8	5851.0	62	6.7	2212.2
Poultry	44	4.8	15446.5	34	3.7	999.7
Monetary Assets						
Savings	390	42.6	21240.2	297	32.1	8324.0
Investments	108	11.8	23722.8	58	6.3	16651.6
Insurance	69	7.5	56107.8	38	4.1	44210.4
EPF	325	35.5	22109.2	113	12.2	19208.9
Mean Total		RM 105,290.10			RM60,623.50	
Liabilities						
Land	21	2.3	7,722.5			
House	54	5.9	16,182.9	33	3.6	13,655.0
Vehicle	52	5.7	11,406.0	13	1.4	9,987.5
Shop lot	5	0.5	8,366.4			
Furniture	7	0.8	856.4	6	0.6	1,103.3
Investment	8	0.9	5,285.3	8	0.9	5,140.0
Sum of Liabilities		13,537.56			11,421.70	
Number of Liabilities		1.2			1.1	

The assets in this study referred to ten items which were land, house, vehicle, building, insurance, poultry, jewellery, savings, investment and EPF. Table 5 shows the results in when the respondents were asked to specify each of the assets and value each of them in Ringgit Malaysia. Over two third of the respondents owned house and half of them have vehicle. Few respondents were reported to have assets likes shop lot (n=15), jewellery (n=124) and insurance. Out of the 1841 cases, only 107 cases reported have insurance with mean coverage of RM 25,000. Few researchers have affirmed that social security (EPF) is one of the government's efforts to ensure the financial security upon retirement (Kevin, 2000; Olsen, 1994) but it covers only a small group (23.8%) of the respondents whereby 17.1 % for male and 6.1 % for female. Male respondents have higher proportion in house, land and vehicle than female respondents. Seventy-nine of the male respondents has house compared to sixty-five for female respondents. Sixty-nine percent of male respondents has vehicle compared to only twenty-nine percent female respondents. For land, 44% percent of the male respondents have land and only 33% for female respondents.

On average, life expectancy increased for almost 10 years from 1970 to 2000 but the age of retirement remains unchanged. Many has experienced a cut of income upon retirement but their expenditure does not decrease in proportion. Therefore, they has to stretch their income over a longer period of time while facing the rising cost of living and inflation. If they still commit in any installment, definitely it is financial burden for the them. Table 6 indicated that a total of 87 older persons still keep paying RM 381.32 per month (average) for their housing installment, vehicle installments (n = 65 , RM 448.42), land installments (n = 21 , RM 276.62) , investment (n = 16 ;RM 323.38), home furnitures (n = 13 , RM 86.92) and shopot (n = 5; RM 578.80).

Table 6. Category of Net Worth by Sex and Employment Status

Variables	Category Of Net Worth			
	N	Negative n (%)	Positive n (%)	Mean (RM)
Gender				
Male	0915	382 (35.0)	533 (71.0)	4,953
Female	0926	708 (65.0)	218 (29.0)	3,847
Employment				
Still working	473	273 (25.0)	200 (26.6)	7,016
Retired	999	552 (50.6)	447 (59.5)	4,424
Never work	369	265 (24.3)	104 (13.8)	5,361

Table 7. Gender Differences in Financial Satisfaction

No	Financial Satisfaction	Sex	Mean Score	X ²	p	df	N
1	I am satisfied with my present financial situation	Male	3.53	2.860	0.582	4	904
		Female	3.47				914
2	My income is enough for me to meet my monthly living expenses	Male	3.50	14.594	0.006**	4	904
		Female	3.36				912
3	I worry about how much money I owe (negative Statement)	Male	3.03	34.366	0.000**	4	904
		Female	2.80				913
4	I am satisfied with the amount of money that I am saving and investing for retirement	Male	3.73	15.488	0.004**	4	903
		Female	3.85				915

1 = Strongly Disagree , 2 = Disagree , 3= Not Sure , 4= Agree, 5= Strongly Disagree
 * Alpha Cronbach's Value = 0.673 ** Numbers may not add to 1841 due to missing

Satisfaction with personal finances has been defined as a subjective evaluation of one's personal finances. According to Kim Financial Satisfaction Scale, four items were asked to each respondent using five points ordinal scale Respondent who scored 12 or below was in low financial satisfaction and. As such, high financial satisfaction category is for those who scored 13 and above. Thirty-one percent (N=554) are under category in low FWB while 69 percent are grouped in high financial satisfaction category.

The mean score for the statement one is 3.5, meaning that majority was satisfied with their present financial situation. Statement two referred to their perceived income adequacy and 70 percent of the respondents feel comfortable for their present income adequacy level with mean score of 3.43. The third statement is a negative statement with 3.79 mean score (after recording). Majority of them did not worry how much money they owe to others. The last statement has the lowest mean of 2.92, which most of them are not satisfied with the amount of money they saved and invested for retirement. The answers given by respondents for statement three and four could reflect part of the findings in Section 4.4 - Financial Practices. It is found that older persons who score better in cash management did not worry much in money they owe (p=0.000; r=2.41). Since majority of the respondents have scored low in investment, it is acceptable that 70 percent of the respondent have ranked below "Not Sure" in the last statement in financial satisfaction.

Table 8. Summary of Multiple Regression Analyses for Financial satisfaction

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	6.074	0.934		6.504	0.000
Health	0.291	0.082	0.073	3.563	0.000
Income Adequacy	1.096	0.061	0.389	18.017	0.000
Financial Literacy	-0.003	0.001	-0.050	-2.419	0.016
Money Attitude	0.070	0.024	0.058	2.891	0.004
Financial Practices	0.093	0.020	0.102	4.725	0.000
No of Financial Problems	-0.404	0.070	-0.118	-5.760	0.000
Net Worth	0.001	0.000	0.065	3.028	0.002
Home Ownership (No = 0 , Yes = 1)	0.312	0.132	0.052	2.368	0.018
Ethnic 1 (Malays = 1 , others = 0)	0.574	0.211	0.094	2.723	0.007
Ethnic 2 (Chinese = 1 , others = 0)	0.329	0.225	0.049	1.460	0.145
Employment (Dummy)	0.172	0.137	0.029	1.254	0.210
Sex (Dummy)	0.154	0.151	0.027	1.022	0.307
Age	0.009	0.011	0.018	0.821	0.412
Education Attainment	0.091	0.048	0.048	1.922	0.055
No of Family Members	0.021	0.027	0.016	0.794	0.428
Income	0.010	0.000	0.025	1.137	0.256
Marital Status (single =0 ,married =1)	0.148	0.164	0.021	0.906	0.365

R square = 0.304 ,df = 17 ; F = 45.985 ; p = 0.000

The F statistic for the overall goodness of fit of model is 45.985, which is significant at $\alpha = 0.01$. After excluding the non-significant variables, the final regression model produced by enter method for financial satisfaction is:

Financial satisfaction = 6.074 + 0.291 health + 1.096 income adequacy + 0.07 money attitude + 0.093 financial practices + 0.001 net worth + 0.312 home ownership + 0.574 ethnic 1 – 0.003 financial literacy – 0.404 financial problems.

This model explains 30% of the variance in financial satisfaction. This indicates that 30% of the dependent variable (financial satisfaction) was explained by the linear combination of the nine-predictor variables. Among the nine-predictor variables, income adequacy was found to contribute more significantly towards one's financial satisfaction. Of the nine predictor variables, two variables have showed a negative relationship (financial problems and financial literacy) with financial satisfaction. It can be explained by the more they know in managing their personal finance, the higher standard they set for their financial satisfaction. Besides, the more financial problems they have the lower financial satisfaction they are.



Analysis on the Characteristics of Guanzhong Traditional Residential Courtyard --- Take Tang Courtyard in Xunyi County as an Example

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Abstract

In this paper, a lot of countryside surveying, mapping, measuring and on-the-spot drawing are conducted to obtain a wealth of first-hand information. In addition, the methods of entity dissection and regional comparison are employed to explain the causes for the formation of Guanzhong traditional residential courtyards and to analyze and summarize the form, structure and spatial pattern of Tang Courtyard as a typical example of Guanzhong residential courtyards in order to further research the form of these courtyards, to pass down and protect intangible cultural heritage and to offer some beneficial references for the planning and design of modern vernacular architecture.

Keywords: Guanzhong in Shaanxi, Traditional folk houses, Courtyard form, Tang Courtyard

1. Introduction

In his book *Research on Chinese Folk Houses*, Dazhang Sun classifies folk buildings into different types according to their forms. Architectural form characteristics can be manifested in spatial organization, horizontal arrangement, structure, composition forms as well as surface decoration. Spatial organization, referring to the spatial form of folk buildings arranged according to social institutions, family organization, beliefs and ideas, life styles and other social human factors, should be given priority to when classifying buildings due to its bright characteristics of the society and the age.

The project of this paper is supported by Shaanxi social science foundation named "Research on the Co-protection of Traditional Folk Techniques and Traditional Architectural Environment" (No. 06H008S), some achievements of which offer a favorable basis for our success in applying for the national soft science project named "Research on New Countryside Construction while Keeping Passing down Culture" (No. 2008GXSD128).

2. An Introduction to Guanzhong Traditional Folk Houses

Lying on the alluvial plain of Wei, Jing and Ba rivers, Guanzhong has a rolling landscape. Piled eolian soil has changed

its former landscape into endless layer of loess. Accordingly, there are many types of folk houses in Guanzhong due to its complex changes in landforms as well as its long history (Figure 1).

Generally, with its plain appearance and rich outline, Guanzhong traditional folk houses display a mild image, its high and thick walls separating the houses from the outside world. Inside the houses are thick walls and mild raising-and-expression; its rammed-earth walls covered with the mixture of stalk, earth and lime, its framework of grey bricks and pine and some brick or wooden carves display its neme style and rich changes in decoration and color (Figure 2).

3. Spatial Organization of Guanzhong Traditional Residential Courtyards

Courtyards are enclosed by surrounding buildings. Chinese folk architectural culture characterized by groups attaches great importance to the techniques of spatial organization and regards courtyards as the soul and core of Chinese traditional folk buildings, which reflects Chinese special sense of time and space (Liu, 2007). Courtyard houses are the most typical architectural representative here, which serve as places to live in and where their soul lies (Li, 2007).

The organization form of Guanzhong folk houses is closely related to their people's closed ideas (Huang, 1990). Houses tend to be higher with the longitudinal extension of courtyards, among which the gatehouse is the lowest, the lounge is the second lowest and the principal room is the highest dominating the whole courtyard. With the height and functions of houses combined with the functions of courtyards, a complete set of ethical orders is manifested, which is an reflection of the sense of hierarchy and center (Wu, 1999) (Figure 3).

Influenced by social propriety system, the architectural form of folk houses is of obvious hierarchical identity, conforming to the order of political and social relations with its tight order of architectural forms. Obviously, there are deeply-rooted sense of hierarchy and strict hierarchical disparities embodied in Chinese traditional folk houses, which are special outcomes of Confucianism on social propriety system (Zhu, 2002). Hierarchy is reflected in the layout, structure and scale of traditional folk houses. As for a family, the rule cannot be broken that the older generation lives in the principal room, the younger generation lives in the wings and servants live in the inferior room; women cannot go out of the courtyard freely and guests cannot enter the inferior courtyard without permission (Zhang, 1999) (Figure 4).

Large courtyard houses in Guanzhong embody more obvious ideas of feudal propriety as well as stricter hierarchical system compared with ordinary ones. Tang Courtyard in Xunyi County of Xianyang City is a striking case, which has some differences from ordinary folk houses as a courtyard house prepared for officials.

4. Form Characteristics of Tang Courtyard

Located in Tang Village about 7 kilometers northeast of Xunyi Country, Tang Courtyard lies on a cliff edge and faces a gully. According to geomantic omen, its location conforms to the rule of submitting to yin and embracing yang. It has a clear outline, including 87 courtyards and over 2700 rooms in its peak period (Ruo, 2009). Now among all the restored courtyards, only three two-hall ones can be visited

4.1 Characteristics in Organization

All the three existing courtyards in Tang Courtyard have a transversely-attached layout with an obvious hierarchy system and clearly-divided functions. There is a door between each two courtyards and all the three courtyards have their own entrances. The main courtyard is five bays wide and the two side ones have a width of three bays, creating a declining width from west to east. Therefore, standing at the entrance, one can judge the hierarchical status of all the courtyards as well as the order in their spatial functions according to their widths (Figure 5).

4.2 Form Characteristics of the Main Courtyard

The western courtyard is the main one with the largest width of about 1500cm as well as the depth of 3700cm. In addition to the residence for the host, this courtyard also serves as the place for weddings, funerals and sacrifices. Different from other traditional residential courtyards in Guanzhong which cannot exceed the width of three bays, the main courtyard in Tang Courtyard is five bays wide due to the high rank of this family, hence preserved well before the Republic of China. It is of greater importance for the protection and perfection of Tang Courtyard that researchers investigated the historical backgrounds of Tang Family, the architectural hierarchy and functions of Tang Courtyard and made vivid waxen images to restore its architectural functions in simulated situations, hence making it easier to distinguish the hierarchical features and functions of the whole courtyard (Figure 6).

Chinese traditional architecture puts great emphasis on symmetrical layout, especially the enhancement and employment of the axis wire, due to their strong "center-worship" sense. The internal space of the main courtyard belongs to vertical double-hall layout, strictly following social institutions. That is, the front view room at the entrance leads to the hall across the front courtyard and to the principal room across the backyard. There is an obvious axis vertically and a symmetrical structure transversely. The main buildings, such as the front view room, the hall for receiving guests and weddings and the principle room for the older generation, are arranged on the central axis wire while the side rooms for the younger generations as well as kitchen are arranged on the sub-axis, on which rooms are

arranged according to the principle of public places coming ahead of private ones, rooms for younger generations coming ahead of those for older ones and the principal room higher than the side ones. That is to say, the rooms for those distant relatives or servants are arranged in the front courtyard, the backyard is dwelt by the host and the immediate family members, the front courtyard must be lower than the backyard, the eaves of the principal room must be higher than those of the side ones and the height of both the buildings and the groundwork is higher along the axis. Obviously, the spatial order of rooms serves the ethnic order in that the symmetrical arrangement, the clearly-distinguished front yard and backyard and the rooms themselves compose the internal network. Such a combination of insufficiency and excessiveness as well as yin and yang forms a clear hierarchical order including the superior and the inferior, the principal and the subordinate as well as the old and the young, reflecting profound sense of social institutions (Figure 7).

4.3 Spatial Layout of the Main Courtyard

A two-storey front view building, lying in the middle part of the whole structure, can reflect the high rank of the host. This building has a width of five bays, among which four bays on both sides are 270cm wide and the one at the entrance is 320cm. Two bays on the western side are for the steward and the two ones on the eastern side are used as the financial office. This front view building is the second highest one in the whole courtyard with its height of 700cm. There is a lookout deck on the second floor and a corridor on the first floor facing the inside courtyard. In addition, there is a screen door between the entrance and the front yard, leaving only two paths on both sides for passage. Such a layout allocates passages reasonably as well as guarantees the privacy of the hall and the side rooms. Once entering the courtyard, family members step from the bluestone board between the foundation of the front view building and the wings to the foundation of the wings below the hanging roof, and then to the space covered by the extended eaves. In this way, the grey space created by the hanging roofs is reasonably employed to prevent the family members from getting wet and dirty when it snows or rains. The screen door is open only at meetings, weddings, funerals and receptions for distinguished guests to show respects for them as well as to make it convenient for guests to get through (Figure 8).

Two wings with a lean-to roof face each other behind the front view building. The wing rooms between the hall and the principal room has the same width of 600cm. Because they are mainly used for receiving guests, the wing rooms are lower than those in the backyard and are actually the lowest ones surrounding the main courtyard. The embedded entrance of the wing rooms increases the spaciousness of the bedroom and reduces the area of the internal hall, making them having more closed space.

As the main reception area, the hall in the main courtyard has the greatest depth in the whole main courtyard. In addition, the screen door is employed to separate the front hall from the lounge, creating a decent reception area and double-passage space.

There is no other connection between the back wing rooms and the hall with connected eaves and deep extended eaves, hence forming the long and narrow backyard as a more private space for family members' life.

The hall in the very end, having the highest status among all, is mainly for the older generation and the middle three bays are taken on as the middle hall for sacrifices. Therefore, the bedrooms at both ends are quite small. There are stairs on one side leading to the second floor, which is dedicated to the memorial tablets of the ancestors.

4.4 The Form Characteristics of the Side Courtyard

As the supplementary part of the main courtyard, two courtyards connected with the main one are mainly for the younger generation or servants. The three courtyards are connected with each other through doors. Two entrances are located between the front view building and the wing rooms as well as the principal room and the wing rooms.

The buildings in the eastern side courtyard have similar height and depth to those in the main courtyard. With the width of 1000cm, the main buildings in its axis have the width of three bays. Here, the principal room and the wing rooms are the younger generation's bedrooms and the second floor of the principle room is for those unmarried daughters. The hall is for meetings of family members or sometimes for weddings as well (Figure 9, Figure 10).

The buildings at the very eastern end are not so high and deep as those in the other two courtyards, mainly for servants, handymen and craftsmen. Therefore, they have more flexible functions for divide spaces and use function.

5. Conclusion

The spatial form of courtyards embodies a lot for exploration and appreciation as the soul of Chinese traditional architecture. In spite of its simple form, Chinese traditional courtyard architecture exerts its advantages with its multi functions (Liu, 2007). As a typical representative of Guanzhong traditional courtyard houses, Tang Courtyard has the following characteristics: having a centripetal layout; each courtyard composed of indoor space, outdoor space and grey space. In addition, Tang Courtyard and all the other typical residential houses in Guanzhong are characterized by strict hierarchical order, definite axis relations, narrow and long courtyard space as well as the longitudinal changes in space.

Tang Courtyard, an important part of Guanzhong residential houses, provides important references and investigation subjects for studies on the architectural form, courtyard form, door and window form of Guanzhong traditional residential houses and offers precious materials for our learning of architecture, culture, sculpture, painting and folk custom in Ming and Qing periods. Based on our investigation and comprehensive analysis on Tang Courtyard and the folk houses in Guanzhong, we intend to offer first-hand materials for our studies on Guanzhong residential buildings and folk culture, to provide references for the creation of new courtyard patterns and vernacular architecture conforming to the geographic features of Guanzhong Plain and actively promote the local special features of modern architectural design and cultural lineage in the current situation of creating new socialist countryside.

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Figure 1. Guanzhong Landform
(taken by the author)



Figure 2. Guanzhong Residential House (taken by the author)



Figure 3. The Facade of Guanzhong Residential House
(taken by the author)



Figure 4. Guanzhong Residential Courtyard
(taken by the author)



Figure 5. Tang Courtyard
(taken by the author)



Figure 6. Tang Courtyard
(taken by the author)

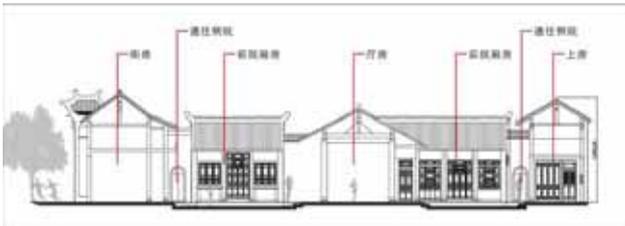


Figure 7. The Side Face of Tang Courtyard
(drawn by the author)

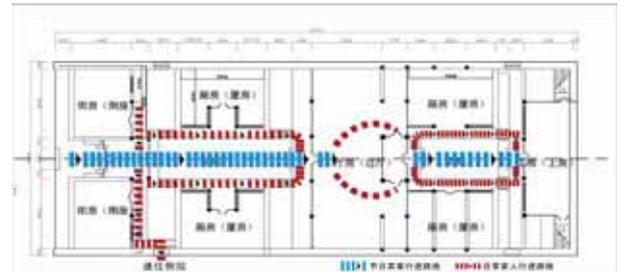


Figure 8. The Traffic of the Main Yard of Tang Courtyard
(drawn by the author)

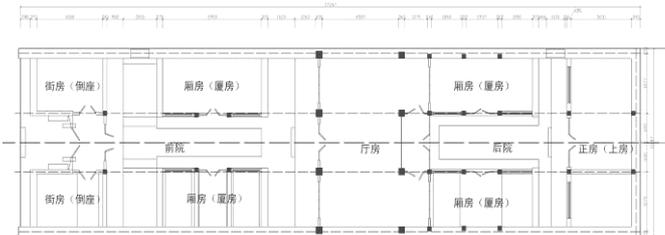


Figure 9. The Spatial Organization of the Side Yard of Tang Courtyard
(drawn by the author)



Figure 10. The Side Yard of Tang Courtyard
(taken by the author)



The Impact of Content-Based Language Instruction on EFL Students' Reading Performance

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Abstract

Reading has always been regarded as an essential skill in foreign language learning, especially for college students. According to previous studies, relative effectiveness is found between the use of Content-Based Language Instruction (CBLI) and reading comprehension. CBLI has been found effectively in developing students' reading comprehension through the topics chosen grounded academic discipline-based and the systematic use of content-based instructional strategies. However, CBLI has been a controversial issue because teachers lack specific linguistic knowledge and skills to help students deliver a language focus on reading. Since the utilization of CBLI is a controversial issue, the purpose of this study attempted to investigate the effect of CBLI on EFL (English as a Foreign Language) students' reading comprehension through the design and implementation of a content-based literature curriculum. Subjects in this study were 101 sophomores majoring in English at I-Shou University in southern Taiwan. *T*-test, ANOVA, and semi-structured interview techniques were used to examine students' attitudes and effect of CBLI on reading performance. Results indicate that the utilization of content-based language instruction in the literature class could enhance students' reading comprehension as well as critical thinking ability. Interview results further support the experimental findings, providing in-depth information about the conditions of CBLI use. Based on the research results of this study, pedagogical implications and suggestions for future study are discussed.

Keywords: Content-based language instruction, EFL reading comprehension, Literature course

1. Introduction

In recent years, increased attention has been given to the teaching of reading in foreign language acquisition. Over the years, numerous approaches to teach reading and to examine the effectiveness of these approaches have appeared. According to previous studies, relative effectiveness is found between the use of content-based language instruction (CBLI) and reading development (Crawford, 2001; Glenn, 2005; Kasper, 1994a; Kasper, 1994b; Kasper, 1995b; Kasper, 1997a; Kasper, 1997b). Many studies reveal that CBLI results in not only content learning (Andrade & Makaafi, 2001; Daryl, 2006; Kasper, 1994a; Winter, 2004), but also improving students' language acquisition (Daryl, 2006; Diaz et al., 2002; Kasper, 1994a; Kasper, 1997a; Smoke & Haas, 1995), as well as students' reading comprehension through the topics chosen grounded academic discipline-based (Kasper, 1994a; Kasper, 1995a; Kasper, 1995/96; Kasper, 1997a) and the systematic use of content-based instructional strategies (Glenn, 2005; Kasper, 1995b). Just like the other teaching approaches, the perspective toward the effect of CBLI is also various. The doubt that teachers may lack specific linguistic knowledge and skills to help students deliver a language focus on reading is the main concern (Creese, 2005).

1.1 Purpose of the Study

Since the utilization of CBLI in enhancing EFL students' reading comprehension is a controversial issue, the purpose of this study was to investigate the effect of CBLI on EFL students' reading performance. More specifically, four research

questions were proposed as follows:

- 1). Can the application of content-based instruction enhance students' general English reading comprehension?
- 2). Can the application of content-based instruction enhance students' academic English reading comprehension?
- 3). Is there a significant difference among students with different proficiency levels on the improvement of general English reading ability?
- 4). What are students' attitudes toward CBLI?

2. Literature Review

2.1 Rationale of CBLI

The term of content-based language instruction refers to an approach to integrate content and language learning (Brinton, Snow & Wesche, 1989). CBLI is supported by the second language acquisition research. One central principle which supports the theory of second language acquisition is that "people learn a second language more successfully when they use the language as a means of acquiring information, rather than as an end in itself" (Richards & Rogers, 2005, p. 207). According to Met (1991), natural language acquisition occurs in context, which is never learned divorced from meaning, and CBLI provides a context for meaningful communication to occur. To further understand the essential characteristics and instructional implications of CBLI, three models of CBLI, including the theme-based model, the sheltered model, and the adjunct model, as well as its effect on reading enhancement are discussed below.

2.2 Models of CBLI

2.2.1 Theme-Based Model

Theme-based language course is structured around topics or themes. Major principles underlying theme-based model contain automaticity, meaningful learning, intrinsic motivation, and communicative competence (Brown, 2001). Its primary purpose is to help students develop second language competence within specific topic areas. The topics chosen can be several unrelated topics or one major topic. Language instructors are responsible for language and content instruction (Brinton et al., 1989). The theme-based model is mainly employed in adult schools, language institutions, and all other language programs. It is suitable for low to advanced learners.

2.2.2 Sheltered Model

Sheltered instruction is an approach to use second language acquisition strategies while teaching content area instruction. In the sheltered model, an academic subject matter is taught by content teachers in content areas, such as science, mathematics, history, or literature via using language and context to make the information comprehensible. Characteristics of sheltered instruction include comprehensible inputs, warm and affective environments, high levels of student interaction, student-centered, hands-on tasks, and comprehensive planning (Echevarria & Graves, 2003). In the sheltered model, content courses are taught in the second language by a content area specialist to a group of ESL learners having been grouped together (Richards & Rogers, 2005) or a language teacher with content-area knowledge (Gaffield-Vile, 1996).

2.2.3 Adjunct Model

Adjunct model constitutes a more sophisticated pattern for the integration of language and content. It aims at connecting a specially designed language course with a regular academic course. In the adjunct model, students enroll in two linked courses simultaneously—a content course and a language course. The content instructor focuses on academic concepts while the language instructor emphasizes language skills using the content-area subject as a background for contextualizing the language learning process (Brinton et al., 1989). The rationale of this model is that the linked courses can assist students developing academic coping strategies and cognitive skills which can be transferred to other disciplines. The adjunct model is suitable for high intermediate to advanced levels (Brinton et al., 1989).

In summary, these three models of CBLI share a number of common features. First, authentic tasks and materials are used in the three models. Second, they all share the principle that helps students deal with the content materials. They also differ in several ways, including the course aim and learning objectives, instructor's roles, students' proficiency levels, and evaluation approaches.

2.3 Researches on Content-Based Language Instruction and Reading Comprehension

There is abundant evidence which is supportive of CBLI in promoting EFL students reading comprehension; the major reason is the use of academic discipline-based topics as content in CBLI. A study conducted by Kasper (1997a) was to assess the effect of CBLI and the subsequent academic performance of ESL students. Subjects were 152 ESL students at Kingsborough Community College – 73 students were assigned to the experimental group and 79 to the control group. The major difference between students in these two groups was in the nature of the textual materials used in instruction. The material that the content-based group used was topic-related to their academic discipline; while the material that the

non-content-based group used was not grounded in any specific academic disciplines, but rather covered a variety of topics. The result indicated that students in the experimental group obtained significantly higher average scores than did students in the control group, with the overall average score of 81% for the experimental group and 68% for the control group. As to the subsequent effect of CBLI, after completing the first year's ESL course, the students in the subject sample went on to a number of different classes taught by a larger pool of instructors than was present at their first year. In all four semesters of this study, the result indicated that students in the experimental group obtained significantly high grades on the reading assessment examination than did students in the control group, with the overall average score of 75% for the experimental group and 67% for the control group. The result suggests that students accumulated adequate background knowledge on topics when they continually dealt with academically-oriented topics. The accumulation of the background knowledge could facilitate the development of reading comprehension. These findings are closely supported by Kasper's (1994a, 1995a, 1995/96, 1997a) and Parkinson's (2000) studies, showing that students' reading comprehension can be improved by using academic discipline-based topics. Through the discipline-based topics, students become aware of how to construct meanings from information stored in their memory, how to extract relevant information from the larger text contexts, and how to filter out redundant or irrelevant information. The conclusion of those studies is that the use of academic discipline-based topics as content in CBLI can accumulate students' background knowledge, construct schemata, increase metacognition of the reading process, and lead to the efficient use of reading comprehension strategies.

Besides the factor of using academic discipline-based topics as content contributing to the effect of CBLI on students' reading comprehension, abundant evidence shows that students' development of reading comprehension is related to the systematic use of content-based instructional strategies. A study conducted by Glenn (2005), the purpose of her study was to examine the effect of English literacy proficiency, academic English literacy, and content literacy of 30 Spanish-speaking students enrolled in a bilingual 10th grade Global Studies course in a public school in New York City through the sheltered content approach. The result indicated that students' English language reading score increased with the mean score of the post-reading 65.87, comparing to the mean score of the pre-reading 18.4. The result also showed the gains on students' academic English reading with the mean score of pre-reading 33.65, comparing to the mean score of post-reading 58.2. Glenn concludes that curriculum delivered through systematic use of content-based instructional strategies, including explicit reading strategies instruction, explicit language objective introduction, explicit core vocabulary introduction, activating background knowledge and schemata, prior knowledge developing, scaffolded modified instruction through well-structured interaction and activities, and the use of authentic reading materials, helps students contextualize concepts and expand their reading skills. Such result is coherent with the previous study (Kasper, 1995b), indicating that the systematic use of content-based instructional strategies contributes to students' reading comprehension.

Despite the positive effects on CBLI, some scholars disagree that CBLI is an effective approach if teachers lack specific linguistic knowledge and skills to help students deliver a language focus on reading. A study done by Creese (2005) indicated that reading comprehension working in the content classroom is given little status because teachers lack specific linguistic knowledge and skills on CBLI. Data from a year-long ethnography in three London secondary schools was used to explore how teachers and students managed the content and language interface in a subject-focused classroom. The result showed that students often rejected a focus on the metalinguistic function, which was not relevant to subject learning. The major reason is that teachers are often unclear about the relationship between form and function in language nor make it working in the subject classroom, which results in CBLI as an ineffective approach in students' reading comprehension development. In fact, in the study conducted by Pawan (2008), data were derived from 33 content-area teachers while they were pursuing professional development in an American university classroom over 32 weeks. Survey findings in the study indicated that 38.5% of the content-area teachers felt that collaboration with their ESL teacher counterparts was necessary in CBLI because they do not feel equipped to undertake English language instruction and thus they rely on ESL teachers to provide assistance. In conclusion, those studies reveal that teachers' lack of linguistic knowledge and skills results in the ineffectiveness of CBLI on students' reading comprehension. Consequently, the present study aimed at examining the effect of CBLI on EFL students' reading comprehension via the employment of CBLI. It is assumed that EFL students' reading comprehension can be enhanced effectively after CBLI.

3. Methodology

3.1 Subjects

The subjects in this study were 101 sophomores including 30 males and 71 females majoring in English at I-Shou University in southern Taiwan. Most subjects received formal English instruction for at least seven years. The subjects took English literature as a required course in the Fall 2008 academic year. Most of the subjects had received formal English instruction for at least seven years before conducting the study. The subjects were grouped into high, intermediate, and low level learners based on the simulated TOEFL reading scores; there were 50 items in total and subjects could get two points for each correct answer. The test results ranged from 10 to 82 points, with the mean of 44

and the median of 44. Thirty-six subjects (35%) whose scores ranged from 50 to 82 were labeled “high”; 33 subjects (33%) with scores from 48 to 38 were labeled “intermediate,” and 32 subjects (32%) with scores from 36 to 10 were labeled “low.”

3.2 Learning Contexts

Subjects in the present study received a 100-minute instruction per week, lasting for 14 weeks. In order to investigate CBLI on students’ reading comprehension, four short stories including *A Rose for Emily*, *The Chrysanthemums*, *Barn Burning*, *The Lottery*, and one poem *The Sick Rose* were selected from *An Introduction to Fiction, Poetry, and Drama* (Kennedy & Gioia, 2006) as the teaching materials. The reading curriculum, mainly applying the sheltered model, including course aims, objectives, and three steps of teaching approaches is elaborated as follows.

3.2.1 Course Aims

The aims of the reading course were divided into two parts: content and language aims. The content aims included that (1) students could develop reading ability as well as lay the foundation for approaching and appreciating literature; (2) students could identify basic elements in reading literature, and (3) students would become interested in the literature world. The language aim included that students could read effectively and develop better reading strategies.

3.2.2 Course Objectives

Based on the course aims, course objectives were made including (1) developing background knowledge of content; (2) acquiring key vocabulary of content; (3) identifying literary elements such as the plot, setting, themes and styles in order to enhance students’ reading comprehension; (4) arousing interest in content reading. Language objectives included (1) predicting the meaning of and rapidly solving unfamiliar words by using different types of cues; (2) reading for information, including identifying the topic, main ideas, stated and implied messages, and reading for details; (3) reading interpretatively including interpreting the author’s intention and attitude, and making critical thinking and judgments, and (4) acquiring reading comprehension strategies.

3.2.2.1 Pre-Reading Stage

At this stage, the course designed focused on making connections with students’ background knowledge and prior learning experiences, and developing their academic vocabulary. Therefore, reading comprehension strategies in this stage were to stimulate students’ interests through identifying their background knowledge and incorporating it into new information. Involved activities contained (1) *author’s life* -- students were arranged in a small group to do research about the author’s life and work, and (2) *prediction* -- students predicted the content based on the title.

3.2.2.2 During-Reading Stage

At this stage, the focus was to help students be aware of the meaning of the text. Reading comprehension strategies at this stage were to use different types of cues to solve unfamiliar words, parse complicated sentences, reread, annotate, and summarize strategies. Involved activities were employed as follows: (1) *listening centers* -- teachers offered the audiobook to students to listen; (2) *read alouds* -- teachers asked students to read for alternation. After students read aloud, teachers gave feedback on students’ pronunciation and emotional expressions, and (3) *scrambling exercise* -- teachers extracted the segment of the text and cut it into pieces, and then asked students to put the scrambled sentences in the right order.

3.2.2.3 Post-Reading Stage

At this stage, students would try out new knowledge, and practice new skills supported by the teacher and peer feedback, leading to mastery. Activities designed aimed to practice and apply the language skills and content knowledge, which called upon students to integrate listening, speaking, and reading. Involved activities were prepared as follows: (1) *role-playing* and (2) *seeing a movie*.

3.3 Instrumentation and Procedure

3.3.1 General Reading Comprehension Test

A pre-reading test was conducted during the first and the second week of the course to figure out the subjects’ reading proficiency level before instruction. After 14-week training, a post-reading test with the same test items was employed to investigate the learning outcomes. In consideration of a standardized language proficiency test with high validity and reliability (Perkin et al., 1989; Read, 2000), a simulated TOFEL reading test was adopted to examine students’ general reading comprehension.

3.3.2 Academic Reading Comprehension Test

An academic reading comprehension pre-test was conducted during the first and the second week of the course to examine the subjects’ academic reading proficiency level. After 14-week instruction, a post test was employed to investigate the learning outcomes. The academic reading comprehension test produced by the researcher was used to

measure students' literal, interpretive, and critical reading comprehension. Fifteen multiple-choice items were designed based on a short story "Powder", written by Wolff Tobias. To reach content validity, the items of the test were evaluated by two professors in the subject matter area.

3.3.3 Semi-Structured Interview Technique

In order to explore in-depth information regarding subjects' attitudes toward the conditions of CBLI use, a semi-structured interview was employed in the study. The researcher randomly selected five advanced, intermediate, and low readers in the population pool as the interviewees to answer eight predetermined questions, which mainly focused on the subjects' past, present experiences, and their opinions of CBLI.

3.4 Data Analysis

Both qualitative and quantitative approaches were applied to evaluate four research questions: (1) Can the application of content-based instruction enhance students' reading comprehension? (2) Is there a significant difference among students with different proficiency levels on the improvement of general reading ability? (3) Is there a significant difference among students with different proficiency levels on the improvement of academic reading ability? (4) What are students' attitudes toward CBLI? A paired-sample *t*-test was used to compare the difference between pre- and post-tests of the general reading comprehension tests and the academic reading comprehension tests after the use of CBLI. The .05 level of confidence was used as the criterion level to determine the significant difference. Then, ANOVA was employed to investigate whether students' different proficiency levels have significant differences on their reading outcomes after employing CBLI. Finally, the semi-structured interview was conducted to transcribe, classify, and synthesize subjects' perceptions toward CBLI use.

4. Results

4.1 Research question 1: Can the application of content-based instruction enhance students' general English reading comprehension?

To examine the effect of CBLI on students' general English reading comprehension, a paired-sample *t*-test was employed to investigate if there is a significant difference between the pre- and post-test administered in this study. As shown in Table 1, the mean score of the pre-test was 43.9 ($SD = 13.8$). After 14-week instruction, the mean increased to 56.2 ($SD = 12.6$). The results demonstrate that there was a statistically significant difference between the pre- and post-test ($p < .05$). In other words, the *t*-test result shows that the subjects' general English reading comprehension scored significantly higher in the post-test than that in the pretest. It is suggested that CBLI had a prominent effect in increasing students' general English reading comprehension.

[Insert Table 1 here]

4.2 Research question 2: Can the application of content-based instruction enhance students' academic English reading comprehension?

To examine the effect of CBLI on students' academic English reading comprehension, a paired-sample *t*-test was employed to determine if there is a significant difference between the pre- and post-test. As shown in Table 2, the pre-test mean score for academic English reading comprehension was 8.2 ($SD = 2.2$); the mean increased to 9.1 ($SD = 1.7$) after 14-week training. The result reveals that there was a significant difference between the pre- and post-test scores ($p < .05$). The *t*-test shows that the subjects' academic English reading comprehension scored significantly higher in the post-test than that in the pretest.

[Insert Table 2 here]

4.3 Research question 3: Is there a significant difference among students with different proficiency levels on the improvement of general English reading ability?

A one-way ANOVA was conducted to investigate if there is a significant difference among students with different proficiency levels on general English reading development. As shown in Table 3, there was a significant difference among the three levels in general English reading post test, [$F(2, 98) = 21.007, p = .000$].

[Insert Table 3 here]

Scheffe post hoc comparison procedure was further employed to examine multiple comparisons among the three-level means. As shown in Table 4, the result reveals that the high level learners ($M = 65.22, SD = 12.33$) scored significantly higher than intermediate level learners ($M = 53.21, SD = 10.25$) and low level learners ($M = 49.25, SD = 8.88$) in the post-test scores. However, low level learners showed the greatest improvement on the reading scores (mean for pre-test = 28.38, $SD = 7.59$; mean for post-test = 49.25, $SD = 8.88$, with the mean difference = 20.87), followed by the intermediate level learners (mean for pre-test = 43.09, $SD = 2.74$; mean for post-test = 53.21, $SD = 10.25$, with the mean difference = 10.12), and then followed by the higher level learners (mean for pre-test = 58.39, $SD = 7.02$; mean for post-test = 65.22, $SD = 12.33$, with the mean difference = 6.83). Such results indicate that students who had the poorest

reading ability seem to get the most benefits from content-based language instruction.

[Insert Table 4 here]

4.4 Research question 4: What are students' attitudes toward CBLI?

According to the interview results, most participants hold positive attitudes toward the teaching of explicit reading comprehension strategies to facilitate their reading comprehension. For example, 13 out of 15 interviewees (86%) reported that content-based instruction helped them comprehend the content of the stories with fewer difficulties. The major reason is that students used to look up the unknown words in the dictionary when reading, but now they realize how to use different types of cues to acquire the meanings of unfamiliar words, such as analyzing words into various components from their roots, affixes, and suffixes, or figuring out word meanings based on their sound. Besides, students used to focus on grammar and sentence structure when reading, but now they know how to use contextual clues to read for general gist and main idea, not for details. Students even learn how to use information in the text to predict upcoming information to better comprehend the content of the story after teaching the reading strategies. According to students' perceptions, the results suggest that students' reading comprehension is improved through the teaching of explicit reading comprehension strategies.

Furthermore, 14 out of 15 interviewees (93%) agreed that a variety of activities done in the literature course helped them comprehend the story, lowered their anxiety, and gave them more confidence to finish reading the whole story. To illustrate more specifically, some participants expressed that they enjoyed the activities done in the literature class, especially doing the scrambling exercise for *The Sick Rose*. From the process of problem solving, students had a clear framework of the poem. Besides, the implied meaning of the poem and the author's point of view and tone were understood through the activity. Besides, students felt that the activity, such as watching a movie after reading approximately half of the short stories not only clarified and reinforced the main idea of the story, but also lowered their anxiety of heavy-load reading, so that they had more confidence to finish and understand the story by themselves. To sum up, the results show that students' reading comprehension is improved through a variety of activities done in the literature class.

In addition, it is found that some of the techniques characterizing sheltered instruction model of CBLI enhance students' reading comprehension and content understanding. Most students felt that the techniques the teacher used for lecture delivery helped them comprehend the story. Those techniques included slower speech, using simple sentence structure, building background knowledge to connect with students' learning experiences, and comprehensible inputs. Besides the gains on students' reading comprehension through the teaching of explicit reading comprehension strategies, comprehensible inputs, and a variety of activities done in the literature class, many psychological and pedagogical benefits, e.g., gaining critical thinking, self-confidence, high motivation, and low anxiety, are also found based on students' feedback.

Though most subjects hold positive attitudes toward the utilization of CBLI, there are still some voices against such an instruction. For example, some minority students reported that it is time-consuming when the complex core concepts were introduced in English. Those complex core concepts should be explained in Chinese with few words, but it might take more time for teachers to use different expressions to make students understand in English. In conclusion, a small group of students are against using CBLI because it is time-consuming to deliver some complex concepts in English instead of Chinese language.

5. Discussions and Implications

The purpose of this study was to investigate the effect of CBLI on EFL students' reading development through the design and implementation of a content-based literature curriculum. To examine students' attitudes and effect of CBLI on reading comprehension, *t*-test, ANOVA, and semi-structured interview techniques were used. According to the research results, students' general and academic English reading comprehension were improved via CBLI. As found from the interview results, this enhancement was achieved by the use of content-based instruction strategies, which include (1) the explicit instruction of reading comprehension skills; (2) teacher's comprehensible inputs, and (3) a variety of activities used in a meaningful context. Such results consist with the previous studies (Glenn, 2005; Kasper, 1995b), showing that explicit reading strategy instruction via the content area, comprehensible inputs, and activities done in a meaningful context contributes to the development of English reading comprehension. Those explicit reading comprehension strategies provide students with a concrete basis to enhance their reading comprehension. More specifically, the techniques used to deliver the content information contribute to comprehensible inputs, which facilitate students' understanding of the content. Based on the results, there is a need for teachers to modify their lecture delivering in order to make the content understandable for EFL students while promoting their English reading development. For example, teachers can use techniques such as slower speech and clear pronunciation, use of visuals and demonstrations, scaffolded instruction, targeted vocabulary development, and connections to student experiences to make content comprehensible (Echevarria & Graves, 2003). This practice is highly beneficial and should be encouraged

further within the curriculum design.

Second, regarding the differences among high, intermediate, and low students on general English reading comprehension, the finding of this study demonstrates that students with the low reading ability have the greatest improvement compared with high proficient level students. Such result supports the previous study (Glenn, 2005), indicating that poor readers benefit more on reading improvement than good readers. One reason to this effect could be explained that students with high reading ability were already good at using these reading comprehension strategies; they might not benefit a lot via the teaching of explicit reading comprehension strategies. However, students with low reading ability benefit more from CBLI because such an instruction might arouse students' awareness of using appropriate strategies in reading process and further improve their reading comprehension (Dole et al., 1991).

Third, although students' reading comprehension was the main focus of this study, the gains of students' critical thinking ability were also found in this study. CBLI has been regarded as an effective approach to improve students' language skills and develop critical thinking as well (Chapple & Curtis, 2000; Huang, 2003). The interview results of the study confirm that students made great gains in analytical and critical thinking ability and develop their language skills by using content-based language instruction, showing that students gain cognitive development via involving in a variety of thinking processes in a CBLI program. An additional benefit in this CBLI course was the increase of students' confidence, high motivation, and low anxiety in language learning. Such interview results are coherent with the previous studies (Stoller, 1999), indicating that many psychological and pedagogical benefits are promoted by utilizing CBLI.

Finally, some students reported that they experienced difficulties when some complex concepts were explained in English, even though the teacher had tried hard to make students understand in different ways. It is suggested to use native language in class for an alternative solution to the problem.

5.1 Limitations of the Study

Although the use of CBLI is a factor that contributes to the improvement on EFL students' general and academic English reading comprehension, there are several limitations in the research design. First, the subjects were only 101 English majors at I-Shou University, who might have a higher level of English proficiency and more opportunities to practice English than non-English majors. Therefore, the results of this study might not be generalized to all university students. Second, the genres of the reading selections were restricted to short stories and poems; as a result, the research findings may not be generalized to other reading genre, such as drama, fiction, etc. Third, this study was conducted over a short period of time, so the findings may be different from those of a similar study carried out over a long period. Finally, many other factors, such as the subjects' genders and individual differences, social background, and motivation were not taken into considerations. Thus, in interpreting the results, we should also bear in mind that those factors might have affected students' reading performance. In future research, it is recommended that larger and randomized subjects with other non-English majors or different educational levels should also join in the research, in order to increase the level of generalization and get a clearer picture of the effect of CBLI on EFL students' reading comprehension.

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Table 1. Pair-sample t-test results for students' general English reading performance

General English Reading Performance	M	SD	t	p
Pre-test	43.9	13.8	- 6.5	.000*
Post-test	56.2	12.6		

Note: * p < .05, N=101

Table 2. Pair-sample t-test results for students' academic English reading performance

<i>Academic English Reading Performance</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Pre-test	8.2	2.2	- 4.9	.000*
Post-test	9.1	1.7		

Note: * $p < .05$, $N=101$

Table 3. Results of ANOVA among high, intermediate, and low groups on general English reading scores

<i>General English Reading Performance</i>	Sum of Squares	<i>df</i>	Mean Squares	<i>F</i>	<i>p</i>
Post-test Scores					
Between Groups	4770.6	2	2385.28	21.007	.000*
Within Groups	11127.7	98	113.548		
Total	15898.3	100			

Note: * $p < .05$, $N=101$

Table 4. Scheffe post hoc test for students' proficiency level and general English reading performance

Level	<i>N</i>	Pre- <i>M</i> (<i>SD</i>)	Post- <i>M</i> (<i>SD</i>)	Level	Mean Difference	<i>p</i>	Scheffe
H	36	58.39 (7.02)	65.22 (12.33)	I	12.01	.000*	H>I
				L	15.97	.000*	H>L
I	33	43.09 (2.74)	53.21 (10.25)	H	-12.01	.000*	I<H
				L	3.96	.329	I>L
L	32	28.38 (7.59)	49.25 (8.88)	H	-15.97	.000*	L<H
				I	- 3.96	.329	L<I

Note: $N=101$; * $p < .05$. H=High Level Learners. I= Intermediate Level Learners. L= Low Level Learners.



Adaptation Research on the Flow of College Teachers and Social Economic Development in Xinjiang

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Abstract

The flow of college teachers is an important part of college staff construction. The demands for higher education by Xinjiang's social economic development go to the flow of college teachers indirectly. Based on an analysis on the basic condition of Xinjiang's social and economic development as well as a retrospect on the policies on the harmonious development of higher education and regional economy there, this paper puts forward some strategies on how to adapt the flow of college teachers to the social economic development in the new situation.

Keywords: Xinjiang's social and economic development, Policy efforts, Flow of college teachers

1. The Basic Condition of Xinjiang's Social Economic Development

1.1 Economy to Develop Steadily

In 2008, Xinjiang's social economy achieved steady development, its GDP reaching 420,341,000,000 yuan, up 11.0% over that of the previous year, and maintaining six successive years' double-digit growth (Statistical Communique on the National Economy and Social Development of Xinjiang in 2008). Such a constant and rapid economic development has offered a solid economic basis as well as strong demands for educational development in the first 20 years of the 21st century. Therefore, in order to upgrade its national economy and social development, Xinjiang is expected to take advantage of the favorable macro environment for economic development to effectively implement the strategy of developing Xinjiang by relying on science, technology and talents, to further accelerate educational development, to improve the quality of college staff construction and therefore to improve local people's education as well as the rapid growth of local economy.

1.2 Industrial Structure to be Adjusted and Upgraded

The first 20 years of the 21st century will witness a speed-up in the adjustment and upgrade of China's industrial structure. Lying in the medium term of industrialization, China still relies on the secondary industry as its main drive for economic development in a long run. Seen from the variation of GDP composition of three industries, by 2020, the primary industry will be lowered to about 7%; the second industry is mainly devoted to structure adjustment and upgrade, maintaining about 50% of the total; the tertiary industry will grow at a higher speed, reaching 10% of the total, hence the department with the most remarkable variation in industrial structure of all.

Ever since the reform and opening up, the conversion process of Xinjiang's economic structure has lagged far behind that of the east as well as the whole nation, hence having a low level of industrial structure, poor comparative benefit, especially laggard industrialized development. In 2008, the ratio of the three industries in Xinjiang was 16.4: 49.7: 33.9; its GNP per capita (19893 yuan) grew by 8.9%.

1.3 Urbanization to be Further Strengthened

With the speed-up in the transfer of rural labor force, about 300,000,000 to 400,000,000 will enter urban areas from

2010 to 2020 (Center for China Study, 2003). Urbanization will surely bring about mobility and redistribution of population among different areas and occupations. As the basic channel to improve employed staff's cultural and technical qualities as well as to improve the quality of human resources, education and training are critical in promoting labor force mobility.

According to the data from the fifth census of China in 2000, the urbanization rate in Xinjiang was 33.82%, 2.33% lower than the national one; in 2002, Xinjiang's urbanization rate was 33.84%, 5.3% lower than the national one. It is obvious that its urbanization process has been laggard behind the national level and the disparity between the two has even been increasingly wider. Generally, when the urbanization rate of a region reaches 30-50%, its urbanization development enters the speed-up stage, calling for mixed education (National Center for Education Development Research, 2005). Currently, Xinjiang's higher education distribution and structure is in constant improvement. In terms of the current educational development, universities and colleges should be established in the cities with a population over 1,000,000 or with long cultural history in order to conform to their economic development and social stability.

2. Demands for Xinjiang's Higher Education by its Social Economic Development Strategy

2.1 The Relationship between Higher Education and Regional Economy Development

1). Higher Education is the source of power for the development of regional economy. The coordination of higher education and regional development can promote steady, constant and harmonious social and economic development. It was found in Zhaozhang Ren's research on the relativity of economic growth and higher education in Guangdong that there was strong relativity between the two. The correlation coefficient between the number of college graduates and GDP per capita as well as that between the number of college undergraduates and GDP per capita in Guangdong were 0.9159 and 0.9272 respectively (Li, 1999). According to Hongbin Zhao's research on the distribution of Chinese universities, regional GDP per capita at the provincial level had a correlation coefficient over 0.8 with the number of college graduates and undergraduates (Zhao, 2007). In addition, based on the material from Statistical Survey of China in 2004, Yimin Yang ranked GDP per capita and the number of college students out of every ten thousand people and calculated the difference of degree between the two. It turned out that there were 10 with a harmony between higher education and economic development and 5 with a fundamental harmonious development; the eastern area (except for Liaoning) had faster development in economy than in higher education while the middle and western area went to the opposite (Yang, 2006).

2). Sustainable economic development and the rapid conversion of economic structure require educational development to fulfill constantly increasing and varying technical demands. Economic growth is mainly determined by five elements including population growth, the increased amount of capital deposited, the improvement of labor force quality, the improvement of resource allocation efficiency and technical advance (Hu, 2001). It has been long that rapid capital accumulation is a main factor to promote China's economic advance. Since labor force will stop growing after 2010, this advantage will fail to support economic growth any longer. Therefore, China has to accelerate its conversion from the development pattern driven by capital to that driven by knowledge and education, from the growth pattern based on accumulation to the accumulation pattern based on technical changes and human resources investment.

The smooth implementation of China's "Western Development" project and the issuance of No.32 File have shown the great importance attached by central government to Xinjiang's social economic development. Xinjiang is expected to seize this historic opportunity to further improve the scale benefit of its higher education, the positive effects of higher teachers' scale and quality on social economy and therefore to further exert the supportive effects of Xinjiang's higher education on its economy.

2.2 Policy Efforts for the Harmonious Development of Xinjiang's Higher Education and Regional Economy

The central and the autonomous governments have laid down corresponding policies in order to promote the effective development of Xinjiang's social economy, to conform to the demands by the knowledge economy era and to create harmonious development of Xinjiang's higher education and social economy.

It is pointed out clearly in The Eleventh Five-Year Plan for Xinjiang's National Economy and Social Development to implement the strategy of developing Xinjiang by relying on science, education and talents. As a result, greater efforts should be made to improve the quality of higher education and to further optimize the structure of higher education oriented by the market, to implement "Aid-Tibet Disciplinary Construction Plan" as well as "The Plan to Support Universities in Western China", to encourage and attract high-level talents to teach in Xinjiang's universities and to cultivate an array of advanced leaders in different specialties. As for the construction of talents, the principle of sticking to man-orientation and the Communist Party's authority over talents should be followed and the demands by Xinjiang's economic and social development should be based on to cultivate practical talents in multi forms. Through cultivation, training and communication, talent staff with sufficient total amount, reasonable structure and higher overall quality should be constructed by sticking to the combination of increasing the number and the quality of talents.

As is required in The Eleventh Five-Year Plan for Xinjiang's Educational Development, the scientific outlook of

development should play a leading role in education. Education should be given priority to to implement the strategy of developing education by relying on science, education and talents. In addition, talent cultivation should be based on and students should be regarded as the main body in education; talents should be based on and teachers should be the main body in school running. It is estimated that Xinjiang's education will have overall approached the level of moderately developing provinces and cities, the construction of some key specialties organized by universities there will have approached or reached the advanced level and the gross enrollment rate of higher education will reach about 30% by 2015.

3. The Relationship between Xinjiang's Social Economic Development and the Quality of Teaching Staff in its Universities

Budgetary appropriation is the main channel for Chinese universities to get capital currently. Since 1985, according to Decisions on Educational System Reform by the Central Committee of the Communist Party of China, China has conducted great reforms on its educational system, in which grading school running and administration is implemented and the money for higher education should be raised at the levels of central government, provinces and central cities. Due to the imbalance among different areas in geographical conditions, economic and cultural development, there are great differences in raising money for education (Lu, 1999).

In addition, the development of regional economy is closely related to the construction of college staff. A society with developed economy tends to have higher educational input and social economic development has strong demands for that of higher education. In addition, open ideas are beneficial for researches in universities as well as their independent development, drive by which college staff will be surely improved. As a result, these universities and such a society will attract more teachers and their sense of competition will be stronger, hence promoting a reasonable and orderly flow of college teachers.

The effect of government investment in college staff and the relationship between college staff quality and social economic development are shown as follows:

Xinjiang's social economic development has obviously lagged behind the southeastern coastal area. In 2007, its GDP per capita was 15000 yuan, ranking the 14th of the whole nation; the average length of education was 7.34 years, ranking the 12th of the whole nation. During the same period, Beijing had GDP per capita of 50467 yuan, ranking the 2nd of the nation; its average length of education was 10.95 years, ranking the top (China Human Resources R&D Institute, 2008). Of course, the construction of basic facilities in Xinjiang's universities cannot be compared with that of the eastern area. Although the ratio of teachers and students in Xinjiang's universities in 2007 was 14.33, which satisfied the demands of the nation, the scale of its universities needs to be enlarged due to the small scale of its higher education and the increasing demands for higher education nowadays.

4. Strategies for the Flow of College Teachers Based on Xinjiang's Middle and Long-term Development Strategies

4.1 The Influences of Changes in Xinjiang's School Age Population on the Flow of College Teachers

The scale and the proportion of school age population will be constantly lowered, which will be one important feature of China's population conversion in the future 20 years. It is estimated that the total school age population in China will be lowered by 8.8% by 2010 compared with the current data and its proportion in the total population will be lowered from 28.7% to 24.3% compared with 2000; it will be lowered to 20.9% up to 2020.

The decline of both the scale and the proportion of school age population in the future 20 years will exert a series of profound influences on the development of Chinese economic society and education. The decline of school age population scale will lessen the huge pressure from the expansion of educational scale objectively, including improving school running conditions and lessening the resource input pressure in order to improve educational quality.

There will be a decline in Xinjiang's school age population in the future 5 to 10 years (The Eleventh Five-Year Plan for Xinjiang's Educational Development). In spite of the increasing demands for higher education in Xinjiang in the short term, the scale of higher education and college teachers must be controlled to have reform in higher education's connotation, hence helping higher education to step into a new phase centering on quality improvement (National Center for Education Development Research, 2008). Therefore, great efforts should be made to reasonably control the scale of universities, to improve the academic quality of college teachers, to keep an open flow of college teachers and to dismiss those unqualified teachers while attracting advanced ones.

4.2 The Influences of Xinjiang's Industrial Structure Adjustment on the Flow of College Teachers

The development of regional economy is closely related to higher education resources in that regional economy calls for local higher education to offer intellectual resources and technical support and higher education must be in conformity to the demands by regional economy. Accordingly, some adjustments should be made in specialty setting or research directions and new-style talents required by new industries should be cultivated according to the upgrade and

adjustment of regional industrial structure. Reflected in the flow of college teachers, it will involve matching the introduction, cultivation and maintenance of college teachers with the orientation of universities as well as the development of regional economy.

Similarly, new-style college teachers are demanded in order to adjust specialties or research directions as well as to cultivate new-style talents in conformity to new industries. During the flow of college teachers, the introduction, cultivation and maintenance of them should match with Xinjiang's economic development since only those universities serving regional economy are successful ones.

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Table 1. The conversion of Chinese economic structure (Statistical Survey of China, 2005; Wang, 2005)

		2000	2003	2004	2010	2020
GDP per capita		840	1094	1270	1742.2	3252.7
Industrial structure (%)	The primary industry	16.4	14.4	15.2	10.7	7.1
	The secondary industry	50.2	52.2	52.9	54.1	52.5
	The tertiary industry	33.4	33.4	31.9	35.2	40.4
Employment structure (%)	The primary industry	50	49.1	46.9	41.0	34.2
	The secondary industry	22.5	21.6	22.5	24.2	22.4
	The tertiary industry	27.5	29.3	30.6	34.9	43.4

Table 2. Urbanization trends in China

	2000	2004	2005	2010	2020
National urbanization rate (%)	36.2	41.8	43.2	49.2	60.0
Western urbanization rate (%)	28.73		34.20	40.12	52.48

Table 3. Evaluation on the sources for China’s economic growth (%) (Statistical Survey of China, 2005; Wang, 2005)

	GDP	Capital		Labor force		TFP	
	Growth rate	Growth rate	Contribution to economic growth	Growth rate	Contribution to economic growth	Growth rate	Contribution to economic growth
1978-2003	9.4	9.9	63.2	2.5	10.6	2.4	26.2
2000-2003	8.4	10.5	75.0	1.1	5.2	1.6	19.8
2005-2010	8.1	5.6		0.4		2.1	
2010-2015	7.5	5.0		0.2		2.3	
2015-2020	6.8	4.5		0		2.3	

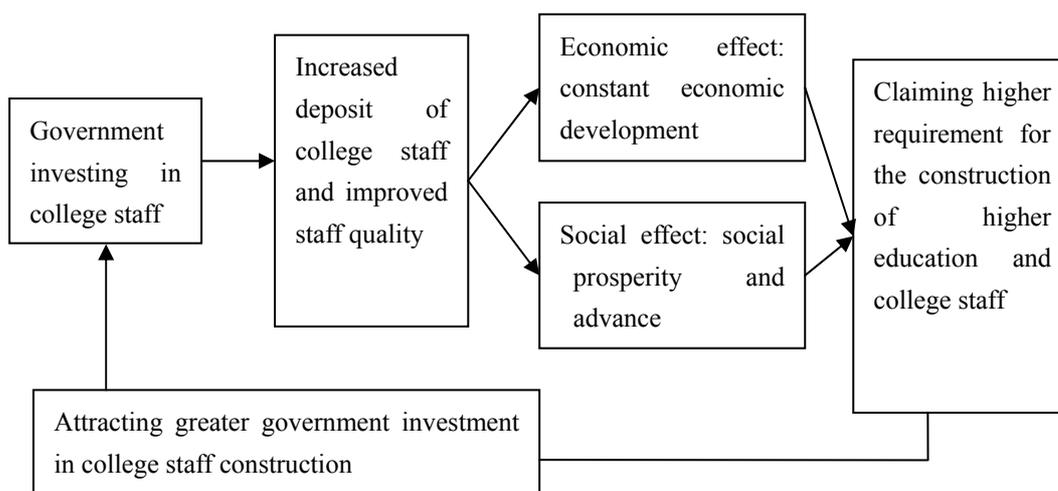


Figure 1. The Effect of Government Investment in College Staff

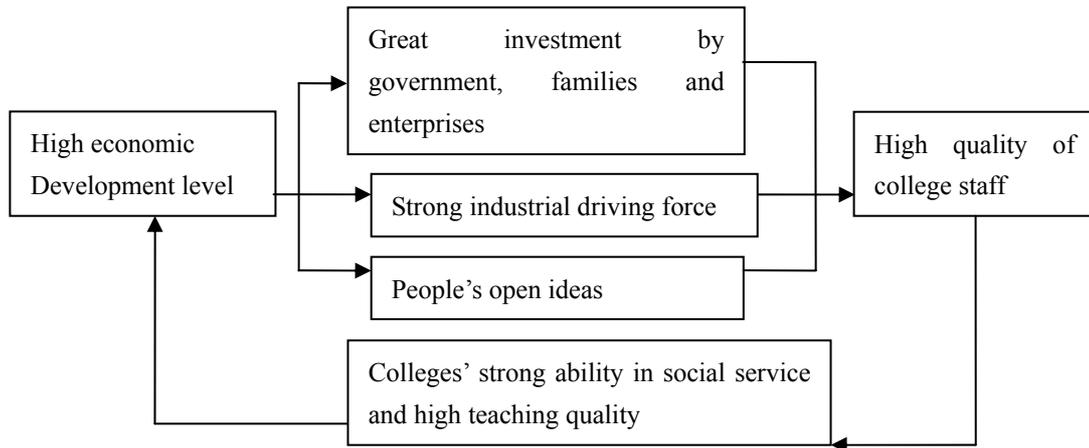


Figure 2. The virtuous Cycle of College Staff Quality and Economic Development

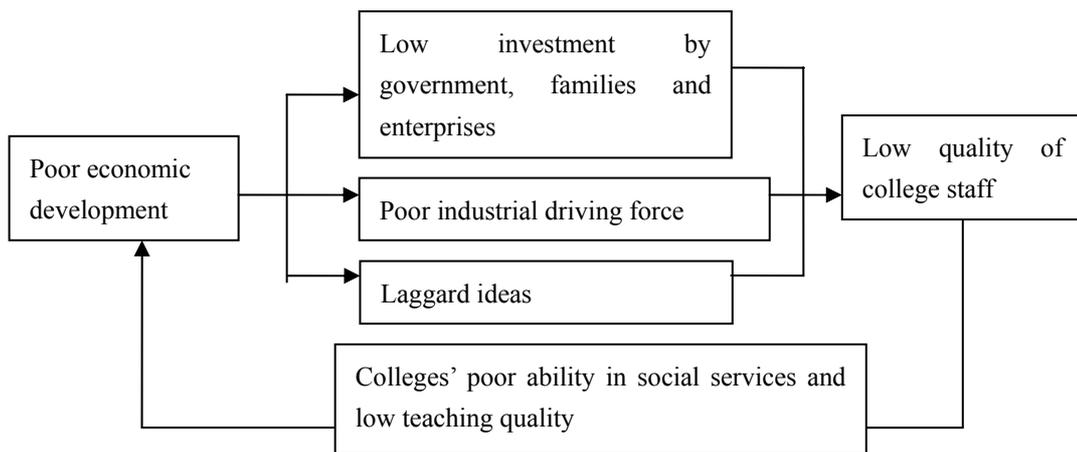


Figure 3. The Vicious Cycle of College Staff Quality and Economic Development



Discourse Coalitions and Consumer Understanding of Organic and Pesticide Free Vegetables in Chiang Mai, Thailand

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Abstract

This paper will demonstrate how discourse coalitions promote and institutionalize regulations, communicating the meanings of certified, alternative agricultural production processes through the labeling of vegetable produce. This analysis introduces the concepts of discourse coalitions as a way to evaluate the power and linkages constituting an alternative agricultural commodity network. The actors constituting these networks will be shown to work as coalitions of actors promoting complementary and competing discursive strategies explains the role of consumer understanding in completing the commodity network. Data for this analysis was derived from a survey instrument used to determine the attitudes and propensities toward the purchase of conventional and alternative vegetables of 320 consumers in the city of Chiang Mai, Thailand. Discourse coalitions are responsible for enacting the relationship between regulatory practice, method of certification, and labeling practices. Effective communication of regulatory practices used in certification can be seen by the level of trust consumers have in the marketplaces and labeling.

Keywords: Discourse coalition, Certified agricultural commodity network

1. Introduction

For many years, there has been controversy over compliance and acceptability of certification policies on organic, pesticide free and pesticide reduced (alternative) agricultural products in Asia (Eischen, Prasertsri, & Sirikeratikul, 2006; Ellis, Panyakul, Vildoza, & Kasterine, 2006; FAO, 2001; Roitner-Schobesberger, 2008; Vandergeest, 2006). Problems in enforcement, oversight, and outright rule-breaking are noted throughout the literature (Roitner-Schobesberger 2008, Eischen, Prasertsri and Sirikeratikul 2006}. There is further evidence concerning problems with compliance. Investigations found that over 10% of certified produce has unacceptable levels of pesticide residue because of mismanagement and poor communications between ministries and farmers (Songpol, 2005:37; Vicha, 2007:77, 80). On the surface, the problem appears to be a lack of understanding throughout the entire organic agricultural network in Thailand. There is uncertainty as to the meaning of what constitutes organic, safe, or healthy products in the marketplace. Certified, alternative agricultural production processes are regulated by socially constructed discourse emerging from consumer needs, coalitions of concern citizens, and the authority of certifying bodies. Uncertainty arises from the propagation of contradictory organic narratives. For some consumers, organic produce means that the product is safe and healthy for consumption. In other cases it means the reduction or the elimination of chemical pesticides. Additionally, meanings such as the preservation of biodiversity, fair trade, and social welfare are also used to define alternative agricultural processes.

Alternative agriculture in Thailand presents a challenge in understanding the discourse of policies, narratives, and other social constructions. Consumer understanding of the meanings and values behind labeling drives the market to favor particular regulatory strategies. The label is the medium through which consumers identify an agricultural production process; consumer understanding controls the social and political power that flows through agricultural commodity networks. Discourse moves from the policy board to field specialists who train farmers in production practice.

Agricultural regulations become mobilized when they are accepted and put into practice by a network of actors. Agricultural networks are ordered by discourse coalitions, each with a specific function in the network. Agricultural discourse coalitions may be defined as a group of actors who share the same social construct, such as an organic or pesticide free agricultural regulation (Hajer, 2005). This analysis will use the concept of discourse coalitions to follow

the transference of the meanings behind agricultural certifications throughout the different vegetable commodity networks in Chiang Mai, Thailand. Consumers act as active participants in the agricultural commodity network through their purchasing power.

2. Research Methods

To find out more about consumer habits in Chiang Mai a survey was used to collect information about consumer attitudes and purchasing habits for organic and hygienic vegetable. The survey was developed in English following acceptable guidelines for the social sciences (Silverman, 2001:239). Specific questions were developed to add further insight into consumer perception of certified vegetable products and how that understanding contributes to the establishment of an alternative agricultural commodity network. The first draft of the survey was discussed with Dr. Chusak Wittayapak, an associate professor of Geography at Chiang Mai University, as well as with agricultural field specialists from MCC and ISAC, to confirm the understandability of each question for an average Thai consumer. The English version was translated with the assistance of the aforementioned individuals, while the final draft was checked by a Thai professor of English, responsible for curriculum coordination, at Chiang Mai University. The first draft of the Thai survey was tested at a Tops Supermarket outside of the survey area. Afterward, minor corrections were made to address specific concerns of the surveyors regarding readability and time constraints of interviewees. The results of the trial survey were discarded.

The content of the survey was designed to evaluate three specific behaviors and attitudes of northern Thai consumers. First, the survey sought to quantify consumer demand for certified vegetables, as well as to differentiate between local and introduced vegetable preference. Second, specific survey questions were asked so as to determine the degree to which consumers understand the difference of different certification strategies and labeling practices. Finally, the survey sought to establish the relative degree of trust consumers hold for different labels, certifications, and market venues. The survey was structured using both multiple choice questions and ranking formats so to make the survey timely enough to administer to passers by.

The survey was conducted during the months of June and July in 2008. It was administered at seven different venues representing the most common retail locations selling certified or alternative vegetables. These were the Tesco-Lotus and Carrefour hypermarkets, the Rimping Supermarket near the airport and Tops Supermarket in the center of the city, Surriwattana fresh market, in the center of the city, with known certified vegetable vendors, and at the MCC and ISAC communities markets (Table 1). Two senior level, undergraduate students were selected from Chiang Mai University based on both their fluency in English and *Kan Muang*, the language of northern Thai people. Knowledge of *Kan Muang* was found to be essential during previous field research because of the trust engendered from speaking in local dialect. Before data collection commenced, the two students were trained in both data collection techniques, as well as to develop their coherency of the questions. The interviewers were instructed to find, to the best of their ability, an equal proportion of men and women of all ages as each venue would permit. In total, 320 surveys were completed. The data from the surveys was entered into MS Excel for statistical processing. The data was aggregated by age, venue, and trust. The results used in this analysis were graphed for direct comparison.

3. Vegetable Certification in Thailand

Worried for their personal health, consumers seek out certified products to protect themselves from toxins and carcinogens. Investigations have shown that dangerous levels of pesticide are used in the production of in Northern Thailand. Estimates show that the amount of pesticides used in Thailand has increased eight times from 1973 to 2004 (GreenPeace, 2008; Chalermphol, 2009 #233; Plianbangchang, Jetiyanon, & Wittaya-Areekul, 2009). The increase in the use of pesticides can be traced to the government's subsidization of pesticides, a lack of clarity laws about agricultural regulation, including Good Agricultural Practices (GAP), and insufficient communication between ministries and stakeholders (Vicha, 2007:77, 80, Songpol 2005:37). Third party certifications provide farmers, assemblers and retailers a credible verification process to ensure quality and consistency throughout the vegetable commodity network.

Validated, organic regulations are accepted as truth by consumers. From the farm gate to the shopping cart, certification provides a framework of understanding. The specific processes verified by certification are represented by logos to identify products for consumers (Marsden, 1997; Raikes, Jensen, & Ponte, 2000; Raynolds, 2004). Certification is understood to have third-party oversight, though not necessarily approved by the government. For example, in Chiang Mai there are several certifications recognized by local consumers through the reputation of specific actor-coalitions. (Ellis et al., 2006; Songpol, 2005). Certified agricultural products may be seen as "embodying the processes of the commodity framework" (Raynolds, 2004:726-728). Certification, and the accompanying logo, brings the entire production process into an understandable representation for consumer.

The Thai government has instituted several different standards of food safety, ranging from organic regulations, pesticide reduced regulations and certification of the overall cleanliness of individual vendors, as listed below. All of

these certifications make the same general claim of food safety. Distributors using these certifications enter into a small and fragmented market. By far the vast majority of vegetables sold in Chiang Mai are uncertified. Within Thailand, less than 1% (.07%) of all farm land is cultivated under certified regulations (ITC, 2008).

Pak Plod Pai Jak San Pis (Safety Vegetable), a pesticide reduced, government certified food safety standard.

Thailand's Good Agricultural Practice (GAP), a fast-track program to encourage farmers to use pesticides responsibly. It is government certified.

Northern Organic Standards Association (NOSA) was organized by local consumers and NGO's to develop pesticide free standards for northern Thai farmers. It is not accredited by the government.

Multiple Cropping Center of Chiang Mai University is research institute whose reputation for training farmers in pesticide reduced and Integrated Pest Management methods has developed into a consumer accepted certification.

Each of these certifications is supported by different discourse coalitions seeking to gain a larger share of Chiang Mai's organic market. Retailers, NGOs, government agencies and the certifying bodies themselves all promote these certifications by endorsing the labels representing the production process. The fact that only NOSA's certification is actually pesticide free has little affected on the consumer, who is motivated by issues of safety more than the specifics of pesticide use. The problem appears to be ineffective communication between discourse coalitions and consumers. One report showed that 97% of consumers surveyed in Bangkok did not know the meaning of "organic" (Roitner-Schobesberger, 2008). The problem is exacerbated by a proliferation of agricultural regulations, many of which are not organic.

Regulated government technologies, such as GAP and Safety Vegetable, are promoted through media campaigns funded by the Ministry of Agriculture and Cooperatives. The most common certified vegetable regulations in Chiang Mai is *Pak Plod Pai Jak San Pis*, hereafter referred to by its popular name "Safety Vegetable." The Safety Vegetable classification is the oldest pesticide regulatory standard in Thailand. Safety Vegetable was initiated by the Thai government in 1992 (Ellis et al., 2006; Vitoon, 2001). It is not a pesticide free standard. The goals of this program were to improve public safety and reduce the need for imported chemical fertilizers and pesticides (Ellis et al., 2006). This certification is overseen by the Ministry of Public Health (MOPH) and recorded at MOAC Agricultural Extensions offices. The Safety Vegetable standard is highly regulated and monitored. The goal of the program is to ensure that a limited, minimum level of pesticide residue reaches the consumer.

Safety Vegetable certification is being phased out and replaced by GAP. However, there are serious doubts about whether or not Thailand's GAP standard can be considered equivalent to international GAP regulatory standards for pesticide reduction and farmer and worker safety (Ellis et al., 2006:36; Vitoon, 2001:27). Like Safety Vegetable, GAP regulations allow for the use of pesticides using less vigorous control standards. GAP certification differs from Safety Vegetable certification in that it can be accomplished in three months compared to one year for the former.

GAP certification is being encouraged by the national government which allocated 8 billion baht (approximately US\$230 million) in 2008 to the Ministry of Agriculture and Cooperatives (MOAC) for the promotion of organic farming in Thailand, with further goals to increase land under GAP production 40% by 2010 (Chatrudee, 2008; Phusadee, 2008). MOAC has enticed many new farm groups to certify under GAP with both monetary and in-kind remuneration, and has invested heavily in a national marketing campaign which promotes GAP products. GAP is also promoted by the Royal Project Foundation (RPF), a quasi-governmental institution sponsoring the eradication of opium production through crop substitution in Thailand's northern highlands. Hundreds of highland farmers who were previously certified under Safety Vegetable are now being converted to GAP. RPF links GAP with the elimination of drugs and the improvement of the welfare of highland farmers in Thailand's remote border areas (Santhad, 2006). As the largest producer of GAP products in Thailand, RPF gives royal prestige to products certified under GAP. On the other hand, RPF has inadvertently diminished the respect for the Safety Vegetable program as it recertifies to GAP.

4. Discourse coalitions operating in Chiang Mai

Actors organize themselves into broad networks established by the acceptance of different agricultural production processes through which unique vegetable commodity networks emerge (Forsyth, 2003:37; Law, 1991). Each regulated, certified agricultural commodity network has a discourse coalition of actors advocating the unique qualities of their processes to consumers. Agricultural discourse coalitions place their power behind specific certified regulations. Alternative regulations can be described as discursive "technologies", these being calculations, regulations, and enforcements used to exert control over a situation (Rose & Miller, 1992:11). However, Thailand has been noted for its lack of coordination and communication between agencies and within the same agency (JICA, 2002). The technologies deployed suffer from a clear definition of terminology and contradictory meaning because alternative agriculture is conceptualized and implemented by different and often competing organizations.

Communication with consumers is done through various types of labeling, logos, and direct contact at community markets. Discourse coalitions align themselves with a specific set of regulations and certify body. Inside each alternative agricultural commodity network there are several different discourse coalitions actively promoting the values represented by the label. Discourse coalitions actively supporting different certifications in Chiang Mai are the certifying bodies, NGO's, university affiliates and retailers within each certified produce commodity network.

The once prominent Safety Vegetable program is now falling out of favor through the active, government promotion of GAP certification. GAP is a response to consumers who only want assurance of safety, not the elimination of pesticides and definitely not higher prices. Safety Vegetable is now only promoted by producers and retailers belonging to pre-existing Safety Vegetable networks. Given its high esteem among consumers of certified produce, practitioners of Safety Vegetable can be assured of a continuing market provided the government does not disclaim it, which is not likely. However, the government is not encouraging any new entrants into the safety vegetable regime.

NOSA actively educates consumers about its certification through cooperating with complementary organizations, such as the Institute for Sustainable Agricultural Communities. Together they promote many issues related to organic agricultural production, including biodiversity and fair trade through public meetings held at community markets. NOSA is the only one of Chiang Mai's certifications represents pesticide free, organic agricultural. However, it is not accredited by the government because it can not meet all of the requirements of the International Federation of Organic Movements. NOSA is unique in Chiang Mai because it supports many other issues separate from organic agricultural, such as biodiversity, social welfare, and fair trade.

The community market sponsored by the Institute for Sustainable Agricultural Communities (ISAC) receives its certification through NOSA. Both NOSA and ISAC are supported in part by OXFAM, an international NGO (Chomchuan, 2008). OXFAM's role as a discourse coalition brings an international array of concerns, expanding the local discourse. Certified farmers must adhere to strict rules to preserve biodiversity, hence they may not implement many forms of integrated pest management. The groups supporting NOSA standards have agreed to support sustainable agriculture and what is known in Thailand as sufficiency economy, a system which strives to work outside of conventional markets. As a result, NOSA products are only available at community markets.

By comparison, the Multiple Cropping Center (MCC) is a university sponsored discourse coalition advocating pesticide reduced production processes. The university allowed farmers to sell experimental crops, using alternative production processes, to consumers from stalls located at the experimental farm. As MCC's research mandate grew, so did its need to help its farmers. In 2008, MCC has developed its on label which is used outside of the community market. The MCC label can be found in several market venues throughout Chiang Mai. Unlike any other label, MCC developed from a synergy of consumer acceptance and research needs.

There are many other types of certified vegetables which occasionally appear in the supermarkets of Chiang Mai. These include vegetables certified by Great Britain's Soil Association, Thailand's ACT, and the United States Department of Agriculture. Overall, Chiang Mai does not yet have the market strength to support these high-priced certifications on a regular basis. Fresh vegetable markets and community markets continue to dominate produce purchases throughout the city, leaving large retailers a small share of the overall market.

5. Consumer purchases

Consumers in Chiang Mai are willing to accept non-accredited, local certification at the community markets operated by MCC and ISAC. This is evidenced by the numbers of consumers purchasing vegetables at these community markets as shown in Figure 1. Local, non-government accredited certification is a tacit acceptance by the community based on the reputation of the certifying body overseeing local, alternative agriculture. Local certification provides consumers with an additional level of oversight into certification by allowing a greater level of personal involvement. The two most prominent local certifying bodies in Chiang Mai are the Northern Organic Standards Association and the Multiple Cropping Center. What makes ISAC and MCC markets unique is that none of the vegetables are packaged or labeled. Communication of the production process is made directly between farmer and consumer. These community markets represent a certified space. The products are signified by the boundaries of the market, constituting what may be identified as "spatial labeling."

With the exception of community markets, certified vegetables are wrapped in packages labeled with official logos; package labeling provides an additional layer of customer assurance (Allen, Massey, Cochrane, & Charlesworth, 1998:90; Massey, 2005:85). Labeling is a symbolic representation of the objects of certification. The label allows the vegetable commodity network to communicate with consumers. The label provides a point of passage where the consumer enters into the certified agricultural commodity network.

The coalitions promoting Safety Vegetable, Gap, and the RPF's privately branded GAP logo, are perceived favorably by almost 60% of northern Thai consumers as shown in Figure 2. Previous studies about crop production show that most farmers want to use high amounts of pesticide because the physical appearance of these crops leads to higher farm

gate prices (Jungbluth, 1997). By comparison, 24% of consumers are not sure what the certifications represent and another 18% do not trust the label at all. This suggests that over 40% of the potential market for certified vegetable is lost to mistrust and misunderstanding. Though discourse coalitions provide concerned consumers knowledge of process and oversight, it is difficult to overcome problems directly related to practice and implementation.

Outside of local forms of certification, only government authorized certification and labeling is proof of regulatory compliance. The abundance of consumer apathy has led many vegetable producers and retailers to place labels assuring consumers of safety on uncertified, conventionally grown produce. Surreptitious labeling enters into the marketplace through loopholes in packaging laws. There are many labeling misnomers in the markets of Chiang Mai. In many cases the labeling is very similar to that of certified produce. Some examples as seen on the supermarket shelves in Chiang Mai include:

"Safe Vegetable"

"Grown with organic fertilizer"

"Fresh and Clean"

"Safety Plant"

"Fresh Vegetable"

"The quality and safety you can trust"

Clearly, all of these labeling claims are meant to give the consumer confidence in the health and safety of the product. However, none of the vegetables observed with these labels was certified as organic or pesticide free. The only guarantee of authenticity is the use of a government authorized certification logo.

Major supermarkets and hypermarkets in Chiang Mai have products using surreptitious labeling on uncertified produce. In some cases, the surreptitiously labeled produce is placed alongside genuinely labeled, certified produce. This helps to explain consumer's overall trust in the government logo. It is illegal in Thailand to use the any government approved logo without permission. However, these logos are often reproduced in likeness. Sometimes a vendor will create a unique design resembling a government seal without actually copying the original. Consumers who trust the government logo understand these deceptions and know that the only sure way to purchase genuine certified vegetables is to look for the official seal. For example, the GAP certified "Q" logo was copied as the "Q for quality" logo. Referring to the examples above, the phrases "Safety Plant" and "Safe Vegetable" are used to confuse a consumer to believe the product is an approved "Safety Vegetable."

One particular counter-discourse, known as the food safety program, creates wide-spread confusion in the markets for safe or organic vegetables. The Food Safety program is sponsored by the Ministry of Public Health. Once a year inspectors evaluate the overall cleanliness of a market, inspect selected vegetables to be tested for pesticide contamination, and look for any other problems of concern to public health. The inspections are scheduled in advance and inspectors generally cooperate with owners. Once approved, the market may display the "Clean Food, Good Taste" placard above all products sold in the market. Many consumers believe that this placard guarantees that all of the produce is hygienic and safe for consumption when, in fact, there is no specification as to where produce may be purchased or of the production method used. It would be inappropriate to call this labeling surreptitious. The intent is to maintain some minimum standard of public health in the marketplace. However, the placards are often used to assure customers of a much greater level of consumer safety than is actually offered. These placards are also used by conventional markets to reinforce the "discourse of assuagement" used to represent contested market spaces of certified and uncertified produce.

6. Conclusions

In conclusion, the availability of certified organic and safe vegetables in Chiang Mai is a direct reflection of the perceived needs of the consumer. At this time different coalitions of Thai consumers have established commodity networks around GAP and Safety Vegetable, NOSA and MCC standards. Except for NOSA, the general public appears to have been excluded from direct participation in the creations of production standards. The actions of the different discourse coalitions manipulate the meaning of different certifiable agricultural production processes. The consumer is informed of the specific discursive practices mobilized by each discourse coalitions by product labeling. Unfortunately, consumers are largely unaware of the specifics of the discourse, with the exception of those who go to community markets and participate in public presentations.

Inaction by government certified discourse coalitions to fully explain the specifications endorsed by certification has allowed various interlopers using surreptitious labeling to enter and compete in the market. Consumers are confounded by a profusion of labels with similar claims. The negative feelings about certified labels can only be addressed by eliminating inefficiencies caused by improper inspection and certification practices. In general, the consumer turns to the fresh market where all vegetables are presented under the Food Safety placard which also assures health and safety.

Effective communication between consumer and retailer takes place at the community markets where spatial labeling is created through direct dialog between consumer and farmer.

Further research is needed to understand the role of consumers and consumer advocacy groups on official policy regarding certified production processes. For the vast majority of people in Chiang Mai organic or safe vegetables are unnecessary, misunderstood, or misrepresented. The expansion of organic or safe vegetables is possible only if the government is willing to:

Promote consumer awareness as to the hazards of pesticides.

Promote consumer awareness as to the actual meaning of GAP and Safety Vegetable

Discontinue or redefine certifications which unintentionally misrepresent products not grown under safe or organic agricultural production processes, such as the "Food Safety" program.

Develop policies to enforce better without strict policies about truth in advertisement

Increase the number of categories of organic agricultural to include in widespread practice and acceptance but not internationally certifiable.

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Table 1. Supermarket Venues Surveyed

Venue	Sub-district	Date	Surveys
Carrefour Hypermarket	San Sai	Thursday, June 19, 2008	48
ISAC Community Market	Patong	Saturday, July 05, 2008	52
MCC Community Market	Suteph	Saturday, June 21, 2008	54
Rimping Supermarket	Baanvan	Thursday, July 10, 2008	15
Siriwatana Fresh Market	Chang Puak	Saturday July 12, 2008	54
Tesco-Lotus Hypermarket	Patong	Saturday, June 28, 2008	48
Tops Supermarket	Suteph	Thursday, June 12, 2008	49
Total			320

The community markets are only open on Wednesdays and Saturdays, with Saturday having the most customers.

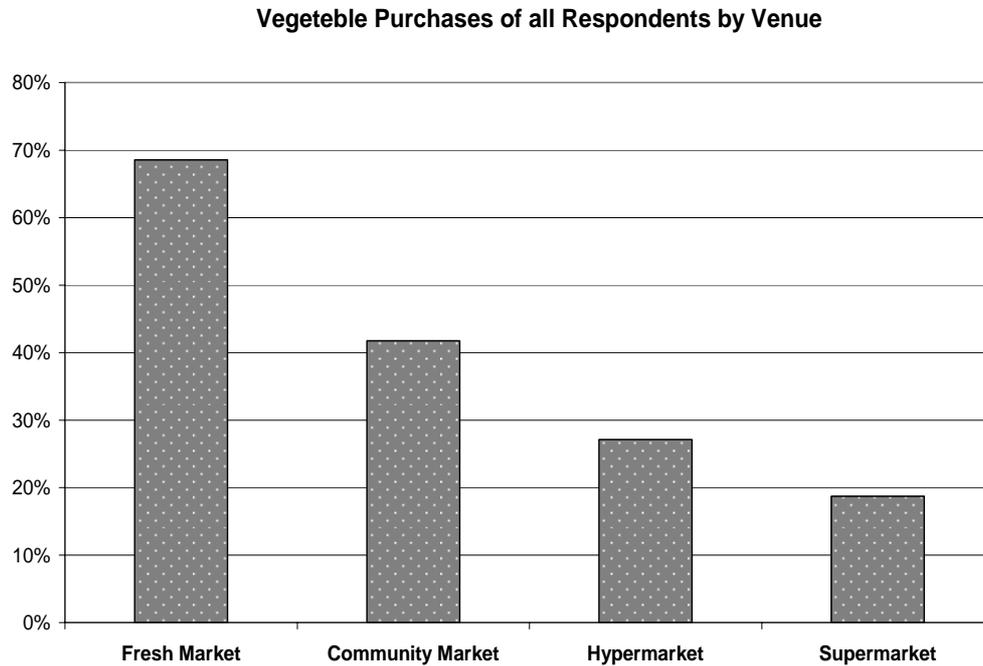


Figure 1. The location of vegetable purchases as a percent of consumers surveyed in Chiang Mai (n = 320)
 Consumers were found to shop for vegetables at more than one location; therefore, the totals represent the percentage of all consumers surveyed shopping at a particular venue.

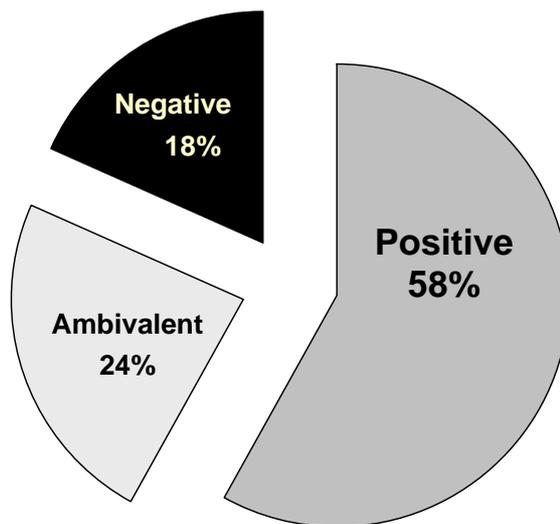


Figure 2. Consumer trust in the logos as a percent of all consumers surveyed.
 This figure represents the attitudes of all 320 consumers surveyed in Chiang Mai when asked about their overall level of trust of logos affixed to fresh vegetables when ranked from trust, no worried, and not trust.



The Implementation of ISO 14001 Environmental Management System in Manufacturing Firms in Malaysia

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Abstract

In this study, the benefits of implementing ISO 14001 Environmental Management System (EMS), employees' responses towards the implementation of EMS, the reasons for resisting the implementation and the challenges encountered by top management in implementing EMS were explored. A questionnaire survey to 97 ISO 14001 certified manufacturing companies in the State of Selangor was conducted. The findings showed that improved corporate image is the most substantial benefit brought by implementing EMS. A majority of the respondents were optimistic and they believed the implementation of EMS was good to the company and it benefited them. The top three reasons for resisting the implementation of EMS were employee's preference to stay at status quo, employees were haunted by the past failures in EMS and fear of the unknown. The findings also indicated three major challenges encountered by top management in the implementation of EMS are top management commitment towards the implementation, identification of environmental aspect, impact and legal compliance.

Keywords: Environmental Management System, Resistance, Benefits, Implementation

1. Introduction

In recent years, there has been significant awareness of global environmental problems like global warming and ozone depletion. Appropriate management and control strategies to address the environmental issue have become a requirement to retain your global customers and to thrive in a more critical global economy (Meena, 2005; Amarjit and Max, 2005; Samuel and Bo, 2007). In this aspect, Environmental Management System (EMS) that is ISO 14001 compliant is designed to overcome environmental issues into every aspect of the company's operations, and offers an organized approach to manage environmental issues. Indeed, the benefits of ISO14001 lies in the cost savings through energy consumption, raw material input, waste management, environmental impact reversal as well as an improved public image (Briggs, 2007; Mori & Welch, 2008). EMS have been said to enable organization to improve their economical performance and environmental performance (Goh, Suhaiza and Nabsiah, 2006; Fortunski, 2008).

It is the interest of this study to investigate the benefits of EMS, employees' response towards the implementation, reasons for resisting and the challenges that top management has to face during the implementation Environmental Management System (EMS) in order to comply to ISO14001 standard. The main objective of the study is to examine and explore the implementation of EMS. Specifically, this study will provide an overview on the benefits of implementing EMS in an organization. It is also part of this study's concern to identify employees' responses or reactions on the implementation ISO14001. In general, the study would cover the reasons why employees felt that this is a threat to them.

Top management which usually includes the managers, supervisors and team leaders are the main drivers of EMS implementation. They have a critical role in making sure that EMS is successfully implemented. It is important for top management to identify the critical areas where they should focus on before they can take action to resolve it. Thus, it is also a concern of this study to understand the critical areas that top management must work on and how they should tackle these challenges.

In order to have a comprehensive overview on all the objectives mention above, this study will be guided by the following research questions,

What are the benefits of implementing EMS ISO14001?

What are employees' responses to the implementation of EMS ISO14001?

Why do employees resist to the implementation of EMS ISO14001?

What are the challenges faced by top management in implementing ISO14001

2. ISO 14001 Environmental Management System

An EMS is a tool for managing the impact of an organization's activities on the environment. It provides a structured approach to planning and implementing environment protection measures. An EMS monitors environmental performance, similar to the way a financial management system monitors expenditure and income and enables regular checks of a company's financial performance. An EMS integrates environmental management into a company's daily operations, long-term planning and other quality management systems (Bozena, Jens and Eklund, 2003; Ambika and Amrik, 2004; Burnett and Hansen, 2007). The most important component of an EMS is organizational commitment. All employees, especially top management need to show their commitment towards EMS in order to develop and implement an effective EMS (Zhang, Bi, Yuan, Ge, Liu and Bu, 2007).

The importance of an Environmental Management System (EMS) for organizations is becoming widely known across all industrial sectors (Burnett and Hansen, 2007). The implementation of EMS has become an important activity for organizations, irrespective of their size, sector or nature of the business. Some organizations decided to adopt EMS due to the external pressures like governmental regulation, community participation and market demand (Bozena, Jens and Eklund, 2003; Zhang, et al., 2007). On the other hand, some studies showed that the major motive for an organization to implement EMS is to improve their corporate image (Bozena, et al., 2003). It should not be an argument even though all organizations have different motives in adopting EMS because the ultimate aim of implementing EMS is to help organization to establish a systematic way to introduce environmental issues into every aspect of the company's operations, and offers an organized approach to manage environmental issues (Quazi, 1999; Gregor and Polona, 2006; Goh, et al., 2006).

2.1 ISO 14001 Environmental Management System and Change

Evidently, many organizations seek ISO14001 Environmental Management Standards certification, especially organizations that trades cross-nationally or international trading (Zhang, Yuan, Ge, Liu and Bu, 2007). Being recognized as an ISO14001 certified company helps firms to remove trade barriers in international business trading (Mori & Welch, 2008; Schylander & Martinuzzi, 2007). Even though ISO14001 was created to help organizations but it has been suggested that implementation of EMS in an organization can change an organization business processes (Samuel and Bo, 2007; Gonzalez-Benito & Gonzalez-Benito, 2008). Employees are expected to accept the change by giving up their previous work pattern in which they are familiar with and adapt to new working pattern (Almaraz, 1999; Smith, 2005). Unfortunately, change can be very stressful (Bat and Varda, 2003). Not all employees react positively and value the implementation of EMS as an opportunity to development. Some employees may take it as a golden opportunity to improve their management skills and this can be their opportunity to climb up the corporate ladder. Some may even feel that they will become a better qualified and knowledgeable employee if they participate in the implementation (Bosse, Breure and Spies, 2006). But many may respond with resistance, anger, frustration, confusion, fear of risks involved, fear to be innovative, afraid to try new things and some will oppose the increase in their responsibilities which the EMS would create (Bovey and Hede, 2001; Meena, 2005; Ayse, 2003; Bat and Varda, 2003).

In general, the progress of the company in attaining ISO14001 certification is influence by four factors namely feedback and review, employee empowerment, rewards and management commitment (Nalini & Bonnie, 2004). It was suggested that resistance from the employees can be a major barrier to a company from successfully implementing EMS (Ford, Ford and McNamara, 2002; Calabrese, 2003). The top management should not underestimate the impact it has on their employees. They must ensure information about EMS implementation is thoroughly & effectively announce and communicated to all employees. It is equally important for top management to emphasize strongly on how to handle the transition as this may help to move the team through change in the smoothest way possible (Goh, Suhaiza and Nabsiah, 2006).

2.2 Benefits of Environmental Management System

Studies on the benefits of implementing EMS ISO14001 have been research by several researchers. For example, a study conducted in Australia claimed that the most significant benefit that an organization gained through the implementation of EMS, ISO14001 is cost reduction (Meena, 2005). On the other hand, a study in Sweden reported that the most significant benefit for organizations in Sweden is improved corporate image (Bozena, et al., 2003). There is also another study conducted in Australia and New Zealand which showed that the most significant benefits experienced by organizations are morale building within the organization and fulfilling of the customers expectations' (Ambika and Amrik, 2004). The different findings in these studies showed that organizations in different countries experience different type of benefits and this could be due to the different culture in each country and organizational expectations.

2.3 Success Factors for EMS Implementation

Top management should have a clear understanding on what are critical success factors in their implementation of EMS. A study highlighted that the majority of the critical success factors in implementing EMS ISO 14001 are management leadership and support, learning and training, internal analysis and sustainability (Ambika and Amrik, 2004). While there is another study claiming that management commitment, employee empowerment, rewards and feedback & review stood out as key elements in implementing EMS (Nalini and Bonnie, 2004). Then again, studies have emphasized that top management should put greatest effort in identifying environmental aspects, environmental management system (EMS) documentation, training, EMS audits, operational control, environmental management program, objectives and targets, and document control (see for example, Khalid, Robert and Matthew, 2002). Top management may have to identify critical success factors that suites their organization because each organizations are unique having their very own organizational behaviors.

3. Methodology

This study employs quantitative research method using questionnaire survey. Questionnaire survey allows collection of large amount of data from a sizeable population in a highly economical way. Collected data are standardized, easy to understanding and allows easy comparison. It gives more control over the research process. However, one of the disadvantages is we have to spent a lot of time in designing and piloting the questionnaire. Data collected by this method may not be as wide ranging as those collected by qualitative research methods. Questionnaire survey limits the number of questions which a questionnaire can contain.

Data for this study was drawn from 97 EMS ISO14001 certified companies located in the State of Selangor. The lists of companies were obtained from the Directory of Malaysian Industries 2007 (Federation of Malaysian Manufacturers, 2007). Data for the questionnaire was developed by analyzing journals, media articles, internet documents and information, and relevant publications & personal observations in organizations. The questionnaire targeted employees in organizations that are involved in the implementation of ISO14001. The questionnaire consists of four parts: 1) benefits of implementing EMS; 2) employees' response; 3) reasons of resisting change; top management's challenges in implementing EMS. Data was collected using pre-designed and structured questionnaires. Before the actual survey were conducted, the questionnaires were pre-tested and reviewed for structure, readability, ambiguity and completeness, and the survey instrument was refined in light of comments from the respondents. The respondents were asked to rate the answer of each question on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree) to what extent the statement fits the situation in their organization.

4. Findings and Discussions

4.1 Benefits of Implementing EMS ISO14001

Section A of the survey asked about the benefits of implementing ISO14001 in an organization. Table 1 showed the benefits and they were arranged on a descending order according to the descriptive statistical 'mean' value.

A majority (76.3 percent) of the respondents reported that the most important benefit of implementing EMS ISO14001 is improved corporate image (mean=4.35) with a low standard deviation of 0.556 indicating a general consensus amongst the respondents. This seems to support Goh, Suhaiza and Nabsiah's (2006) findings that certification of ISO14001 will enhance the reputation of the company. More than 60 percent of the respondents agreed that increased customer's satisfaction (mean=4.18), improved employee morale & awareness about environmental aspect, regulation and impact (mean=4.04), implementation helps in developing staff potential (mean=4.00), implementation is capable in building better team work (mean=3.94), improved relations with vendors (mean=3.88), improved relations with relevant legal authorities (mean=3.78) and reduce operation cost (mean=3.49) were the benefits of implementing EMS ISO14001.

However, it was reported that improved relations with local communities (mean=3.31), maintained/increased profit margin (mean=3.31), contribute to increased market share (mean=3.22), increased productivity (mean=3.18) and increase delivery time to customers (mean=3.03) were somewhat benefiting or does not contribute organizations very much in the implementation of EMS 14001.

Insert Table 1 Here

4.2 Employee's Responses on the Implementation of EMS ISO 14001

Table 2 showed employees responses in implementing EMS ISO 14001 and they are arranged on a descending order according to the 'mean' value. About 58.8 percent of the respondents reported that the implementation of ISO14001 is necessary to the success of their organizations (mean=3.96) with a low standard deviation of 0.768 suggesting a general consensus amongst the respondents. More than 50 percent of the respondents agreed that implementation of ISO14001 will benefit the respondents themselves (mean=3.82), the respondents (57.3 percent) also felt that it is good for their organization to adopt EMS ISO 14001 standards (mean=3.81), respondents (54.6 percent) are glad that the management

decided to implement EMS in their company (mean=3.75), respondents (55.7 percent) expected that the implementation of EMS ISO 14001 will affect their employment in a positive way (mean=3.74).

However, less than half of the respondents (41.2 percent) agreed that the implementation of EMS ISO 14001 excites them personally (mean=3.57). In addition, only 34 percent of the respondents agreed that they adapt and accept the implementation of EMS ISO 14001 easily (mean=3.29). The study also reported that respondents (15.5 percent) strongly disagree that they have no job anxiety caused by the implementation of ISO14001 (mean=2.91) and employees like to participate in the environmental program (mean=2.84;). These 3 responses seem to support the SATIR Change Model, stage 2- resistance. When an implementation threatens the stability of familiar power structures, most employees resist by denying its validity, avoiding the issue or blaming someone for causing the problem (McCalman, 1992; Khalid, Robert and Mathew, 2002; Manuela and Clara, 2003).

Insert Table 2 Here

4.3 Employees' Resistance to the Implementation of EMS ISO 14001

About 69 respondents reported that the most significant resistance to change is because of employee's habit of complacency – like to stay at the current comfortable condition (mean=4.13). It has a standard deviation of 0.656 which means there is a general consensus amongst the respondents. More than 50 percent of the respondents agreed that employees experiences of failure in the past in implementing ISO systems (mean= 3.77) is another reason for resisting to the implementation of EMS ISO 14001. Many of the employees who tried and failed to implement EMS in the past believed that this is just another trial to fail. In addition, most of respondents also agreed that employee's fear of the unknown (58.7 percent; mean=3.71), employees fail to recognize the need for implementing ISO14001 (49.5 percent; mean=3.64) and different interest between employees and top management (44.3 percent; mean=3.58) were among the reasons for resisting to the implementation of EMS ISO 14001 in their organizations. Moreover, it was reported that employees are not motivated to value the benefits of change (34 percent; mean=3.39) and employee fear of personal loss (mean=3.38) as other reasons of resistance.

Insert Table 3 Here

4.4 Top Management Challenges in implementing ISO14001

A majority of the respondents (75.3 percent) reported that top management's commitment is one the major challenges in implementing EMS ISO 14001 (mean=4.60). Identification of legal compliance of environmental aspects and impact (mean=4.42) were ranked in the second place. Legal compliance and environmental aspects and impact seem to be an important component of the implementation. This seems to support the EMS process flow under planning process where clause 4.3.1 – Environmental Aspect and Impact and 4.3.2 – Legal and other requirement are the two major pillars in this process.

Moreover, capital investments (74.2 percent; mean=4.22), middle management commitment (66 percent; mean=4.22), workers' commitment (66 percent; mean=4.21), training (69.1 percent; mean=4.18), following standard procedures (50.5 percent; mean=3.68) and periodic audits (42.3 percent; mean=3.61) are challenges faced by the top management in the implementation of EMS ISO 14001.

However, only a small number of the respondents agreed that the implementation of corrective action (37.1 percent; mean=3.47), documentation (22.7 percent; mean=3.17) and (re)defining standard procedures (27.8 percent; mean=3.12) were challenges in implementing EMS ISO 14001.

Insert Table 4 Here

5. Conclusion

The implementation of EMS ISO 14001 has its benefits to organizations. At the organizational level, the implementation of EMS ISO 14001 can put companies at an international position with quality standards and procedures, which in turn can lead to increased organizational productivity and success. At the employee level, the implementation of EMS ISO 14001 can be very challenging with increased workload and changes in the way tasks are performed, particularly with additional documentation and procedures to follow which can be very bureaucratic and unnecessary at times. However, during the implementation, there is definitely some of resistance from employees. Nevertheless, during any change in work processes, it is the norm that resistance may occur. Hence, it is suggested that employers conduct sufficient awareness training on the objective and benefits of EMS and get employees from all levels to participate in the implementation of EMS ISO 14001. Moreover, it was suggested that employers design a reward / incentive program for all active participants. Constant review on the implementation of EMS ISO 14001 with committee members, ensure that the EMS committee member's role and responsibilities are clearly defined were also suggested to overcome the problems. Finally, it was suggested that management must only apply the recommended solutions that are applicable to their organizations.

Like any other studies, this study has its limitation. The first limitation of this study is associated to the scope of study. This study has examined only the benefits, employee's response, resistance to the implementation of EMS ISO 14001 and also examining top management challenges in implementing EMS. Analysis on these few areas cannot reflect the actual situation about the implementation of ISO14001 in an organization. There might be other aspects during the implementation of EMS that is worth researching such as the application of permits from legal authorities. The researcher hopes that this research will encourage other researchers to conduct similar studies by including this aspect. The second limitation of this study is related to the fact that the sample size is only limited to 98 companies situated in the State of Selangor. Therefore, a generalized picture on the implementation of ISO14001 in Malaysia might not be accurate. The researcher hopes that this research will encourage other researchers to conduct similar studies by having a broader population of ISO14001 certified organizations in Malaysia. The third limitation of this study is associated to the size of organizations. It should be considered that 80 percent of the responding companies are relatively large, exceeding 150 employees. This study has not been able to capture the data from small organizations, which may be significantly different from those of the large organization. Therefore, it is suggested that a comparative study be conducted, a comparison of large and small companies.

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Table 1. Benefits of Implementing EMS ISO14001

	N	%	Mean	SD
Improved corporate image.	74	76.3	4.35	.556
Increased customer satisfaction.	64	66.0	4.18	.702
Improved employee morale & awareness about environmental aspect, regulations and impact.	64	66.0	4.04	.616
Help to develop staff potential.	67	69.1	4.00	.513
Building up better team work.	61	62.9	3.94	.675
Improved relations with vendors.	61	62.9	3.88	.778
Improved relations with relevant legal authorities.	49	50.5	3.78	.754
Reduce operation costs.	44	45.4	3.49	.868
Improved relations with local communities.	27	27.8	3.31	.847
Maintained / increased profit margin.	30	30.9	3.31	.693
Increased market share.	32	33.0	3.22	.898
Increased productivity.	25	25.8	3.18	.739
Increase on time delivery to customers.	14	14.4	3.03	.668

Table 2. Employee’s Responses on the Implementation of EMS ISO 14001

	N	%	Mean	SD
I think implementation of ISO14001 is necessary to my organization.	57	58.8	3.96	.768
I believe I will benefits from the implementation	54	55.7	3.82	.807
It is good for my company to adopt ISO14001 standards.	56	57.3	3.81	.859
I am glad that the management decided to implement environmental management program in the company.	53	54.6	3.75	.948
I expect that the implementation of ISO14001 will affect my employment in a positive way.	54	55.7	3.74	.733
The implementation of ISO14001 excites me personally	40	41.2	3.57	.880
I adapt and accept the implementation of ISO14001 easily.	33	34.0	3.29	.871
I have no job anxiety due to the implementation of ISO14001.	15	15.5	2.91	.830
Ordinary staffs in the company like to participate in the Environmental program.	19	19.6	2.84	.796

Table 3. Employees' Resistance to the Implementation of EMS ISO 14001

	N	%	Mean	SD
Employee's habit - like to stay at current comfortable condition.	69	71.1	4.13	.656
Employee's experiences of failure in the past in implementing ISO systems.	52	53.6	3.77	.944
Employees are fear of unknown.	55	58.7	3.71	.559
Employees fail to recognize the need for EMS.	48	49.5	3.64	.687
Different interest between employees and top management.	43	44.3	3.58	.817
Employees are not motivated to value the benefits of change.	33	34.0	3.39	.728
Fear of personal loss - change will lead to loss of power, pay and company benefits.	34	35.1	3.38	.859

Table 4. Top Management Challenges in Implementing EMS ISO 14001

	N	%	Mean	SD
Top management commitment.	73	75.3	4.60	.591
Identification of legal compliance of environmental aspects and impact	72	74.2	4.42	.615
Capital investments.	72	74.2	4.22	.553
Middle management commitment.	64	66.0	4.22	.719
Workers' commitment.	64	66.0	4.21	.713
Training	67	69.1	4.18	.643
Following standard procedures	49	50.5	3.68	.880
Periodic audits.	41	42.3	3.61	1.114
Implementation of corrective action	36	37.1	3.47	1.071
Documentation.	22	22.7	3.17	.834
(Re) defining standard procedures.	27	27.8	3.12	.888



From “Goodness” in Chinese Confucianism to “Truth” in Japanese Confucianism

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Abstract

After being introduced to Japan, part of the basic ethic concepts and value of Chinese Confucianism, which pursues “goodness” as its core value standard, are deep into the hearts of Japanese people and become an impartment part of their moral standard and national mentality. However, due to the inclusive and subjective characteristics of Japanese culture, Chinese Confucianism that pursues “goodness” gradually changed into Japanese Confucianism that pursues “truth”. By comparing the Confucian culture in China and Japan, this paper analyzes the changes happened to Chinese Confucianism when it was spreading in Japan.

Keywords: Chinese Confucianism, Japanese Confucianism, Goodness, Truth, Practicality

Japanese people believe in Buddhism, Christianity, Shinto indigenous in Japan and Confucianism originated from China. The basic ethic concepts and value of Chinese Confucianism are deep into the hearts of Japanese people and become an impartment part of their moral standard and national mentality.

As we know, by focusing on the moral cultivation of human being, the indigenous Chinese Confucianism aims to regulate people’s ethic and morality through their will so as to build a harmonious social order. However, Japanese Confucianism does not take all the concepts of Confucianism introduced from China unconditionally. Instead, by fully considering the reality and possibility in Japan, Japanese Confucianism keeps the unique national mentality and characteristics of Japanese culture and localizes Confucianism with the folk customs of Japan. Besides pursuing social stability, it also caters to the social conditions in Japan and proceeds from reality, which is clearly displayed in Japanese Confucianism. For this, it is without doubt that the localized Japanese Confucianism can become the true driving force for the social development of Japan.

After being introduced to Japan, Chinese Confucianism is digested and absorbed by Japanese people and demonstrates the characteristics of Japanese culture. We can observe the inclusiveness of Japanese culture and the applying and creating capacity of Japanese people in this process. By comparing the Confucian culture both in China and Japan, this paper analyzes their main characteristics, differences and similarities with a view to explore the unique cultural features and national mentality of Japan.

1. Chinese Confucianism

1.1 *The Development of Chinese Confucianism*

In the Spring and Autumn Period, Confucius, famous ideologist and educationist of China, absorbed the great achievements of China’s ancient thought and culture and founded the original Confucianism ideological system. Original Confucianism is also called Pre-Qin Confucianism. Combined with political theory and moral thought, it plays a significant role to the development of Chinese history and the formation of China’s national and cultural mentality. Original Confucianism is regarded as the source of Chinese Confucianism and Chinese philosophy. Besides Confucius, its main representative figures include ancient sage such as Mencius and Xunzi. They make China’s cultural market active by their respective opinions. Pre-Qin Confucianism lays the foundation for China’s classic culture.

Under the backdrop of fast economic development in the Han Dynasty and to go with the need of feudal autocracy, Pre-Qin Confucianism witnessed further development and improvement and was endowed with new ideological system. Dong Zhongshu, the main representative figure at that time, added the thought of Yinyang and Wuxing to Confucian

classics featuring the thought of benevolence, loyalty, ceremony, wisdom and honesty and founded an ideological system of “telepathy between heaven and man”. Theologized by Dong Zhongshu, Confucianism in the Han Dynasty matches the ancient feudal ruling system and turns from folk theory to orthodox official theory.

Although delayed in the Six Dynasties and Tang Dynasty Period, Chinese Confucianism experienced fast development in the Song Dynasty. The Taiji Theory and Theory of Li and Qi added the traditional concept of Yinyang and Wuxing, the theories of Laozi and Zhuangzi and the philosophy and world view of Buddhism to the system of Confucianism and formed the framework of the new Confucianism. Based on the world view of Li and Qi since North Song Dynasty, Zhu Xi in South Song Dynasty founded the Zhuzi Studies. Till the end of Qing Dynasty, Confucianism maintained an important place in China.

After Song Dynasty, Confucianism with the theory about human nature and ethnics as the center absorbed the essence of world view and epistemology of the Huayan School and Chan School of Buddhism and the heaven evolving theory of Taoism and laid the abstract and philosophical foundation for Confucian theory system in terms of ontology and cosmology, forming a large Song and Ming Philosophy system including the metaphysical theory. Song and Ming Philosophy can be regarded as the second reconstruction to Confucianism.

Through the above analysis we can see that the Confucianism founded by Confucius continuously renews and improves itself in accordance with the requirement of time in the long history of China; however, its basic characteristics and essences never change. This paper will explore the essence and characteristics of Confucianism by looking back at the developing process of Confucianism in the following pages.

1.2 The Characteristics and Cause of Formation of Chinese Confucianism

Before exploring the characteristics of Confucianism, we need to first talk about metaphysics. In the Spring and Autumn Period when Confucianism was formed, most of China’s ancient sages took a metaphysical view about the origin of the world. The speculative and abstract thinking they held on the origin of the world and the form of the universe constitute the most basic factors in Confucian theory system.

The important figure that promoted and developed the metaphysical view or philosophical view in Confucianism is Zhu Xi. He said in his theory of Li and Qi that “Li” is the most important thing and the source of all morality. Zhu Xi expounded the paramountcy and absoluteness of the “principle of heaven” and set a complete theory system. Zhu Xi's Neo-Confucianism played a certain positive role for the social development at that time; however, his “principle of heaven” which was the source of the universe, ruler of everything and source of social moral standard was abused by the ruling class and became the base for all feudal regulations and etiquettes. That means besides some positive effects, Zhu Xi's Neo-Confucianism also has some drawbacks. Perhaps the real meaning of Zhu Xi's Neo-Confucianism is a metaphysical theory that starts from the point of “Li” and explores the moral order of human society.

Ever since its founding, Confucianism is connected with politics and morality. Many Confucianists are committed to finding ways to rectify social order and rule the country and exploring the necessity of ethic and morality and the validity of emperor autocracy. Besides metaphysics, another distinct feature of Confucianism is the importance it attaches to ethic, morality and personal cultivation.

Confucianism that highlights ethic, morality and personal cultivation is pursuing “goodness”. “Goodness” as it implies seeks the inner tranquility and peace of people’s heart and a friendly and harmonious human relation. The main goal of Confucianism is to pursue the “goodness” of people’s inner world, “goodness” among social members and “goodness” among different ranks of society.

In terms of this, Confucianism is also knowledge about life and explains how people should live their lives in this world. First self-cultivation, then regulating the family, governing the country and establishing peace throughout the world is the lifelong dream and goal of all Confucianists. Starting from improving personal moral standard, they pursue the common interests of the whole society. The ultimate goal of Confucianism is to make their most contribution to the society through personal efforts. The society guided by this Confucian theory is a society in which people “concern about others’ interests and do good things to the society”. Confucianism advocates goodness and the society built under this concept is harmonious and liveable.

While taking “goodness” as the ultimate goal, Chinese Confucianism also has its fatal weak point. If too much effort is made to pursue “goodness”, the efforts to pursue “truth” will be reduced. Lack of attention on technology and practical science becomes the main obstacle for China’s social development in modern times. Just as Han Lihong says: when approaching an issue, most Confucianists turn to their inner world and moral cultivation instead of the nature, resulting in a trend that defies science and technology.

Sometimes blindly pursuing “goodness” will result in the trend that “morality” is over “law” and “human relation” is over “regulation”. Under Chinese traditional cultural background influenced by Confucianism, what people highlight is the moral cultivation of themselves. So compared with the binding effect of law, the binding effect of morality is more

easily recognized by people. This is in essence different from modern managerial concept that counts on laws and regulations and hinders the pace of China's modernization.

We can not finish everything of the characteristics and influence of Chinese Confucianism in this paper. By analyzing the most distinct characteristic and most profound influence of Chinese Confucianism, this paper will study the characteristics of Japanese Confucianism and the national cultural mentality of Japan.

2. Japanese Confucianism

2.1 The Development and Characteristics of Japanese Confucianism

In the sixth century A.D., scholars who taught the Confucian classics from Baiji spread the classic Confucianism to Japan and since then Confucian theories began to develop in Japan. From the time Confucianism was introduced to Japan to the end of Heian Period is the "Early Confucianism" period. As a political thought, early Confucianism only influenced Japan's politics at that time instead of morality and other fields. The strong speculative and metaphysical features of Pre-Qin Confucianism were not represented in the early Confucianism of Japan. The main reason is that early Confucianism only exists as a foreign culture instead of a culture born from Japanese society.

In the Kamakura Period, Neo-Confucianism, ie. Song Studies, Zhuzi Studies and Chan Studies spread to Japan and its development injected new vitality to Japanese Confucianism. However, the real purpose of Japanese Buddhists lied in promoting the Chan doctrine through the strength of Song Studies instead of popularizing Song Studies. The Neo-Confucianism at that time just co-existed with Buddhism and failed to achieve its independent development. In the Edo Period, Japanese Confucianism witnessed real development and ushered into its peak era.

Fujiwara Seika, who is regarded as the ancestor of modern Confucianism, first advocated the independence of Confucianism; then his disciple Hayashi Razan founded the Zhuzi Studies in Japan. The theory of Zhuzi Studies advocates the duality-opposition of the Yin and Yang in the nature and believes that this duality-opposition bolsters the order of class difference in human society. This metaphysical theory was used by the feudal ruling class. To the Shogunate government at that time, this was the best theory and was greatly appreciated and stressed as the official learning of Japan.

But when Chinese scholars analyze the inevitability of the formation of Japan's ancient studies, they say like this: with the upheaval of the Bakuhan System, Zhuzi Studies, although as the official feudal learning, fails to play its due role, which makes the founding of ancient studies, the new theory pillar of feudal system, become inevitable. Ienaga Saburo, famous historian of Japan, describes the main causes for the formation of ancient studies like this: Feudal thoughts are formed not merely to cater for the wills of the feudal rulers. As there are contradictions and development in the feudal society, the sector of thought is not in a standstill. So the ancient studies, which abandons Zhuzi Studies and returns to the thoughts of Confucius and Mencius, comes as the time requires.

The three representative figures and forefathers of ancient studies in Japan are Yamaga Sokou, Itō Jinsai and Ogyuu-Sorail. Although there are differences in their thoughts, their common idea is the same, which is to find the theory and philosophy from Chinese classic Confucianism to guide the social practice in contemporary Japan. The three schools all agree that reality and positive activities should be stressed instead of empty theory and formal morality. From the common ideas of the ancient studies we can see the change in ways of looking at things in Japanese society, which is the biggest contribution of ancient studies schools to the cultural history of Japan.

Besides, the Yangming Studies advocated by Nakae Toju and the thoughts of the School of Mind founded by Ishida Baigan also appeared successively, both of which became the original spirit power that boosted the social development of Japan.

2.2 Inheriting and Developing Chinese Confucianism

While absorbing the essence of Chinese Confucianism, Japanese Confucianism adds some unique factors of Japan's folk customs into Chinese Confucianism, makes it more close to Japanese culture and forms a Confucian theory with Japanese features.

As described above, Chinese Confucianism focuses on the pursuit of "goodness" and stresses the harmony among social members. Every social member takes himself/herself as an individual of the society, tries not to cause troubles to others and pursues social interests to realize his/her personal value. This value of Chinese Confucianism is taken and absorbed by Japanese Confucianism and forms a common mentality of the Japanese nation which is the "Group Consciousness" of Japan. Chinese Confucianism has shed some enlightenment on the formation and development of "Group Consciousness".

Kawashima Takeyoshi, contemporary social scientist of law of Japan, once describes like this: if many people coexist in a group for a long time, they will unconsciously take themselves as a member of this group. If the thought or deed of one individual goes against the interests of the group, it means that he or she breaks the idyllic peace of the whole group.

While inheriting the spiritual essence of pursuing “goodness” of Chinese Confucianism, Japanese Confucianism creates its splendid culture pursuing “truth”. As the pillar of feudal society, Confucianism on the one hand plays a positive role in sustaining social order and human relations and on the other hand it bounds the individuality and ignores human emotions. The Japanese nation has the cultural tradition of respecting individual feelings in essence and attaches great importance to the truth and purity of the inner world of human beings.

For example, Yamaga Sokou, Confucianist in the early Tokugawa Period and one of the three forefathers of Japanese ancient studies, advocates that human beings should unleash all the feeling from their hearts and he describes this insuppressible inner feeling as “sincerity”. He says: the naturally expressed desires and feelings of human being should be respected instead of suppressed. Masuho Zankō, expert of Shinto studies in the middle Edo Period, holds the idea that the moral view that focuses on form and etiquette and ignores human feelings should be abandoned. He believes that marriage without love will result in unhappiness for both man and woman and they should get into marriage on the basis of love. It can be seen that the ethical thought of Japanese Confucianism is very emotional. It excludes asceticism in essence but takes a tolerate attitude towards ardor.

Japanese Confucianism, which stresses “truth”, attaches great importance to the true feelings of human being. It advocates the creation of an environment where individuals can unleash their feelings naturally. Only in this way can every individual bring their initiatives and creativity to the full play. Japanese Confucianism also advocates the development of practical science and holds great interest in science and technology. This is far different from Chinese Confucianism that stresses moral cultivation and looks down upon science and technology. Most Confucianists in Japan stress science and technology as regard them as “statecrafts”. Ekiken Kaibara, ideologist in the early Edo Period takes the view that the “Li” of natural law are more important than the “Li” of metaphysics. He advocates that human should explore the laws of nature objectively and implement their rationality and objectivity. That is why his thoughts in medical field, herbal studies and practical morality all have profound influence.

3. Relation between Confucianism and the Cultural Mentality of Japan

To sum up, Japan always takes Chinese Confucianism as a foreign culture and accepts it critically in line with the conditions in Japan. Then what is the cultural mentality and national personality behind this?

First, Japanese Confucianism has been absorbing the most advanced part of Chinese Confucianism during its development and including the new changes and development of Chinese Confucianism into Japanese Confucianism. On the contrary, Chinese Confucianism is relatively closed. Most Chinese Confucianists restrict themselves by the theoretic system created by them and only focus on their moral cultivation. They ignore foreign cultures and other Confucian theories. Proceeding in such a lonely atmosphere, Chinese Confucianism reserves its purity and independence but excludes all foreign cultures and hinders its development.

Japanese culture adopts an inclusive attitude when learning from Chinese Confucianism. Backed by this inclusiveness and tolerance, it can naturally accept the advanced ideas and thoughts of other countries; however, this is not unconditional acceptance but critical acceptance. Instead of a simple imitation, it is based on the necessity and possibility and combines the local folk customs and way of thinking to finally create a unique cultural model of Japan.

Chinese Confucianism focuses on promoting smooth exchange between people and peaceful and harmonious social relations. When Chinese Confucianism that pursues “goodness” is introduced to Japan, Japanese people modify its core value according to their conditions. Chinese Confucianism stresses the ethics and morality, but the modified Japanese Confucianism stresses the existence of individual and the simple and natural feelings of human beings. It does not accept the hypocritical asceticism of Chinese Confucianism. Besides, Chinese Confucianism tends to create a harmonious society through the efforts of individual, while Japanese Confucianism takes the view that individual deeds should be guided by social regulations and the overall social rule should be maintained by common social standard.

The same origin but different viewpoint results in the above-mentioned difference between Chinese Confucianism and Japanese Confucianism. When exploring the causes, we discover another distinct feature of Japanese culture, which is its subjective feature. Due to this feature, Japanese Confucianism does not inherit Chinese Confucianism totally; instead, it adopts the way of thinking and Japan and creates advanced ideas that Chinese Confucianism can not reach.

“Syonindo” is also a unique economic and moral system of Japan. As a merchant, while fully affirming that it is a just deed to pursue economic interest in business activity, Ishida Baigan also advocates that merchants should be upright instead of speculative so as to create a practical ethical morality for the merchants. Ishida Baigan first establishes a management philosophy that combines economic interests and morality in the “Confucianism Cultural Circle”, which is the famous syonindo of Japan. This example fully displays the “creativity” of Japanese culture.

The above analysis gives us the following enlightenments: Japanese nation adopts an inclusive attitude when absorbing Chinese Confucianism and develops Chinese Confucianism under a creative and pioneering spirit. Either in accepting foreign culture selectively or in localizing foreign culture, the Japanese nation always starts from their needs and national interests and take into consideration the reality in Japan and the pragmatic mind of Japanese nation all the time.

4. Conclusion

To sum up, while pursuing “goodness”, stability and harmony, Chinese Confucianism also restrains the initiative and creativity of individual. It is undeniable that this negative and conservative deed hinders the social progress and development of China. However, Japanese Confucianism starts from the pragmatic cultural mentality and pursues “truth” in social life while absorbing the spiritual essence of “goodness” in Chinese Confucianism. It not only inherits and develops the essence of Chinese Confucianism but also improves it with folk customs of Japan to make it the original driving force for Japan’s social development.

When doing the research for this paper, the author feels that if China can adopt a critical attitude like Japan when accepting foreign culture, it will play an inestimable role for China’s development. We should not mechanically imitate foreign culture; instead, we should take into consideration the way of thinking of our people and create a unique cultural model that belongs to ourselves. In a time when culture plays an increasingly significant role, to inherit, develop and innovate Confucian culture plays an unignorable role for both China and Japan.

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Perspective on Fair Value Measurement

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Abstract

Although fair value is not a new measurement attribute, the interest of discussing fair value has been aroused by the release of new accounting standards. This article decodes fair value measurement again from four aspects respectively. Fair value measurement attribute is for asset measurement in the end, a kind of initiative measurement from master-slave relationship. As a matter of fact, fair value measurement is a measurement process. However, considering the special time, the relationship of exclusiveness does not exist between fair value and other measurement attributes. Simultaneously, fair value refers to fairness of value in special time and it is meaningless for fair value without the concept of time.

Keywords: Fair value, Assets, Measurement attribute

With rapid development of Chinese economy, whether accounting reflection corresponds to outside demands has gradually become a much-talked-about topic in the circle of accounting theory and practice. The central issue of accounting reflection rests with the quality of accounting data generated through accounting measurement. Just as the independence of auditing is soul of auditing, the quality of accounting data is soul of accounting. Accounting data with high quality is an important symbol for actual reflection of accounting. There have been various opinions on whether introduction of fair value measurement in accounting practice in China can generate accounting data with high quality. Those who hold a supportive opinion believe that, as an artificial accounting information system, estimation and hypothesis are intrinsic in accounting, so measurement of fair value does not affect its reliability (Xie Shifen, 2004). Reliability is just an issue of degree, and there does not exist any measurement attribute that is unexceptionable in terms of reliability (Chen Zhaohui, 2000). Those who oppose to the above opinion believe that, it is really extremely difficult for fair value to realize "fairness" since fair value is affected by external environment and artificial estimation. Especially, since 2008 when the financial crisis broke out, fair value has been faced up with unprecedented challenges. Those from banking and political circles hold the view in succession that fair value accounting standards are the "accomplice" of this crisis, and fair value measurement standards deteriorate the credit crisis. In the process of disputes for almost twenty years in China, it can be said that attitudes towards fair value have been full of twists and turns, the intricate process of approval --- negation --- approval in succession. New Accounting Standards for Business Enterprises released on February 15, 2006, have almost made their last pitches, and we should boldly use fair value measurement to improve quality of accounting data. Taking as a sample those A-share listed companies since implementation of new accounting standards in 2007, Liu Ying (2009) regarded the period of half a year as a sub-duration. It is indicated by the evidence that fair value measurement has value relevance, which in turn is interrelated with the market environment, and that relevance of fair value measurement in the bull market is higher than that in the bear market. This conclusion tells us that promotion of fair value measurement is feasible and may improve quality of accounting information disclosure. In this article, the author attempts to express his humble opinions in four aspects from the perspective of the nature of fair value measurement in the hope that the extensive accounting staff in listed companies can better understand fair value and better carry out new standards.

1. Ultimate direction of fair value measurement --- measurement of assets

Under the circumstance of satisfying specified conditions, application of fair value measurement is, as a matter of fact, measurement of assets. In accounting, accounting factors are classified into six major factors, including asset, liability, ownership interest, income, expense and profit. Measurement of fair value on other factors should be based on fair value measurement on assets produced in the transaction. According to Li Yu (2009), the core of accounting measurement is measurement on assets, and all other factors can be defined or set price by assets. Among the three

static accounting factors, asset is in the central position all the time, and changes of liability and ownership interest can both be expressed by assets. Therefore, from the perspective of fair value measurement, measurement on other factors by use of fair value can ultimately be transformed into fair value measurement on assets.

From the perspective of manifestation forms, accounting measurement can mainly be classified into two major parts, namely, assets valuation and income determination. The so-called assets valuation is to use currency amount to confirm and display acquisition (such as realization of sales revenue) of all asset items, its employ (such as generation of a cost) and its balance (remaining assets). According to Ge Jiashu and Lin Zhijun, valuation of assets can also be applied to measurement on liabilities and property right. Liability is usually termed as negative assets, whereas property right refers to the remaining assets or net assets after deducting liabilities from assets, both of which can not go without assets valuation or measurement. After implementation of the new standards, China began to attach great importance to the asset-liability view, and the accounting standard for income tax in China was a case in point. Under the concept of assets and liabilities, measurement determined by income is subordinate to assets valuation. Therefore, either measurement on the factor of operation results or measurement on the factor of financial situation should be finally attributed to fair value measurement on assets. In turn, unfairness of assets measurement value may also affect measurement on other factors.

From the perspective of accounting practice, the ultimate direction of fair value measurement is that the idea of measurement on assets is to be well verified. For instance, assets received by an enterprise from an investor should enter an item in an account according to the value agreed in the investment contract by both parties of a transaction, with exception of unfair value agreed, which indicates the entry value of assets should be fair. If the value agreed is not fair, then there may appear two sorts of value for the assets, that is, agreed value and fair value. It is stipulated in the new standards that the entry value of assets have to be fair. Thus, assets should enter an item in an account based on fair value, while paid-up capital may enter an item of an account based on agreed value, with other items being balance adjustment. Here, agreed value means that the investor has voting capital amount, which in turn refers to the value agreed by both parties, but not according to fair value. Therefore, the stipulation that entry value of assets have to be fair actually determines that unfair voting capital amount agreed should be adjusted in balance. After adjustment, total interest amount generated is also fair. Thus, it can be seen that, fairness of interest is determined by fairness of assets.

2. Fair value measurement is a sort of initiative measurement, but not passive measurement.

According to the master-slave relationship between measurements, the six major factors of accounting can be classified into initiative measurement factor and passive measurement factor. Initiative measurement factor refers to the factor directly measured by such measurement attributes as fair value, whereas passive measurement factor refers to the accounting factor whose measurement amount can only be confirmed based on measurement on other factors (including measurement attributes and value of measurement). From the perspective of factors of static financial situation, assets and liabilities can be regarded as initiative measurement factor, and ownership interest can be seen as passive measurement factor. Considering the accounting reform in the past several years in China, it is measurement on assets and liabilities that have been mainly standardized, especially measurement on assets. Since merely data of initiative measurement factors are accurate, amount of factors of passive measurement is naturally determined. From the perspective of factors of operation results, income and expense belong to initiative measurement factor, whereas profit belongs to passive measurement factor. As for confirmation of income and expense, specific stipulations have been made in the new standards, including confirmation and measurement of income and expense, because data about income and expense directly decide data about profit. As has been mentioned previously, measurement on assets is the core of the entire accounting measurements. Under the concept of assets and liabilities, measurement determined by income is subordinate to assets valuation. Therefore, compared with measurement on factors of dynamic operation results, measurement on factors of static financial situation can be attributed as initiative measurement whereas the former belongs to passive measurement.

From the angle of the master-slave relationship between measurements, if an economic activity is required to apply fair value measurement, then it should start with factors of initiative measurement so as to guarantee fairness of factors of passive measurement. For exchange activities (with the precondition of corresponding with fair value measurement) of nonmonetary assets under the mode of fair value measurement, assets received are based on fair value measurement of assets surrendered. Here, first of all, it should be stipulated that assets received should be based on fair value measurement, whereas after assets surrendered have actually been converted into measurement on profits and losses after being surrendered. Hence, measurement on profits and losses rests with measurement on assets received. From this angle, fair value has always been mentioned in allusion to factors of initiative measurement. Thus, fair value measurement is a sort of initiative measurement, but not passive measurement.

In addition, according to the author, to let the extensive accounting staff come to understand the master-slave relationship between measurements can enable them to better apprehend influences and outcome of accounting measurement. Measurement on accounting factors does not only refer to measurement on factors per se, but also

determines data about factors of passive measurement. Therefore, we should be prudent in application of fair value measurement. Otherwise, the “chain reaction” may be caused. The accounting standards in China adhere to the moderate and prudent principle in application of fair value. As a matter of fact, after full implementation of accounting standards, the Ministry of Finance have prompted enterprises by all means to prudently apply fair value measurement. For example, in the case of investment real estates, although in “Accounting Standards for Enterprises No. 3 - Investment Real Estates”, it is stipulated that follow-up measurement mode of fair value should be adopted in investment real estates. However, at the same time, strict restricted conditions are also specified in application of fair value. It is indicated through the data in “Analysis Report on the Implementation of New Accounting Standards by Chinese Listed Companies in 2007” by the Department of Accounting of the Ministry of Finance, 630 out of 1570 listed companies held investment real estates in 2007, among which only 18 listed companies adopted the fair value mode to conduct the follow-up measurement on investment real estates, which should be attributed to implementation of the principle of “Day-to-day door-to-Market Analysis” by the Department of Accounting of the Ministry of Finance. After the new standards were carried out, the Department of Accounting of the Ministry of Finance tracked and analyzed reports of each listed company in 2007, which reflected the prudent attitude of the country towards implementation of fair value measurement from the very beginning. It is emphasized that fair value belongs to initiative measurement and may arouse the “chain reaction”, so it can better cultivate and establish the prudent concept of accounting staff.

3. Fair value measurement is a process.

Fair value measurement refers to the amount of exchange of assets or settlement of obligation of their own free will by the two parties of transaction in a fair deal. As for an item of asset, whether the amount --- the fair value measurement --- of exchange of assets or settlement of obligation can be adopted is affected by lots of factors, but not finished at a stroke, because fair value measurement is a process. However, it has been less than three years since the new accounting standards were carried out in China. Therefore, according to the author, if too high expectation is placed upon effects of applying fair value measurement, then it is not in accordance with the current situation in China. How to understand this process? The author is going to discuss it from the following several aspects:

3.1 Fair value measurement is a progress and is developmental direction of accounting.

Western countries have always been a pilot in research and application of fair value measurement. Especially in USA, fair value was attempted to use since 1970s. Afterwards, studies on fair value have never really stopped. Until September 15, 2006, US Financial Accounting Standards Board released the Statement of Financial Accounting Standards NO.157 --- “Fair Value Measurement” (SFAS NO.157). In the new standards, meliorative guidance was put forward for assets and liabilities of fair value measurement, and made response to information disclosure of investors. It was stipulated, a company should give more disclosure to such aspects as scope of assets and liabilities of fair value measurement, information applied in fair value measurement and influences of fair value measurement upon income, etc. International Accounting Standards Board (IASB) also adopted fair value measurement in IAS32. A general view of courses of study by the international accounting circle on fair value for almost 40 years, it can be found out that, fair value measurement can obviously improve quality of accounting data and represents developmental direction of accounting measurement in the future. However, in earlier 2008, the Subprime Lending Crisis broke out in USA, and fair value measurement was faced up with severe challenges. Those who criticized fair value measurement mainly included the following financial institutions: the Stars and Stripes, Merrill Lynch, United Bank of Switzerland, American International Group (AIG) and the Blackstone Group who censured that fair value measurement had exaggerated the subordinate debt, which aggravated the Subprime Lending Crisis. Under the great pressure of political and financial circles, some changes have taken place in fair value measurement in western countries. Fair value is not a direct cause to give rise to the Subprime Lending Crisis. However, outbreak of the Subprime Lending Crisis indeed revealed that fair value measurement was still not extremely perfect. Thus, we should speed up research on newly emerging issues and attempt to revise and make perfect fair value measurement, but the future trend of fair value measurement will not alter. Fair value measurement is market-oriented, which emphasizes fair transaction and market perfection. Although America possesses a developed market economy, problems still happen in fair value measurement. What's more, the existing market economy in China is still not extremely perfect, and US and the European Union still have not acknowledged the status of the market economy in China. It should come to our mind that there is still a long way to go for the market economy in China. Considering the current situation of China, fair value measurement will be long term process.

3.2 Fair value measurement is a process of continually testing professional judgment of accounting staff.

According to Zhang Lianqi, considering its purpose, fair value is a process to seek for an objective kind of value, but this process has to be realized through the subjective judgment of human being, which enables fair value to evolve into a kind of utility value. Utility of the same object means differently to different people, and even the same person may differ under different circumstances. Therefore, it is difficult to generate a stable evaluation scale. Furthermore, the evaluation depends on such factors as the background, scholarly attainments, purpose and concept, etc, of the subjects,

so it is difficult for others to make a decision on the right and wrong. This sort of property of insufficient rigidity and superabundant elasticity is susceptible to being manipulated. On one hand, the above viewpoint indicates the perplexity encountered under fair value measurement, and, on the other hand, also tells us that accounting staff should be strengthened in terms of their professional ethics and professional judgment capacity in order to adopt the amount of assets exchange or settlement of obligation --- fair value measurement. However, improvement of moral quality and cultivation of judgment capacity calls for a long term process, which determines that adoption of fair value measurement requires a long process to actually realize more fair value measurement.

3.3 In a narrow sense, amount of fair value of an item of asset is always changing, and accounting measurement needs to track the process of changes so as to realize measurement of the overall process of fair value.

Under fair value measurement, accounting staff may at any time adjust the book value. So long as fair value fluctuates, it is proved that a transaction occurs and the book value should be adjusted accordingly. According to Zhou Mingchun and Liu Xihong (2009), the reason for high information cost of application of fair value is that the confirmation process of fair value usually consumes a large amount of human power and material resources. Furthermore, the procedure is quite complicated, and cost of information may be increased if the procedure lasts for long. Actual fair value measurement cost is extremely high. However, offer of accounting information is restricted by the principle of cost effectiveness. As for offer of accounting information with high cost, there are usually two methods used by an accountant: firstly, surrender of the offer and secondly, simplification of the offer. As a matter of fact, the second method is what is adopted in the existing standards in China. According to the new standards, adjustment can only be made on the balance sheet date and the book adjustment is not required to make in other periods of time. Thus, cost of fair value measurement is largely reduced, and at the same time, demand of investors on more relevant accounting information is given due consideration. Therefore, essentially speaking, fair value measurement is a process in which the book value is adjusted at any time.

4. Fair value refers to fairness of value in special time, and it has no meaning at all without the concept of time.

According to the author, accounting measurement has its relativity in the aspect of time concept, so the value measured by means of a measurement attribute also has its relativity in the aspect of time concept. For example, considering relationship between historical cost and fair value, historical cost reflects value of a transaction or an item during a certain period of time in the past, which was fair at that time or was conformed based on fair value. Historical cost of a certain item of asset or liability under the current circumstance might be the fair value of this item of asset or liability in the past, whereas the fair value of a certain item of asset or liability under the current circumstance may be the historical cost of this item of asset or liability in the future. Therefore, it can not be said that historical cost is unfair or fair value is absolutely fair, and when the value of the transaction is selected to be confirmed and reflected should be taken into consideration. If the value measured in the past is selected to be reflected at present due to constraints of accounting hypothesis, then the value is already "out-dated", so there is obviously nothing meaningful to criticize unfairness of the value. Likewise, if the value measured at present is reflected in the future due to various restraints, then the value belongs to disclosure of data in the future, and even if it is much fair at present, it will mean nothing in the future.

Considering the special time, amount of a transaction may be expressed as several measurement attributes. This indicates that fair value is not necessarily a completely independent measurement attribute, but has close relationship with other measurement attributes. According to Han Dongping, et al (2009), fair value is equal to other measurement attributes, but it is contradictory to parallel fair value to other measurement attributes in the new standards. Besides, there are also some people who believe that the relationship between measurement attributes should be exclusive (Li Yu, 2009), and the equality relation of amount should not exist between measurement attributes. However, the author in this paper is not about to this viewpoint. According to him, a certain relationship may exist between measurement attributes (including fair value), but not the relationship of exclusiveness. We should not think that two sorts of measurement attributes are equal just because their amount is equal. Amount of measurement is merely one aspect of measurement attribute, and it also has characteristics of other aspects, such as foundation and angle of measurement, etc. There are the following reasons why we don't agree with the above viewpoint. Firstly, although their amount is the same, basis of their measurement is different. According to Professor Ge Jiashu, the basis of assets valuation can be classified into output value basis and input value basis. Output value basis includes fair value and net realizable value, etc, whereas input value basis includes historical cost and replacement costs. Therefore, although the amount of special time is equal, fair value is different from cost measurement in that the former is a sort of output value measurement, but cost is not. Secondly, under a definite circumstance, the non-excludability relationship between measurement attributes is more significant, which provides good reference for us to recognize the relationship between fair value and other measurement attributes under an indefinite circumstance (realistic circumstance). For example, under a definite circumstance, present value refers to fair value. Here, it is confirmed that future cash flow and interest rate (namely, discount rate) produced during a transaction are already known. In the Second Section of the book "Financial Accounting Theory" by William R. Scott, he took an extremely simple example to illustrate the total feasibility of the

current value. What's more, the discounted present value of future cash flow equals to the market price of assets, that is, fair value. Otherwise, the phenomenon of interest arbitrage may occur. The so-called interest arbitrage refers to the phenomenon in which the market price of a market enables one to purchase goods and services from one market and then sells them in another market to acquire profits. Existence of the motive of interest arbitrage ensures that the market price of an item of asset is always equal to the present value of future cash flow.

In sum, as a measurement attribute, fair value has been promoted for application by all countries in the establishment structure of their standards by sparing no effort, which has already become a major trend in international application. Thus, we should also boldly advocate its use. Although it has all sorts of disadvantages, just as a lot of opponents have pointed out, such as, easily manipulated by human beings and insufficiency of reliability, etc, the major trend of fair value has been determined and is irreversible. The International Financial Reporting Standards have extensively used fair value measurement, and quite a large number of countries in the world (including Hong Kong) are implementing the International Financial Reporting Standards. There has not been any evidence to indicate that fair value can not be used. On the contrary, fair value measurement has obviously improved quality of financial reporting.

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Explore the Ideological and Political Work of University Teachers and Students in the New Era

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Abstract

Development is the core of the scientific outlook on development. Its essence is people-oriented and the main content is comprehensive, coordinated and sustainable development. Using the scientific outlook on development to guide the ideological and political work in higher schools is to unify thoughts and coagulate the people's mind to promote the rapid, healthy and coordinated development of higher schools so as to provide personnel and intellectual support for comprehensively building a well-off society and the socialist modernization.

Keywords: The scientific outlook on development, Teachers and students, Ideological and political work

The scientific outlook on development reveals the universal law of development. It is of guiding significance for us to do well our ideological and political work in colleges and universities in the new period, as is mainly reflected in three aspects. Firstly, as long as we always adhere to humanism, firmly establish a comprehensive, coordinated and sustainable scientific outlook on development, will we continue to promote the development of advanced productive forces, the progress of advanced culture and realize the fundamental interests for the people and for the teachers and students. Secondly, it is needed objectively by building a "harmonious University". The Ideological and political work of the higher schools involves the school's educational direction and the goals of educating people, and the realization of building a harmonious university. So we must practice the scientific outlook on development well. Thirdly, the ideological and political work in new era continuously needs to create new political tasks. With the development of the socialist market economy, the ideological concepts of college teachers and students have displayed a pattern of diversification. The mutual penetration of the ideological field and the internationalization of higher education has brought many new subjects to the ideological and political work in colleges and universities. So, the party and administrative departments in colleges and universities should take the scientific outlook on development as a guide, and consider it as an important political task to publicize it and implement it well to create a good atmosphere of spirit and environment of public opinions for the reform, development and stability of the higher schools.

1. From an overall and strategic perspective, we should have a profound understanding of the importance of spirit of reform and innovation to promote the ideological and political work in colleges and universities and to effectively enhance the sense of urgency and responsibility.

1.1 The ideological and political work of the teachers and students of higher schools still can not meet the requirements of the new situation.

The ideological and political work is weak in some higher schools. The long-term educational system of advanced CPC members is inadequate and the educational outcomes of advancement need further consolidating. The leading bodies at all levels of higher schools need further promoting to meet the development trends of higher education. Their abilities and qualities requires to be raised in promoting the higher education to gain a sustained, healthy and coordinated development. Their consciousness in adhering to the socialist direction of opening schools, improving the political sensitivity and discernment, and effectively resisting division and westernization needs further strengthening. It is still an arduous task to build the leading team well in colleges and universities. some departments do not give enough emphasis on the ideological and political education of university students. The ideological and political theoretical courses are not properly set up and the ideological and political education is not completely in line with the realistic thinking of university students. The student management work is inconsistent with the requirements of development. The team in charge of the ideological and political work is not of high quality. The existence of these problems directly restricts the quality of personnel trained in the higher institutions. We should attach great importance to conscientiously

sum up the experience, reform and improve it with innovative spirit.

1.2 The new period needs to strengthen and improve the ideological and political work for it is the fundamental guarantee for the higher education to complete the historic mission entrusted by the CPC 17th National Congress.

The higher schools are the important bases to develop talents, to innovate science and technology and to inherit the civilization and serve the community. They shoulder the noble mission of cultivating the qualified builders and successors to build the socialism with Chinese characteristics, and have played an irreplaceable important role in supporting economic and social development, improving the capability of independent innovation and promoting the building of an innovative nation, and speeding up the process of building a well-off society. In today's world, the economic globalization is developing in depth. The scientific and technological revolution is speeding up. The international competition is becoming increasingly fierce. Knowledge is increasingly becoming the decisive factor for raising the overall national strength and international competitiveness. The human resources have become key and strategic in the pattern of international competitions. More people receiving higher education means the higher quality and stronger international competitiveness. The CPC 17th National Congress pointed out that priority should be given to develop education to construct a strong nation of human resources. Attention should be paid to improving the quality of higher education, and striving to create world-class scientists and leading talent in science and technology. The creative talents on the forefront should be especially stressed and cultivated. These are the clear requirements for the higher schools to do good ideological and political work in new era. To realize the goals advanced by the CPC 17th National Congress, technology is the key, education is the foundation and talent is the guarantee. Only with the spirit of reform and innovation to promote ideological and political work and the sound and rapid development of higher education, can we run the higher schools well to make the people satisfactory and complete the Party's historic mission entrusted by the 17th National Congress of the CPC.

1.3 Taking the scientific outlook on development as guidance to promote the ideological and political work in higher schools is needed by the 17th National Congress of the CPC to meet the new challenges of the ideological and political work in the higher schools.

At present, the development of higher education stands at a new historical starting point, showing a series of new characteristics. First, the young teachers are becoming the main force. However, it becomes urgent to enhance the quality, especially the ideological and political quality and the level of specialty of them. Second, the Internet, cell phones and other modern media and communication tools have become important means for university teachers and students to obtain information, learn knowledge and enjoy entertainment and exchanges friendship, which have produced new challenges for education and teaching management and the means of ideological and political education work as well. Meanwhile, higher schools, where intellectuals are clustered, are the places of various thoughts and cultures, and the originated places for new ideas or new concepts. University teachers and students are active in their thinking. They are in pursuit of personal independence, strong sense of democracy and critical spirit. With the development of economic globalization and the further implementation of reform and opening up policy, various kinds of social thoughts may have more and more direct impact on higher schools. Different changes in society may spread even more rapidly in colleges and universities. Therefore, teachers and students of higher schools may have stronger independence of thinking, more option and variability. More differences will turn up. This requires us to carry forward the spirit of reform and innovation, constantly study new situations, solve new problems, and effectively enhance the ideological and political work of the higher schools, make the ideological and political work vigorous and lifelike, and give full play of the lifeline role of ideological and political work in the reform and development of the higher schools.

2. We should make great efforts to practice the scientific outlook on development and promote the ideological and political work with the spirit of reform and innovation.

2.1 The ideological and theoretical construction should be vigorously strengthened.

First, we must persist in using the theoretical system of socialism with Chinese characteristics to arm the minds of teachers and students. Marxism is the fundamental guiding ideology on which the Communist Party of China and the Republic of China are founded. Relentless effort should be made to adhere to the guiding position of Marxism in the ideology and the latest achievements of Chinese Marxism should be adopted to arm the teachers and students. Research on various types of ideological and cultural ideas should be strengthened. Teachers and students should be told to correctly understand and treat a variety of ideological and cultural ideas, to enhance political sensitivity and discernment, and to raise the ability to tell right from wrong. Practical teaching should be strengthened and various forms should be adopted to let the teachers and students deeply understand the great practice of socialism with Chinese characteristics, to enhance their theoretical, political, and emotional identification with the socialism with Chinese characteristics to firmly stick to the ideal and belief of taking the socialist road with Chinese characteristics.

Second, we must melt the socialist core values into the entire process of education. The effective ways or means should be actively explored to build campus culture with the use of the socialist core values. we should vigorously advocate the

basic content of socialist core values to be written in teaching materials, to enter classrooms and the minds of the university students so as to form the mutual ideal and faith, strong spiritual motivation and good morals in teachers and students. Practical activities should be vigorously conducted about the socialist core values. Promoting the theme and highlighting the high grade by means of various academic, scientific, cultural and sports activities in rich content helps the teachers and students to receive the thoughts, enhance their quality and devote themselves to the society in the process of practicing the socialist core values. We should stick to controlling the ideological and cultural fronts with the socialist core values, strengthen the construction of school newspapers and magazines and the campus network, strictly manage the societies, classes, lectures and network, while resolutely oppose the erroneous tendency of denying Marxism, never provide channels for the wrong ideas to spread, and ensure the safety positions and correct guidance of Marxism.

Third, we must deeply carry out the activities of studying and practicing the scientific outlook on development. Carrying out the activities of study and practice is not only an important starting point for the Party's ideological and political work, but also the vital opportunity to promote sound and rapid development of the higher schools. We should correctly grasp the requirements of the Party members and cadres, organize the discussions of emancipating the mind, and make efforts to solve the major issues such as "what is the scientific development, and how to achieve scientific development" to form a consensus of promoting the idea of scientific development. We should grasp the high-level scientific development, on the basis of deep investigation and exploration and public opinions, clarify the thinking line of development, better the development planning, make clear the development strategy and focus on building the institutional mechanisms conducive to scientific development. We should correctly understand the requirements that the teachers and students all want to share the benefit, improve the long-term mechanism for leading cadres to go to the grass roots to contact teachers and students, make every means to resolve the urgent issues, and honestly do something for the teachers and students to achieve real results.

2.2 The ideological and political education should be vigorously strengthened.

First, teachers' professional ethics should be well built. It is the primary task to build the team of teachers. The more attention we pay to it, the better results we will achieve. To enhance the professional ethics of the teachers, great efforts should be made to strengthen the professional ethics and moral standards, comprehensively improve the ideological and political quality of teachers, professional morality and teaching capacity. All the teachers should effectively strengthen their ideals and faith, firmly believe socialism with Chinese characteristics, have loyalty to the Party's educational course, in teaching and research obey the rules of "non-restricted area in academic research while being self-disciplined in classroom", conscientiously strengthen the guiding status of Marxism in colleges and universities, establish a good teaching style and good morality, rigorously prepare every class, educate the students with morality, teach them to be a man, becoming a real teacher in academy and a good example for the students. New teachers should be trained to inherit the good morality. Good examples of teachers should be praised and their exemplary deeds should be publicized so that the typical example can be known by more people. The style of study should be further built to create an honest academic atmosphere where teachers can put their heart in studies and devote themselves to teaching. Institutional construction should also be strengthened and the professional ethics and teaching style should be investigated to deeply understand the apparent problems and better the systems of standards of teachers' professional ethics and the academic morality, and the teacher appraisal practice, etc. Long-term mechanism should be set up about the teacher morality.

Second, we must do a good job about the ideological and political work of the students. We should correctly grasp the characteristics of the mentality of the contemporary college students and the law for them to be a useful person in the future to develop our work effectively. We should make full use of the great process, the glorious achievements and other rich materials that new China has made since its foundation, especially, the 30 years of implementation of the reform and opening up policy to tell our students to strengthen their belief, consciously integrate their own life pursuit with the future and destiny of China, set up a great ambition of dedicating themselves for an open, prosperous, democratic, civilized and harmonious China, cherish the time, study hard, experience the life of ordinary people, put theory to practice, exercise their wills, better their characters and strive to become useful persons for the society. The pointed education of loving the Party, our motherland, the people and socialism is conducted to enhance the national pride and social responsibility of the students. Practical education should be strengthened and some theme activities such as the construction of harmonious campus, to be examples of educators, to become useful persons to serve our motherland, etc. should be firmly pushed forward. The students should go out of the ivory tower and into the society to experience the life, improve their capacities and make their contributions in the great socialist practice. Meanwhile, they can educate themselves through their own experience, insights and understandings. The network position should be stationed by actively opening up, utilizing, purifying and controlling the new position of network to develop network ideological education to raise the timeliness, enlarge the coverage and enhance the influences. Mental health education should be strengthened by improving the prevention against psychological crisis and response system and initiatively communicating with the students to adjust their emotions. Humanistic concerns should be conducted to guide the students to treat themselves, the others and the society correctly, to confront difficulties, frustrations or setbacks

properly and to shape social attitudes of self-esteem, self-confidence, rationality and peace, and optimism so as to enhance their abilities to burden the pressure from society. We should offer to solve their practical problems and care them and help them to look for jobs with a high degree of political responsibility and deep love for the students. As for those students with financial difficulties we should offer assistance for them to ensure that each student from economically disadvantaged families can be effectively funded.

Third, we must establish and improve the effective mechanism of the ideological and political education. We should set up and better the leading mechanism led by the Party committee of the school and managed by both the Party and administrative departments, construct the mechanism of cultivating all the students in an all-round way, and the mechanism of guaranteeing that all students in education, all the team members, all assessment and all the investment in place. The first thing is to strengthen the team of instructors and class supervisors, who are backbone of the ideological and political education work for the college students. According to the principle of “strict admittance qualification, selecting the best, training them well and giving them free space to display their abilities”, the mechanism of selecting, training, encouraging and guaranteeing for instructors and class supervisors should be established to ensure that they have conditions to work platforms to perform and space to develop themselves to arouse their enthusiasm and creativity to the most degrees. The second is to effectively strengthen the educational network of schools, families and the society to form the resultant force that the whole society cares and supports the ideological and political education of the higher school students. The third is to work out plans, improve the measures, intensify our efforts, fully tap the social wealth of educational resources to integrate them and campus educational resources, invite the leaders from the Party and government departments at all levels, experts, scholars, social outstanding figures and leading figures in all walks of life and encourage the old schoolmates and successful entrepreneurs to have talks with the students to let the students receive the education of the times.

The ideological and political work of university teachers and students has a long way to go. The 17th National Congress of the CPC pointed out that priority should be given to developing education to build a strong nation with human resources. Emphasis is made to improve the quality of higher education to create world-class scientists and leading figures in science and technology. Attention should also be paid to cultivating the talents of innovation in the forefront. To complete the ambitious goal advanced by the 17th National Congress of the CPC, we should adhere to the fundamentals of cultivating students with morality and put educating people as essentials, ideological and moral education to be first to the various aspects of higher education to constantly open up new prospects for teachers and students of the ideological and political education work.

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On the Influential Elements of English Study

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Abstract

The paper focuses on the most important elements in English study. The influential elements are classified into types outside classroom and types inside classroom. After a thorough analyzing the important elements, the interrelationship between the two kinds is also explored. Besides, the typical ESA (Engage, Study, Active) patterns of the inside class in English study is discusses.

Keywords: English study, Outside classroom, Inside classroom

1. Introduction

Nowadays, more and more people are learning English for various reasons: getting a job; a chance to get educated; the ability to take a full part in the life of one's own country or the opportunity to emigrate to another, and so on. Many researchers have exerted a lot of efforts to help people achieve the language proficiency more easily and the important elements for the English study are found. As people learn language either outside classroom or inside the classroom, it is reasonable to divide the relative elements into two categories--elements outside the classroom and inside the classroom.

2. Important Elements for English Study outside the Classroom: Exposure, Motivation, and Use

It is no doubt true Exposure is one of the important elements to learn English outside the classroom. All the children who are repeatedly exposed to a language will in normal circumstances learn it. They do this unconsciously rather than as a form of study. Sooner or later, most adults can learn English well, if they get endless exposure, for they can get help from the surrounding language speakers.

Motivation is people's internal motility to learn the second language. According to Gardner and Lambert (1972), there are integrative motivation and instrumental motivation. A learner is said to be interactively motivated when the learner wishes to identify with another ethno linguistics group, while a learner with instrumental motivation is motivated to learn English for utilitarian purposes, such as furthering a career, improving social status or meeting an educational requirement. It is said Integrative motivation is more powerful than Instrument motivation. No mater what kind of motivation the students have, it is clear that highly motivated learners do better than those who haven't any motivation at all.

The Use of language gives people the chances to practice what they have obtained and the chances to monitor the language. There are some adult immigrants, without frequent use of the language, it is difficult for them to learn English well, even if they are repeatedly exposed to the language and they have either integrative motivation or instrumental motivation. Getting endless exposure of English for a long period time, the immigrants may understand the target language when it is spoken or read, but if they don't practice the language intentionally, they can not succeed in speaking and writing, and they can't be called successful language learners.

3. Important Elements for English learning and teaching inside the classroom: Engage, Study and Activate

The features of learning language outside the classroom and inside the classroom are deferent from each other. The former focuses much on learning, while the latter combine teaching and learning. Teaching and learning are two closely related components of the inside classroom study. There are three elements in English learning and teaching inside the classroom, which are Engage, Study and Activate.

Engage is the point in a teaching sequence where teachers try to arouse the students' interests, thus involving their emotions. Activities and materials which frequently Engage students include: games, music, discussions, stimulating

pictures, dramatic stories, amusing anecdotes etc. Even where such activities and materials are not used, teachers will want to ensure that their students engage with the topic, exercise or language they are going to be dealing with. Engage plays dominant role in language learning inside the classroom and it often takes place at the beginning of the teaching sequence, which ensure that the process of teaching goes smoothly and efficiently. Without the element of Engage, the class may be boring and the students will switch off from what was being taught. If the students are engaged, they will be interested in the class and learn better.

Study activities are those where the students are asked to focus in on language and how it is constructed. They range from the study and practice of a single sound to an investigation of how a writer achieves a particular effect in a long text; from an examination and practice of a verb tense to the study of a transcript of informal speech to discuss spoken style. Study is a typical element for learning English inside the classroom, and it is a conscious activity of learning which is different from language acquisition outside classroom. Successful language learning in a classroom depends on a judicious blend of subconscious language acquisition and kind of Study activities.

Activate is the element describing exercises and activities which are designed to get students using language as freely and communicatively as they can. The objective for the students is not to focus on language construction and practice specific bits of language, but for them to use all and any language which may be appropriated for a given situation or topic. Thus, Activate exercises offer students a chance to try out real language use with little or no restriction---a kind of rehearsal for the real world. Typical Activate exercises include role- plays advertisement design, debates and discussions, describe and draw, story and poem writing etc. If students do have a chance to activate their knowledge in the safety of a classroom, they may have fewer problems in using the language in the real world.

4. Connection between the Elements for English Study Outside and Inside the Classroom

The elements of learning language outside the classroom and inside the classroom are different from each other, while there are some connections between them. If the students are frequently Engaged in the class, they will probably be interested in the class and have a motivation to learn the language. Some activities and materials which frequently Engage students will also make the students be exposed to the language. Activate is the element which creates a second language spoken environment in which the students will be exposed to the language, and it gives the students more chances to use the second language.

5. Some Different ESA Patterns in English Study inside the Classroom

To say that the three elements, Engage, Study and Activate are very important for English study inside the classroom and need to be present, does not mean they always have to take place in the same order. The frequently used in English study of different ESA patterns are as follows.

5.1 ESA Straight Arrows sequence

ESA Straight Arrows sequence is a type of teaching sequence takes students in a straight line: first the teacher gets the class interested and Engaged, then the students Study something and they then try to Activate it by putting it into production.

For example: at the beginning of the class, the students may be engaged by watching a movie clip concerning about Christmas celebration. Then the teacher helps the students to concentrate their attention on the language used in the text, "Christmas", for example, to analyze the grammar or the writing features of the text. At last, the teacher asks the students to do a role play named "On the Christmas EVE".

ESA Straight Arrows sequence works well for certain structures. It is frequently used in the classroom learning and teaching, and many teachers often use this type of sequence without cautious.

5.2 EAS(A) Boomerang sequence

Boomerang is a curved flat wooden missile (use by Austrian Aborigines), which can be thrown and it returns to the thrower if it fails to hit anything. EAS(A) Boomerang sequence is one type the teacher is answering the needs of the students. They are not taught language until and unless they have shown (in the Activate phrase) that they have a need for it.

For example: In the Engage phrase, students and the teacher discuss issue surrounding job interviews and the students get interested in the discussion. Then the element of Activate takes place: after the teacher describes an interview situation, the students act out in role-plays. While the students perform the role-play, the teacher makes a lot of English mistakes they make and difficulties they have. When the role-plays are over, the teacher works with the students on the grammar and vocabulary which caused them trouble during the role-play. They might compare their language with more correct usage and try to work out (discover) for themselves where they went wrong. They might do some controlled practice of the language. Some time later, students role-play another job interview, bringing in the knowledge they gained in the Study phrase.

EAS(A) Boomerang sequence makes much better sense because the connection between what students need to learn and what they are taught is more transparent. However, it places a greater burden on the teacher since he or she will have to be able to find good teaching material based on (often unforeseen) problems thrown up at the Activate stage. It may also be more appropriate for students at intermediate and advanced levels since they have quite a lot of language available for them at the Activate stage.

5.3 EAASAEA Patchwork sequence

EAASAEA Patchwork sequence is made up with some patches of ESA elements. It is a mixture of procedures and mini-procedures, a variety of episodes building up to a whole.

For example: Engage: the teacher shows the students a science fiction movie clip concerning about the Internet to arouse the students interests. Activate: they have a discussion about the effect of the internet. Activate: they act out a role-play named "Internet Friends". Study: the teacher does vocabulary work on words of the text. Activate: the students describe their opinions on the virtual world. Study: the teacher focuses the students attention on the relative clause construction used in the text. Engage: the students watch another relative movie clip. Activate: the students have a discussion about how to use the internet efficiently.

EAAASEA Patchwork sequence is commonly used in the class of intermediate and advanced levels, because they probably reflect the way we learn--rather chaotically and not always in a straight line. But this type of class is often limited by the time and the size of the class.

6. Conclusion

From the all above, the conclusion can be given: whichever way of learning and teaching the learners and the teachers prefer, the elements describe--Exposure, Motivation, Use, Engage, Study and Activate--are the basic building blocks for successful language learning and teaching. Therefore, if the learners and the teachers take the conscious of the important elements and use them intentionally, it is easier to succeed in English study.

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The Reinvention of Love in D. H. Lawrence's *Women in Love*

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Abstract

Women in Love is interpreted as a novel of relationships between man and woman, man and nature, and mind and body. D. H. Lawrence's point of view on these relationships finds its best expression through the perspective of psychology and symbolism. It also suggests regenerating natural and inexorable relationships between man and woman, and man and nature to explore the mystery of life.

Keywords: Man and woman, Psychology, Symbolism, Characters

British literary critic F. R. Leavis in his great literary work *D. H. Lawrence: Novelist* tells that *The Rainbow* and *Women in Love* can prove D. H. Lawrence is one of the greatest literary artists, and Lawrence is a modern novelist and uses a lot of modern writing techniques to mode the characters. *Women in Love* is especially a book which "has artistic form more contrary to nature and meaningful structure". The characters in the novel are extraordinary in their personalities which are closely related to the bible and have symbolic meanings.

Women in Love is one of Lawrence's masterpieces and also one of the important novels in the 20th century. Nevertheless, this novel is difficult to thoroughly comprehend and analyze Lawrence's art in novel writing. Another aspect is that different readers interpret it in different perspectives. Many readers try to understand it from a modernistic point of view and attach much importance to the writing styles and through which to reflect the characters and to exhibit one of the themes of the novel—the reinvention of love of the characters.

In *Women in Love*, Lawrence uses a different technique which is contrary to the traditional to arrange the structure of the novel so as to achieve his goal. It is true that the narrative structure of *Women in Love* is complicated. On the one hand, it has lucid narration technique to draw the outline of its theme; on the other hand, it has the psychological description which is unique and has profound symbolism. Perhaps it is the complex structure and unique creative writing style that aroused the interests of the critics as well as readers to study and further explore the unparalleled literary charm of D. H. Lawrence.

Women in Love is the novel of ideas. The structure and development of its characters are directly linked with the theme of the novel, and vividly expresses Lawrence's thinking about the development of modern man's civilization and his theory about the relationship between male and female. The novel abandons the traditional plot and linear narrative technique in novel writing, and chooses special scenes and stories which have profound significance. Within these seemingly fragmentary scenes and stories, there are internal links that draw the fate of characters together.

In *Women in Love* Lawrence adopts a kind of symmetry in dealing with the two pairs of characters who are in love and this becomes the basic thread to link the whole story together, also this is one of the major themes of the novel. Brangwen sisters: Ursula and Gudrun fall in love with Birkin and Gerald respectively at the beginning. Gerald ended his temporal sensual relationship with model Minette, and was captivated by the cold sculptor Gudrun, their relationship represents "death". (Leavis, p114) Birkin parted with Hermione and established the polarized male and female relationship finally with Ursula, and their relationship represents "live". (Leavis, p114) The relationships between the two pairs of lovers develop towards the opposite sides. In a perfect symmetry the narrative devices form an antithesis which reflects the main theme of the novel. Later Birkin and Ursula experienced the hardship and struggle both in idea and feeling, and at last achieved harmonious love. While another pair Gerald and Gudrun seem in harmony with each other but actually at variance, especially in their idea and thinking, finally ended with Gerald's death in the snow.

Lawrence is no doubt an outstanding psychological novelist, who is influenced by Sigmund Freud's psychoanalytical

theory. In *Women in Love*, readers can find Lawrence widely uses psychological description to portray and analyze the characters, and that is conducive to reveal the theme—the mixed feeling of love and hate of the four characters. The “psychological pattern” (Leavis, p135) created by Lawrence is used to describe the characters and to promote the development of their relationships.

Lawrence’s exploration on the psychological development of his characters is clearly seen in *Women in Love*. The psychology of the characters is the basic element in the novel, the subconscious mixed feeling of love and hate is like a driving force to promote the development of the novel and establish the relationship, while, in a sense, the novel becomes a kind of “psychodrama” Although influenced by Freud, Lawrence thought he shared little or nothing with Freud. His technique in expressing the psychology of the characters surpasses his contemporary writers and the traditional concept. Lawrence says:

You mustn't look in my novel for the old stable ego of the character. There is another ego, according to whose action the individual is unrecognizable and passes through, as it were, allotropic states which it needs a deeper sense than any we've been used to exercise, to discover...like as diamond and coal are the same pure single elements of carbon. The ordinary novel would trace the history of the diamond... but I say "diamond, what! This is carbon. " And any diamond might be coal or soot, and my theme is carbon. (Kirkpatrick, p708)

It is from the surface to interior and the direct portrait of the characters’ psychology that Lawrence creates a peculiar psychological rhythm in his novels, so one cannot find the traditional characters and plots in *Women in Love*. In order to understand the unique structure of *Women in Love* one should penetrate into the very details of the psychological rhythm.

The theme of “life and death” determines the general psychological rhythm of the characters in *Women in Love*. Gerald is likened to the white moon, to the Alps, and to the Arctic snow wildness. The things that accompany him are always chilly, cold, hopeless and desperate. Gudrun is a person to control, to possess, and to exercise her own willpower. She has the negative destructive mental self-consciousness in the depth of her soul. Practically speaking, Gudrun belongs to the same group with Gerald, and their relationship represents death. While contrast to Gerald, Birkin symbolizes the natural, spontaneous life, the man alive and lived wholly as a man of integrity, the invincible life force that tries to overflow and stimulate him. While his lover Ursula is sensitive and protective, believes in true love and resents Birkin’s lectures on the subject and his hope for some thing beyond. She is milder, calmer and more delicate than her sister. Together with Birkin they are in Lawrence’s sense “man alive and woman alive”. Besides this, all the other characters contribute to the theme and interact with the main characters to reflect the psychological movement of the main characters.

The complex interleaving and transposition compose the framework of the characters’ psychology in *Women in Love*. We can perceive many detailed and particular psychological description in the novel. In chapter 8 Breadalby, Hermione and Birkin are walking toward the end of their relations, and Lawrence uses exquisite style of writing to manifest the tense relationship and psychological struggle between Hermione and Birkin. There are neither any inner soliloquies and quarrel nor any explicit expression of their action, but only their intuition, impulse and instinct. Hermione from time to time immerses into the depth of consciousness, and scrabbles at the edge of her mentality. Since Birkin is not willing to accept shelter Hermione provides for him, so subconsciously she bears a kind of hatred towards Birkin. Lawrence puts great emphasis on the psychological confrontation between Hermione and Birkin in their conflict. The whole chapter is based on the psychological rhythm, and is much like a psychodrama which dramatically demonstrates the psychological struggle between the characters.

Lawrence is one of the first novelists to introduce themes of psychology into his literary works. He believed that the healthy way of the individual’s psychological development lay in the primacy of the life impulse, or in another term, the sexual impulse. Human sexuality is, to Lawrence, a symbol of Life Force. Through presenting psychological experience into individual human life and human relationships, and exploring the personalities of his characters, Lawrence has opened up a new territory in the writing of novel. This is clearly shown in *Women in Love*, and the novel is the typical of this kind of writing.

In *Women in Love*, Lawrence uses a great deal of symbolism. The symbols and images are unconventional and are good to the development of the theme. He is very good at drawing concrete symbols which can convey his theme from the ordinary objects in nature to characters. He also develops concrete subjects and details into small images which appear repeatedly from the beginning to the end in the novel, by doing this he succeeds in symbolically expressing and suggesting certain kind of meaning.

Generally speaking, the symbols in *Women in Love* can be categorized into two groups: *images indicate life, vitality, hopefulness and prosperity; and images suggest coldness, hopelessness, decadence and death* (Leavis, p205). Images that accompany Birkin and Ursula are linked with the first group of images. The couple tries their best to escape the black ugly misery world and react against the mechanical civilization. They usually go to the places full of flowers,

trees and grass which suggest nature and life. Primrose, hyacinths, fir-trees, thickets of hazel, tufts of heather, all these are likely to be associated with life, vitality and hopefulness. Their relationship has a quality of comforting and soothing warmth and a hopeful promise. Images associated with Gerald and Gudrun are quite different from the former pair and represent the second group of images. Whenever Gerald and Gudrun appear on the scene, the atmosphere becomes cold, tense and ghastly. The cold, grey, remote, still water, the grey, visionary figures; Gerald's father's agony and suffering death; the deep snow-covered valley walled up by the steep precipice; the half-buried Crucifix and the cold stiff Gerald frozen to death, all of those images set up pictures of hopelessness and death. With a little carefulness, we can find that all these images appear at the time when their love affair begins, then comes to the turning point and final endings.

Critic Francis Fergusson makes such a statement about Lawrence: "by the time he reached *Women in love*, he was sure that he was through with the traditional novel that he no longer cared for individual character and circumstance." (Leavis, p221) Through the sentence we can infer that almost every character in *Women in Love* has a broader and more profound meaning than himself or herself, even their names have symbolic meanings. In the novel, the characters can be put into categories. Gerald is an efficient but ruthless coalmine owner, who suppresses his individual personality and emotion, twists the human instinct and nature and transforms modern man into mere instrument and slave machine, and he embodies the business achievement and fulfillment of the industrialism of the society. The things that accompany him are always chilly, cold, helpless and desperate. He is a symbolic figure of spiritual death and the decadent and corrupt western civilization, representing the whole set of bourgeois ethics. Contrary to Gerald, Birkin, in a real sense is a self-portrait of Lawrence, who fights against the cramping pressures of mechanized industrialism and the domination of any kind of dead formulas, is presented as a symbolic figure of human warmth, standing for the spontaneous Life Force.

In *Women in Love*, the theme of death, rebirth, Ruin, flood, Son of God and Christ are all allude to the Bible. All these biblical suggestions are developed into unifying and overwhelming archetypes throughout the whole novel and form the novel's framework upon which the structure of the novel organized. In order to strengthen his apocalyptic vision in *Women in Love*, Lawrence compares both Birkin and Gerald to Jesus Christ. Birkin acts as both destroyer and savior of the world. Through out the whole novel, almost all the death-like images and nature of the modern society is exposed by Birkin. Birkin's comparison to one of God's suggests the beginning of a new life, a new consciousness and a new world. Birkin and Ursula, turn a new page in their life, and it would, according to Lawrence, be the beginning of a new history for the humankind. Gerald's association with Jesus Christ is fulfilled at the end of the novel. It is well-know that Jesus actually has been murdered by his betrayer. But in the novel who after all has murdered Gerald? The answer is Gerald himself, the man himself is a murderer, and he is his own enemy. He has been committing a long process of suicide. His idealism, his belief in will-power, his mechanism, and his industrialism all betrays him in the long run; they have all the way been gnawing at his life-root. Therefore in this sense, Gerald is a Jesus-like figure, and much similar to Jesus Christ, his death should be taken as a resurrection and rebirth in spirit.

Lawrence feels that the most sacred thing is love, and the sacred can be realized only in the love between a man and a woman. Only in love can man restore his true emotional self. In *Women in Love*, Lawrence invents a love story which takes the wasteland of modern industrial society as its backdrop. The novel deals with the possible unconscious influence on human relationships, marriage and personal fulfillment. All this makes *Women in Love* an ever-lasting love novel for readers.

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Relief and Control: Analysis of Countermeasures for Urban Vagrants and Beggars

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Abstract

In large and medium-sized cities, the number of vagrants and beggars is increasing. We should change the point of view that vagrants and beggars are due to their "lack of capacity" but "imputed to the injured person". Assistance for urban vagrants and beggars should be selective, differential treatment, sub-type management, and follow the people-oriented, user-friendly aid principles. Considering the angle of social and economic construction, the country should increase investment in rural basic education, develop skills training, and guarantee citizen's right to survival.

Keywords: Vagrants and beggars, Welfare concept, Classification management

On the street, at the railway station and bus station of bustling metropolis, especially in places where there is a mass of stream of people, vagrants and beggars can be seen frequently. This mass of people includes handicapped, the aged, women, and also the "trailer party" "lethargy party" and "seeking-for-help party" who exploit children for begging. What is your response when you are encountered with such groups of people? This involves the issue of values of human beings. There are some almsgivers who show sympathy based on the humanitarianism, there are some dodgers who regard begging as swindling by false pretences and are disgusted, and there are even some brave people who directly face themselves up to the bleak life (such as, volunteers from the Association of Bao Bei Hui Jia are dedicated to rescuing those children who are abducted and trafficked). However, the problem is whether individual power can rescue such a huge quantity of vagrants and beggars, and how to effectively resolve their actual difficulties? All the above are issues which deserve our thinking.

1. Whether aid should be given to these people?

Without doubt, the answer is yes. Then, let's have a look at those vagrants and beggars without any living sources in the urban life. According to "On 'Measures of the Urban Vagrants and Beggars for Salvation'" released by the Decree of the State Council NO. 381 in June 20, 2003, those so-called vagrants and beggars in the urban life refer to the group of people who leads a vagrant and beggar life in urban areas, unable to resolve their own board and lodging, without any relatives or friends to rely on and unentitled to share subsistence allowances for the urban poor or sustenance of Five Guarantees in rural areas.

As for the above group of people, the government should carry out measures for aid. First of all, what sort of aid on earth is better for them? Usually, most of us may classify those targets in need of aid into two groups, namely, those deserving sympathy (aid) and those not deserving sympathy (not to aid). Generally speaking, young and middle-aged men should earn their own living and stand on their own feet, but not stretching out their hands for begging. R.M. Titmuss from Britain proposes that, there can exist three sorts of choices in the field of social policies that offer social security: firstly, the remedy mode for social security which confirms actual needs based on income investigation; secondly, the mode of redistribution of a system which is universally protected by the society; thirdly, the industrialization mode in which contribution and benefit coordinate to mobilize the initiative.

Social welfare mode can generally be categorized into the major two sorts of "common relief mode" (mainly in Northern Europe and Western Europe) and "remedy mode" (or selective mode, mainly in English-speaking countries, especially in America). According to Professor Zheng Bingwen, China is vast in area and irregular in terms of development level, and it is impossible for China to adopt the welfare mode of "common relief" within an extremely long period of time, because setting of welfare standards in Northern European countries is based on the middle class

and absorbs the social underclass to unify and climb upwards, in which only some "corporatism" factors can be applied by our country to some extent. Within an extremely long historical period of time, it has been impossible for China to adopt the welfare mode of "common relief" that is popular in European countries, and has no choice but to adopt the welfare mode of "remedy" popular in English-speaking countries, such as North America, etc. The welfare mode of "remedy" has the following essential characteristics: the social under-class depends on the country, whereas the middle class depends on the market; the social under-class supports its political system, whereas the middle class supports its economic system; in combination, the country gains joint support from the two social classes, and the society becomes stabilized. If China is going to prevent the Latin American situation, it should select an appropriate welfare fare of "remedy", place the major resources of the country and the government on the social under-class and strengthen the strength of social aid.

For the time being, the economic society of China is being rapidly developed. Life of the people is continuously improved and the social security system is gradually becoming perfect. However, due to such reasons as movement of population, difficulties of family living, unscheduled events and personal choice, there still exist vagrants and beggars. Especially, juvenile vagrants are a social vulnerable group, so they are in need of care and help from the whole society.

Considering the above way of thinking, aid to vagrants and beggars should be investigated so as to determine the social security actually required, for which the social welfare of selective mode is suitable. What selective mode emphasizes is that the group of expenditure target should be aimed at.

Those professional and healthy beggars with the capacity of earning have fixed dwelling places and sources of living, and they regard begging as a way of living or a way of earning money. Under the circumstance when such a group of people does not violate public interests, the area of their begging can be limited. It depends on givers charity should be given or not.

Those physically disabled persons with mental disease undertake begging because they are driven by the life and have no individual subsistence capacity. Such a group of people should be give aid by the country according to relevant regulations on the handicapped in China, so as to guarantee their minimum living standard.

Juvenile vagrants have the possibility to be abducted and trafficked, kidnapped, coerced, inveigled, exploited for begging or vandalized and maltreated as a result of violating illegal criminal activities, so the country should strictly enforce the law to rescue and protect juveniles.

2. What kinds of aid should be given to vagrants and beggars?

The general principle is people-oriented and humanization aid, differential treatment and sub-type management. Ying Ruoping pointed out, vagrants and beggars can be classified into the four types, including prototypical type, professional type, operational type and gang type, based on the fundamental principle of combination of positive aid with sub-type management and according to different begging purposes of vagrants and beggars. Vagrants and beggars of different types are treated with different management measures. As for those prototypical beggars who are driven by difficult living with the purpose of seeking to live, they should be given aid in living, whereas for those professional types with the purpose of seeking a livelihood, those operational types with the purpose of making a profit, and those gang types with the purpose of profit-making, they should be treated with the method of management and control.

2.1 Distinction of reasons for the life of vagrants and beggars and aid to be offered in different classifications

Under the circumstance when the reasons for begging are made clear, we should choose to offer aid or not. As for the group that organizes and forces others to undertake begging, organizers and those who are passively asked to beg should be distinguished, the latter to be rescued, educated and assisted to return to their hometown; however, as for those phenomena of individually organizing and begging, but without any false imprisonment or intentional injury, etc, we should be determined not to give them any aid; as for those who violate security administration, we can implement administrative penalty on them. The existing law in China has not defined the act of individually organizing and forcing others to beg as a behavior of committing a crime, which enables some lawless persons to organize juveniles and the handicapped to beg by taking advantage of this legal slip. Therefore, we should attempt to make perfect the legal regulations on the above phenomena in legislation as soon as possible.

2.2 Pertinent aid should be provided to children, women, the handicapped and psychopaths.

In "On 'Measures of the Urban Vagrants and Beggars for Salvation'", particular regulations are made on women, juveniles, the handicapped and psychopaths. Women, children, the handicapped and psychopaths who lead a vagrant and beggar life have their own distinctiveness, and they belong to a more vulnerable group among the great mass of vagrants and beggars, so aid and protection on them should be more comprehensive, delicate and pertinent.

As for those who abduct and cripple children for begging, the legislation should be made to strictly prohibit begging of juvenile children. Some juveniles who wander in the streets should be the most vulnerable and be a special group which is mostly in need of our care and aid, because juveniles have no civil act capacity, and they are in special want of aid

and protection of governments at all levels and of all circles in the whole society. Thus, the civil administration department has specially set up an aid and protection center for juvenile vagrants. Civil administration departments, police security departments, urban management departments, departments of health, and departments of finance at all levels should take the initiative to play their respective advantages, use many ways to deal with any criminal behavior, crack down any illegal crime, educate and warn the public and propagate healthy atmosphere. The rescue and protection work should be done to juvenile vagrants.

As for those who run away from their home due to inappropriate family education, they should be sent home.

As for those who are abandoned and handicapped and their addresses can not be made a thorough investigation, they should be transferred to a welfare institution. As for those who are maltreated as a result of family reasons and who return each time they are sent, they should be provided with aid and management so as to reduce minor crimes by juveniles.

As for those who are normal in intelligence and run away from their home due to personal reasons, they should be convinced to return home.

As for those children vagrants who are cheated and controlled to beg, they should be rescued and sent back home.

2.3 Other persons

As for those who are put up temporarily due to such reasons as suffering from loss by theft and fail in search for relatives, the rescue stations should provide them with short term board and lodging, return tickets and help them contact their relatives.

3. To what extent should aid be provided?

Why do vagrants and beggars select begging as their means of living? Poverty ought to be the primary cause. One of angles to define poverty is the "theory of insufficiency". The "theory of insufficiency" focuses on the superficial phenomenon of poverty, with a scope ranging from pure material "insufficiency" to the embracive social, spiritual and cultural "insufficiency". The second angle to define poverty is the "competence theory", which is inclined to the internality, subjectivity and initiative of causes of poverty, that is, poverty is caused by its own "insufficiency of competence". The third angle to define poverty is the "deprivation theory" or "exclusion theory", that is, poverty is caused as a result of being "deprived", "excluded" and "low social hierarchical class", which, without doubt, is to discuss the deep reasons for poverty.

In the past, a large majority of us would think that existence of vagrants and beggars was due to their own "insufficiency of competence", "eating their head off", and their stewing in their own juice. The author once spoke with justice to a young woman who carried an infant in the arms for begging, "You have your hands and feet, so why don't you try to find a job by yourself? Your begging may not only hurt yourself, but may also do harm to the innocent child in your arms." recalling that at present, we should change our concept: "in most cases, poverty is not due to individual reasons, but as a result of social reasons." Thus, the life of vagrants and beggars is not influenced by personal factors or cultural factors, but an outcome of the whole social and economic structure.

3.1 The country should guarantee subsistence rights of its citizens.

The current objective fact is that, the social security system is still seriously unsound, which in turn seriously constrains effect of aid to vagrants and beggars. For example, there are still lots of limitations to the system of subsistence allowances in urban citizens, medical assistance system, educational aid system, housing aid system, employment assistance system, the system of aid and protection to children and welfare care, etc, and especially these systems usually can only be accessed by local urban citizens, and there is no means for them to benefit outsiders. For instance, establishment of the social security system in the extensive rural areas in China is still seriously lagging behind, and there still hasn't any other nationwide and systematic social relief and aid except for the support system of Five Guarantees. Thus, it is unlikely to provide even the least basic living guarantee for rural residents.

"When the granaries are full, people know courtesy, and when the purse is light, one cannot be polite". The nation is obliged to guarantee subsistence rights of its citizens, formulate subsistence standards and, at the same time, carry out specific measures that attain these standards. That is, the country should concentrate on comprehensively making perfect its social security system, especially focus on establishment and improvement of a rural social security system, be dedicated to realizing the plan of urban and rural social security as a whole, and satisfy the lowest subsistence demand of human being, that is, offer of food and housing.

Recently, on the internet, such a story has been widely known: two brothers from Kai County in Chongqing held hostages for raising money (such posters as "We only want relevant department to loan us with an amount of 18,000 Yuan", etc, to blackmail relevant department) and saving their mother (when their mother sprayed insecticides on the crops on the mountain, she carelessly fell down from the mountain and was seriously damaged). The incident of "holding hostages for raising money and saving the mother" indicates that, medical insurance in rural areas is still not

perfect, and if farmers suffer from a serious illness, they are actually waiting for death. The two ordinary men could not help but make such an unwise decision.

3.2 To narrow gap between urban and rural areas and to promote coordinated development of urban and rural areas

Poverty is the primary cause for vagrants and beggars. If poverty can not be eliminated and gap between urban and rural areas can not be narrowed, then aid to vagrants and beggars may be faced up with persistent pressure and challenges. The ultimate target of the system of aid to vagrants and beggars should eliminate existence of vagrants and beggars. Therefore, we should attach importance to the strategy of effecting a permanent cure, which is to adopt several effective means in a comprehensive way, promote rapid development of rural social economy, narrow gap between urban and rural areas, and to try to stimulate coordinated development of urban and rural areas. The major issue encountered at present in China is the crisis caused by some social problems which happened in the process of modernization and urbanization, such as extreme disparity between the rich and the poor, gap between urban and rural areas, social inequality, growing income disparity, class antagonism and conflict of interest, etc. We can imagine that, if farmers also share stable medical care and retirement pension, then vagrants and beggars in urban areas may witness a reduction.

3.3 To enlarge investment in rural basic education and to develop skill training

Education to the poor is the fundamental approach to changing the reality, which is to invest in "human capital".

According to survey, education degree of vagrants and beggars is seriously low. Degree of education and professional skill affect their employment competence. For example, the Rescue Station of Bao'an District in Shenzhen has taken the initiative to help vagrants and beggars seek for jobs. They established close relationship with local personnel market, helped them seek for jobs, and provided them with pre-post training. As a result, three of them were employed, and two of them left the position the next day. Their answer was that the working strength was too heavy and the salary was too low.

3.4 To satisfy demands of women and to carry out the family planning

For instance, popularization of the measure of birth control and release of tools of birth control are helpful for implementation of the family planning of women. However, what's most important, farmers have changed their concept. If the social security of farmers does not be carried out, then the concept of "bringing up sons to provide for their old age" can not be eradicated fundamentally. The family planning in rural areas has always run into a stone wall in its implementation, but having more children outside the state plan for farmers further increases their burden. One of the reasons is that farmers have the deep-rooted concept of "bringing up sons to provide for their old age". Therefore, we can not simply criticize that their concept is laggard. We can imagine that, if farmers can be provided for when they are old just like urban citizens, then the concept will naturally fade out, and implementation of the national policy of the family planning may become easier.

All in all, in order to differentiate and analyze selection of the concept of social welfare, aid to urban vagrants and beggars is discussed as a living example. Assistance for urban vagrants and beggars should be selective, differential treatment, sub-type management, and follow the people-oriented, user-friendly aid principles. At the same time, We should change the point of view that vagrants and beggars are due to their "lack of capacity" but "imputed to the injured person", and make clear that "poverty is more as a result of social reasons than personal reasons". Therefore, the life of vagrants and beggars is not influenced by personal factors or cultural factors. Considering the angle of social and economic construction, the country should increase investment in rural basic education, develop skills training, and guarantee citizen's right to survival. Then, urban vagrants and beggars may witness a reduction.

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When volunteers offer aids to urban vagrants and beggars children, they are susceptible to be tracked in dangerous misunderstanding [EB/OL]. [Online] Available: <http://news.sohu.com/20091012/n267280349.shtml>2009-11-27.

The first sort is "Trailer Party", in which one child drags a plate trailer, on which a big loudspeaker box is tied up, and there is also a "handicapped" adult sits on the trailer singing who is the watch master. The latter threatens and orders the child to beg for money. The second sort is "Lethargy Party": in bustling places in downtown, one adult carries a lethargic baby to try to gain sympathy and begging from passers-by. The third one is "Seeking-for-help Party": one adult, together with several children, kneels on the street, instigating these children to continually kowtow and weep for begging.

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Study on College Students' Learning Burnout

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Abstract

Learning burnout is students' passive mental state to the learning. College students' learning burnout is closely related with the bad style and culture of the society, the employment pressure, the deficiency of college education and college students' own mental factor. Therefore, to overcome the learning burnout, college and teachers must correct the deficiencies in the education and teaching, and students should also change themselves actively.

Keywords: College students, Learning burnout, Causes, Countermeasures

1. Definition of learning burnout

When students have no interests or lack in enthusiasms for the learning but can not but do it, they will be sick of the learning, and feel tired in body and mind, that state is called as the learning burnout (Yang, 2005, P.54-58). Generally, the learning burnout has following characteristics. (1) Exhausted emotion. For this characteristic, students generally lack in enthusiasms in their learning, and they feel exhausted, nervous, and frustrated, and they can not centralize their attentions on the learning. Students' emotion is in the extreme tiredness, and the emotional resource is exhausted, and the learning enthusiasm is very low. (2) Lacking in humanization. That means students often treat others with the bland, passive, and negative attitude, and they can not trust others, and they are unbelieving and overcritical to others. The attack behavior is an extreme representation of the learning burnout. On the one hand, students' attack behaviors increase, and their human frictions increase. On the other hand, they will aim at themselves and harm themselves. (3) Low achievability. Learning burnout will induce low achievability. Students will undervalue their achievements, and some of them will even negate what they did.

2. Causes of college students' learning burnout

In recent years, many surveys about college students showed that the phenomenon of learning burnout in college students was serious. For example, Zhang Shu et al's survey about 438 college students in Inner Mongolia Municipality indicated that college students' level of learning burnout was higher (Zhang, 2009, P.140-142); Li Weiwei et al's survey about 340 college students also showed that quiet part of colleges students had learning burnout (Li, 2007, P.19-21). College students assume the burden of national building, and the existence of learning burnout would seriously influence the learning and the enhancement of learning efficiency, which goes against the accomplishment of the teaching task of college and the implementation of the educational target, and blocks college students' healthy development in body and mind at the same time. College students' learning burnout mainly comes from following causes.

2.1 Influence of bad social style and culture

Bad social style and culture are the important exterior causes of college students' learning burnout. College is not a closed place all along, and the opening characteristic of college students' idea also makes the social style and culture to continually impact the campus culture and college students' consciousness. China is in the transformation term of the society, and various passive ideas and concepts are strongly impacting college students' immature mentality. The practicality, the money worship and the gastronomy are seriously corroding college students' heart, and many college students have been eager for quick success and instant benefit, and they feel that it is too far to change their economic state by the learning, so they will exclude and tire in the learning.

2.2 Unprecedented employment pressure

With the popularization of higher education, college students assume unprecedented employment pressure. In 2008, the

amount of college graduates in China achieved 5.6 million, and this number achieved 6.1 million in 2009, and this number will achieve 6.3 million in 2010. With unemployed graduated in past years, college students will be large employment group every year. But the actuality that the supply exceeds the demand will make them very difficult to find an ideal work, and even they can be employed, but the salary will be less than peasant workers, so the idea of useless learning will be grew crazily, and they will early want to find a good job, not study hard.

2.3 Deficiencies in college education

One abuse of the higher education in China is to emphasize the theory but ignore the practice. The course setting has not emphasized the actual demand of the society and college students, but too much theoretical courses, without practical courses. In teachers' teaching, they also only pay attention to the teaching of theoretical knowledge, but ignore the practices, so many students have low cognition to their learned knowledge. One survey showed that only 5.52% of college students thought that knowledge was useful, but 50.68% of them thought that knowledge was useless (Huang, 2007, P.54). Students thought that the learned knowledge has not practical value, which makes them to exclude the courses and knowledge what they learned to some extent, and have low identification to their specialty. Teachers' teaching level also impacts students' learning, and with the enrollment expansion of colleges, the amount of teacher expands quickly, but the total quality of teacher has not been enhanced accordingly, and many students don't satisfy teachers' occupational morality, individual culture, teaching method, and teaching level, which also make them to produce the learning burnout to some extent.

2.4 Causes in college students

College students' learning burnout is closely related with their self-efficiency feeling and self-attribution. Some college students had depended on family and teachers too much for a long term, with bad independence of learning, and they could not adapt the learning mode in colleges and they failed in learning, so their self-efficiency feeling would be largely reduced. When facing learning failure, the attribution tendency is not right too. They always attributed their failures to their low ability, so their enthusiasm of learning will be largely harmed, and they will feel helpless in study. Some students also lack in the ability to delay satisfaction. They have not far eyesight, and they only pay attention to the immediate interests, and they can not control themselves in learning, which is one of subjective cause of learning burnout.

3. Countermeasures of college students' learning burnout

3.1 Colleges should satisfy students' demand for practice and emphasize students' psychological health

Colleges should really emphasize the practice teaching, and increase the hardware investments of the practice teaching, and perfect many establishments such as lab, computer lab, and multimedia to fulfill students demand for practices. In addition, colleges should set up practice courses for students' future employment and development, and correct the mode emphasizing the theoretical courses. At the same time, college should also emphasize college students' education of psychological health. Loving learning and being happy in learning are one standard to measure college students' psychological health. Colleges should further correct students' wrong learning cognition, improve their learning method, strengthen their successful experience, enhance their learning motivation, and help them to overcome learning burnout by the lecture, group and individual consultation, and special psychological healthy course.

3.2 Teachers should change the single and bald force-fed teaching mode

Teachers should emphasize the adopt the heuristic education and the research teaching mode to continually enrich the teaching content, strengthen the charm of teaching process, and make students to enter into the learning and become the master of the learning. Teachers should specially pay attention to the connection between theory and practice, and instruct students to study the knowledge in order to apply it by after-school activities, practice, and probations, enhance their ability to solve problems, and promote them to experience the interests of learning and the value of knowledge in the practice. Teachers should also adopt various and flexible teaching modes to establish the teaching situations, make suspense, and stimulate their curiosity and learning enthusiasm.

3.3 College students must actively change themselves

First, college students should emphasize the will training and the self-building of personality. Students should strengthen the endurance to the learning burnout. College students should establish long-range ideas, actively participate in various practices, cultivate their patience and establish the confidence and decision, train their will and quality, and enhance their ability to refuse the entices in the process of overcoming difficulties. At the same time, facing the learning burnout, college students should bravely face the actuality with optimistic attitude, and be good at changing the unreasonable cognitions, and control their emotions by various measures, and keep good learning enthusiasm. They also should self-consciously refuse the influences of bad style and culture in the society, try to cultivate right demands and interests, establish active value view, philosophy, and firm life faith.

Second, college students should establish proper learning target. The so-called "proper" means that the level of the

target is not too high or too low. Too low learning target can not enhance the level of individual, and too high learning target will be hard to realize, and when the individual is failed, his learning enthusiasm will be struck. Therefore, based on objective analysis of existing knowledge and ability, college students should establish their own learning target which is higher than existing level but can be achieved. Facing thus target, the individual will not flinch, and the realization of the target will also stimulate his enthusiasm of learning to effectively deal with the learning burnout.

Third, college students should properly attribute their failures. Psychologist Julian Bernard Rotter proposed the theory of control point in 1954, and he thought that the interior control was that the result was induced by individual behaviors or decided by individual stable personality; on the contrary, if the thing was induced by the factors except for the individual, it was called as exterior control (Chen, 2007, P.225). Interior controllers are always inclined to attribute their learning failure to the deficient ability and efforts, and their learning motivation is stronger. But exterior controllers are always inclined to attribute their learning failure to the luck, learning task, and other exterior causes, because they thought that these exterior causes make the learning can not be improved and enhanced, and even they attribute the failure to the interior causes, they will only increase too much pressures. Therefore, when facing the learning failure, college students should make objective and exact attributions, and they should not only look for the causes from themselves, but see the influences of objective factors, and find a balance point between exterior causes and interior cause, and form correct cognition to the learning failure, and effectively reduce the level of learning burnout.

Fourth, college students should fully enjoy the happiness of college life. Learning is the main rhythm of the college life, but it is not the whole of the college life, and the learning burnout is a tired state in body and mind when students engage in the learning all along and the happiness in the life could effectively restrain and adjust this bad state. Therefore, students should work and rest in the learning, and after learning, they should actively participate in many recreational activities, develop wide interests, enjoy the happiness and relaxation of the life, and promote their attention to transfer properly, which can effectively loose the body and mind, adjust the nervous state of the brain, and reduce the level of learning burnout.

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Synthesis and Characterization of a Layered Uranium Phosphites

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Abstract

A novel layered oxouranium phosphite open-structure $[\text{C}_{10}\text{H}_{24}\text{N}_2]\cdot[(\text{UO}_2)_2(\text{HPO}_3)_3]\cdot\text{H}_2\text{O}$ (denoted as ZZ-1) was hydrothermally synthesized by using isophorondiamine (IPDA) as the template. Single crystal structure refinement discloses that ZZ-1 crystallizes in the monoclinic space group $\text{P}2_1\text{c}$ with the cell parameters of $a = 18.347(4)\text{\AA}$, $b = 6.7341(13)\text{\AA}$, $c = 20.639(4)\text{\AA}$, $\beta = 114.61(3)^\circ$, $V = 2318.2(8)\text{\AA}^3$, $Z = 2$. The structure of ZZ-1 is constructed by UO_7 monomer, U_2O_{12} dimer and HPO_3 groups. The monomeric UO_7 or dimeric U_2O_{12} is connected by HPO_3 groups to form two types of 4-ring chains. An undulating sheet is then generated by connecting these two types of chains via HPO_3 bridges. The layer structure is formed by stacking the sheet along the direction with the organoamine cations and water molecules intercalated in the interlayer spaces with strong H-bonds to the framework oxygen atoms. Although a mixture of cis and trans IPDA is used, only cis PDA serves as the template. A typical green light emission of UO_2^{2+} is observed when excited by 266 nm laser.

Keywords: Hydrothermal synthesis, Open-framework compound, Single crystal structure, Template synthesis, Oxouranium phosphite

1. Introduction

Open-framework materials have been extensively pursued due to their structural diversities and potential applications in catalysis, absorption, separation, ion-exchange and host-guest chemistry. Recently, replacing tetrahedral HOPO_3^{2-} by pseudo pyramidal HPO_3^{2-} has been demonstrated to be an effective approach to generate more open framework structures. The occurrence of HOPO_3 , $\text{O}=\text{PO}_3$ groups in some large pore zeolitic compounds verified its possibility. From this view, replacing tetrahedral phosphate groups by pseudo-pyramidal phosphite units has been considerably explored and resulted in a new family of metal phosphite compounds in the past decade. Metal phosphites with novel structures and compositions have experienced dramatic expansion under the assistance of various organoamines. Crystals with extra-large pores were also achieved, including TJPU-3 with 20-ring apertures, ZnHPO-CJ1 and Cr-NKU-24 with 24-ring openings, and NTHU-5 with the largest 26-ring micropores. As well-known, uranium is fruitful in coordination geometry and valence state, which lead to structural versatility of uranium-containing framework. However, open-framework uranium phosphites are seldom in the documents.

On the other hand, organic isomer separation and recognition have stimulated extensive research into the preparation of separation media. Inorganic matrix for isomer recognition have been considerably pursued but the occurrence is scarce. Successful examples for isomer separation include the ND-1 and a tin phosphate that only use trans-1,2-diaminocyclohexane as the template. Herein, by using isophorondiamine (IPDA) as the template, a layered oxouranium phosphite, $[\text{C}_{10}\text{H}_{24}\text{N}_2]\cdot[(\text{UO}_2)_2(\text{HPO}_3)_3]\cdot\text{H}_2\text{O}$ (ZZ-1) was isolated. Only cis-IPDA served as template.

2. Experimental

ZZ-1 was hydrothermally synthesized by using isophorondiamine (mixtures of cis- and trans- isomers, Aldrich) as the template. All chemicals were used without purification. Typically, 0.107g $\text{UO}_2(\text{CH}_3\text{CO}_2)_2\cdot 2\text{H}_2\text{O}$, 0.116g H_3PO_3 and 0.042g IPDA were dispersed into 5ml distilled water. After stirred for 1.5hs, the mixture was sealed in an autoclave and heated at 180 °C for 144hs. The hydrothermal reaction produced yellow stick-like crystals, which were washed by distilled water and dried at room temperature. The experimental and simulated XRD patterns are well matched,

indicating the monophasic feature of the products. EDAX measurement gave the U:P ratio of 2:3. XPS gave the binding energy of U4f7/2 of 381.2eV that very close to the value of UO_3 , indicating the hexavalent state of U.

3. Results and discussion

ZZ-1 crystallizes in the monoclinic space group $\text{P}2_1\text{c}$. The asymmetric unit contains 31 non-hydrogen atoms (Figure 1A). The uranium atoms are all in pentagonal bipyramid geometry. Two vertex of the pentagonal bipyramid are occupied by acyl-oxygen atoms. While U(1) is a monomeric UO_7 , two adjacent U(2) O_7 groups are edge shared to form dimeric U_2O_{12} (Figure 1B and 1C). All the phosphorous atoms are pseudo pyramidal HPO_3 groups. A strong IR adsorption at 2378.1 cm^{-1} verifies the presence of P-H bonds.

Insert Figure 1 Here

Insert Figure 2 Here

The extended structure is built by UO_7 , U_2O_{12} , and HPO_3 groups. The connection of these groups generate two types of 4-ring chains running along b axis. These two types of chains alternatively align along ab plane with a cut angle of about 104° . Connecting these two types of chains generates an undulating sheet that extended along ab plane. Stacking these sheets along c axis gives rise to a layer structure. The interlayer spaces are occupied by diprotonated IPDA cations and water molecules with complex H-bond to the framework oxygen. Interestingly, all the IPDA cations are in cis- form (Figure 1C). The means isolation ZZ-1 lead to the separation of cis-IPDA from the isomer mixtures.

UV light excited green light emission is a well-known character for uranyl-containing compounds, which is usually used to determine the presence of U(VI) in minerals. The fine structures of photoluminescence spectra of ZZ-1 show typical emission features upon irradiation with 266nm UV light (Figure 2B). A strong peak at 525 nm accompanied by four weaker peaks at 504, 549, 575, and 604 nm is observed as a typical phenomenon for UO_2^{2+} .

4. Summary

A new open-framework oxouranium phosphite, ZZ-1, has been synthesized under the hydrothermal condition by using isophorondiamine as the templates. It has a layered structure with the isophorondiamine cations and water molecules intercalated in the interlayer spaces. The connection of the UO_6 pentagonal bipyramids and HPO_3 pseudo pyramids generates two kinds of chain structures. These two types of chains fuse to form a 4,8-network sheet that are stacking to generate the layer structure. As well, separation of IPDA isomers is achieved by isolating ZZ-1 crystals. Fluorescent spectroscopy analysis reveals that the uranium phosphite exhibits interesting intense photoluminescence upon photoexcitation at 266 nm.

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Table 1. Details of data collection and structure refinement of ZZ-1

Empirical formula	$[\text{C}_{10}\text{H}_{24}\text{N}_2] \cdot [(\text{UO}_2)_2(\text{HPO}_3)_3] \cdot \text{H}_2\text{O}$
Formula weight	1940.64
Temperature	293(2) K
Wavelength	0.71073
Unit cell dimensions	
<i>a</i> (Å)	18.347(4)
<i>b</i> (Å)	6.7341(13)
<i>c</i> (Å)	20.639(4)
β (°)	114.61(3)
Volume (Å ³)	2318.2(8)
Z, calculated density	2, 2.78g/cm ³
Absorption coefficient	14.228 mm ⁻¹
F(000)	1776
Crystal size	0.2 x 0.2 x 0.2 mm
Theta range for data collection	2.44 - 25.02 °
Limiting indices	-21 ≤ <i>h</i> ≤ 21, -8 ≤ <i>k</i> ≤ 7, -23 ≤ <i>l</i> ≤ 24
Reflections collected / unique	19331 / 4054 [R(int) = 0.0579]
Completeness to theta = 24.99	99.4 %
Absorption correction	Semi-empirical from equivalents
Max. and min. transmission	1.0000 and 0.2849
Refinement method	Full-matrix least-squares on F ²
Goodness-of-fit on F ²	1.018
Final R indices [I > 2sigma(I)]	R1 = 0.0275, wR2 = 0.648
R indices (all data)	R1 = 0.0325, wR2 = 0.658
Largest diff. peak and hole	1.068 and -1.352 e.Å ⁻³

Table 2. Selected bonds and angles for ZZ-1

Bond lengths			
U1–O4	1.772(5)	U2–O10	1.756(5)
U1–O6	1.775(5)	U2–O11	1.773(5)
U1–O1 ^{#2}	2.314(5)	U2–O8	2.272(5)
U1–O5	2.315(5)	U2–O9	2.318(5)
U1–O2	2.340(4)	U2–O13 ^{#2}	2.378(5)
U1–O7	2.470(5)	U2–O12	2.472(4)
U1–O3	2.538(5)	U2–O13	2.594(5)
P1–O1	1.508(5)	P2–O8	1.518(5)
P1–O2	1.513(5)	P2–O7	1.531(5)
P1–O5 ^{#1}	1.533(5)	P2–O3	1.533(5)
P3–O9 ^{#1}	1.509(5)	O5–P1 ^{#1}	1.533(5)
P3–O12	1.527(5)	O9–P3 ^{#1}	1.509(5)
P3–O13	1.534(5)	O13–U2 ^{#2}	2.378(5)
O1–U1 ^{#2}	2.314(5)		
Bond angles			
O4–U1–O6	177.6(2)	O10–U2–O11	179.8(2)
O4–U1–O1 ^{#2}	89.2(2)	O10–U2–O8	86.0(2)
O6–U1–O1 ^{#2}	93.2(2)	O11–U2–O8	93.8(2)
O4–U1–O5	90.98(19)	O10–U2–O9	92.1(2)
O6–U1–O5	89.40(18)	O11–U2–O9	87.85(19)
O1 ^{#2} –U1–O5	79.71(16)	O8–U2–O9	82.02(16)
O4–U1–O2	91.76(19)	O10–U2–O13 ^{#2}	88.6(2)
O6–U1–O2	88.77(18)	O11–U2–O13 ^{#2}	91.6(2)
O1 ^{#2} –U1–O2	78.27(16)	O8–U2–O13 ^{#2}	161.45(16)
O5–U1–O2	157.76(17)	O9–U2–O13 ^{#2}	80.44(16)
O4–U1–O7	86.5(2)	O10–U2–O12	92.63(19)
O6–U1–O7	91.3(2)	O11–U2–O12	87.35(18)
O1 ^{#2} –U1–O7	154.22(15)	O8–U2–O12	77.23(16)
O5–U1–O7	74.97(16)	O9–U2–O12	158.34(16)
O2–U1–O7	127.22(16)	O13 ^{#2} –U2–O12	120.80(15)
O4–U1–O3	91.88(19)	O10–U2–O13	83.1(2)
O6–U1–O3	86.15(19)	O11–U2–O13	97.0(2)
O1 ^{#2} –U1–O3	147.06(15)	O8–U2–O13	131.69(16)
O5–U1–O3	133.16(16)	O9–U2–O13	145.11(15)
O2–U1–O3	68.79(16)	O13 ^{#2} –U2–O13	64.95(18)
O7–U1–O3	58.58(15)	O12–U2–O13	56.53(14)
O1–P1–O2	112.0(3)	O8–P2–O7	114.6(3)
O1–P1–O5 ^{#1}	113.4(3)	O8–P2–O3	114.3(3)
O2–P1–O5 ^{#1}	109.4(3)	O7–P2–O3	106.2(3)
O9 ^{#1} –P3–O12	115.2(3)	P1–O1–U1 ^{#2}	138.6(3)
O9 ^{#1} –P3–O13	113.2(3)	P1–O2–U1	136.9(3)
O12–P3–O13	103.3(3)	P2–O3–U1	96.0(2)
P1 ^{#1} –O5–U1	141.4(3)	P3–O12–U2	101.7(2)
P2–O7–U1	98.8(2)	P3–O13–U2 ^{#2}	148.5(3)
P2–O8–U2	147.5(3)	P3–O13–U2	96.4(2)
P3 ^{#1} –O9–U2	144.8(3)	U2 ^{#2} –O13–U2	115.05(17)

Symmetry transformation used to generate equivalent atoms: 1: -x+1, -y, -z+1; 2: x, y+1, z.

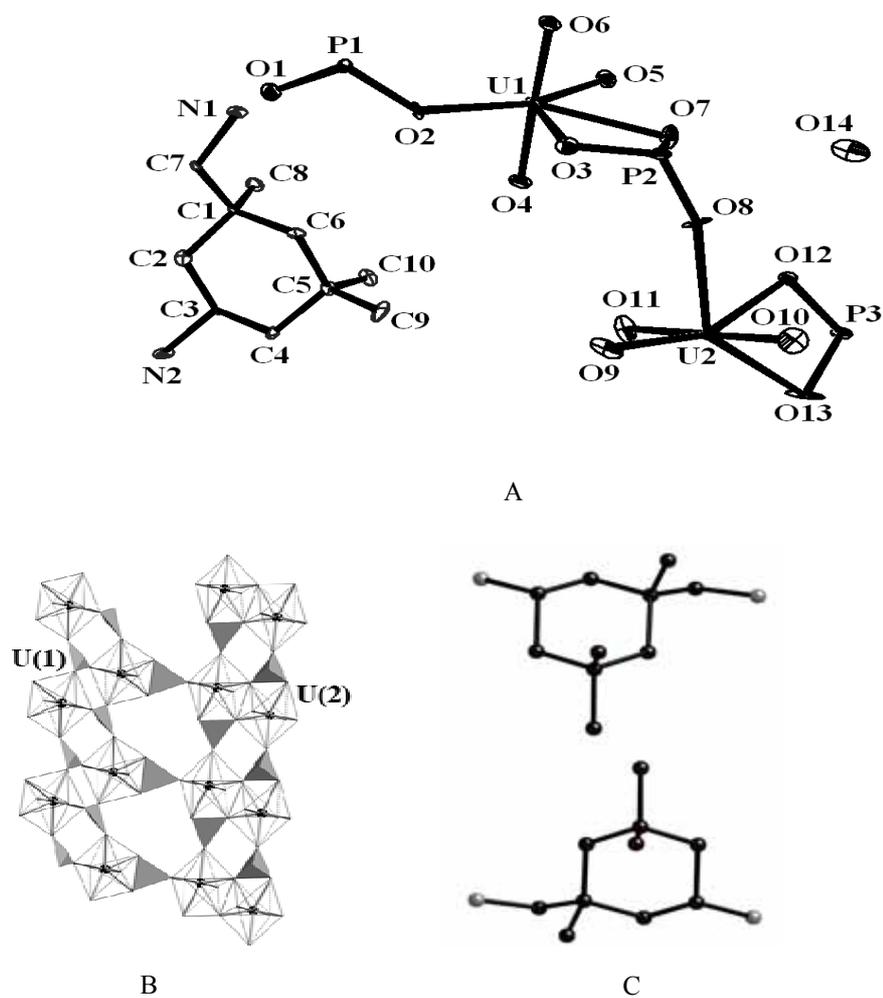
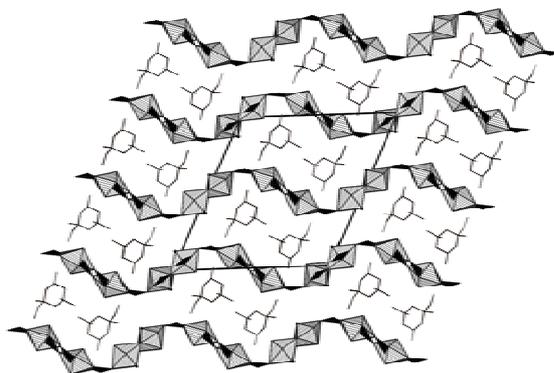
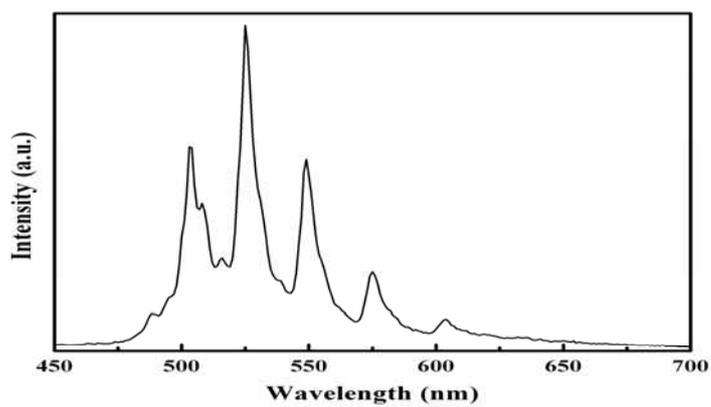


Figure 1. ORTEP plot of ZZ-1 showing the labeling scheme(A); Polyhedral representations of the two types of four-ring chains in ZZ-1(B): HPO_3 linked $\text{U}(1)\text{O}_7$ monomer and HPO_3 connected $\text{U}(2)_2\text{O}_{12}$, and (C) ball and stick model of the IPDA cations in cis- conformation.



A



B

Figure 2. The layer structure with the intercalated H₂IPDA cations of ZZ-1 viewed along the b direction

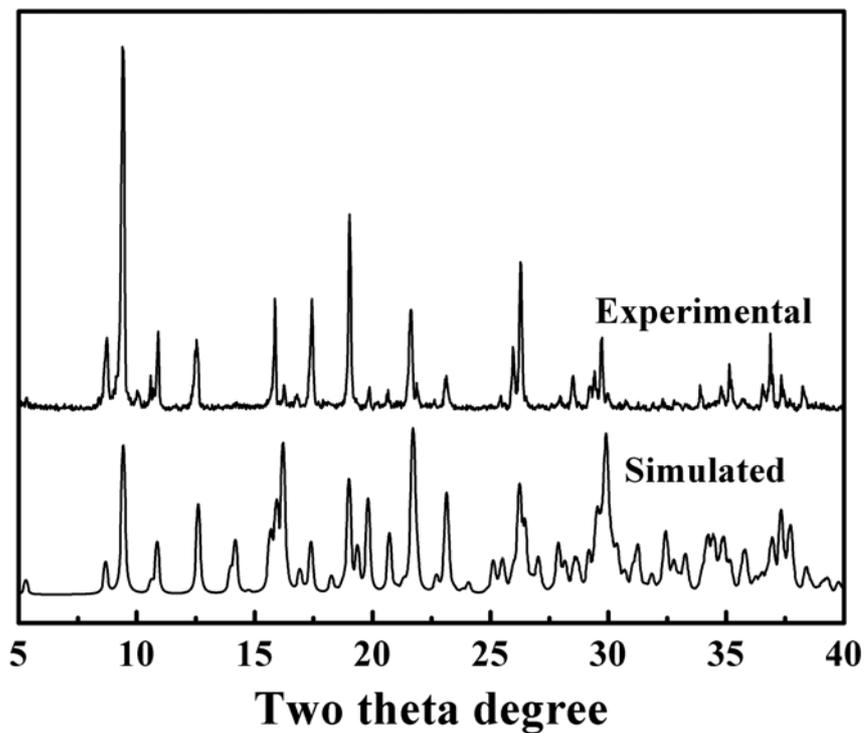


Figure 3. Simulated and experimental XRD patterns for ZZ-1

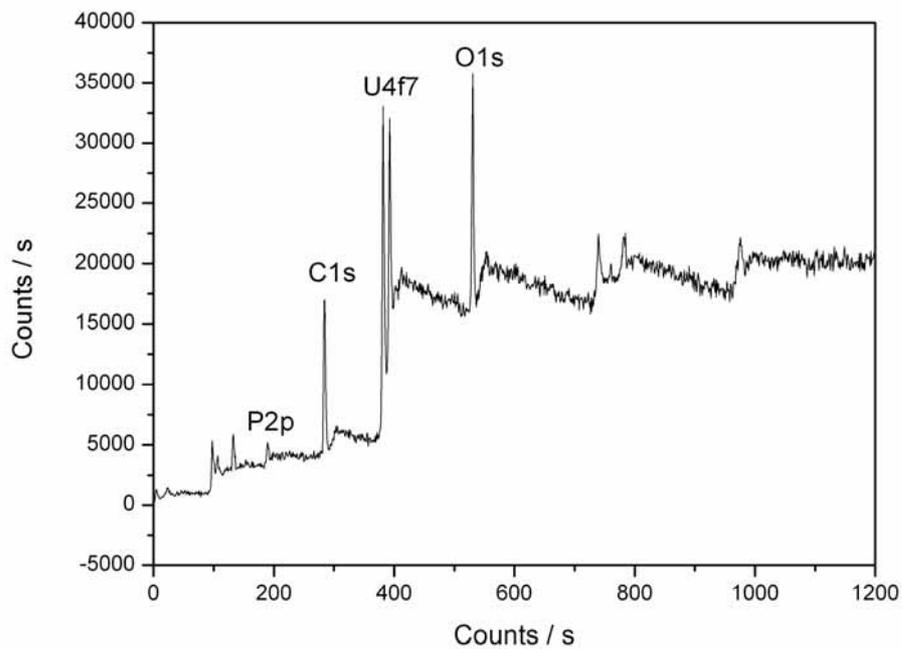


Figure 4. XPS curve for ZZ-1



Philosophical Thoughts in the Teaching of Electrodynamics

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Abstract

As the important part of the theoretical physics, the electrodynamics is a theoretical basic course of the physics and relative subjects. To adapt the demands for cultivating the target of highly-quality talents in the 21st century, to properly add relative philosophical thoughts can not only deepen students' cognition about the electromagnetic law, but can further cultivate students' scientific thinking ability, which is very important for cultivating innovational talents with high quality. Combining with teaching experiences, the philosophical thoughts in the teaching of electrodynamics are analyzed in this article from five aspects including the general and the special, the abstract and the concrete, the local and the whole, the matter and the movement, and the time and the space.

Keywords: Electrodynamics, Philosophical thoughts

The electrodynamics is a complete and accurate classical physics theory. The basic law of the electromagnetic movement is presented dialectically and scientifically by beautiful, harmonious, simple and symmetrical equation and profound electromagnetic concepts, and its physical contents not only have higher quantification degree, but contain abundant philosophical thoughts. In the electrodynamics materials compiling and the classroom teaching, the transfer and understanding of the scientific knowledge are generally emphasized, but the necessary and complete discussion about the philosophical thoughts are deficient. In fact, to add relative philosophical thoughts education properly in the teaching of electrodynamics could not only deepen students' cognition about the electromagnetic law, but can further cultivate students' scientific thinking ability, which is very important for cultivating innovational talents with high quality. The philosophical category in the electrodynamics is wide, and classical philosophical problems include following aspects.

1. The general and the special

Ascending to the historical skeleton of the electrodynamics knowledge system, it is not difficult to find that the production, formation and development of the electromagnetic theory are the dialectic cognition process from the special to the general and then from the general to the special. Scientists' initial researches about the electrics, magnetism and photics were to conclude the Coulomb Law applying in the general static field from the rules among special point charges, obtain the Ampere Law in the general constant magnetic field from the special abstract electric current element, conclude the general electromagnetic induction law from the special electromagnetic induction phenomena, and obtain general photic laws such as intervention, diffraction, refraction and reflection from some special photic phenomena. Relative to the whole electromagnetic movement rules, above various laws about static electrics, magnetism and photics still are some special concrete electromagnetic rules. By understanding these special electromagnetic rules, Maxwell gave reasonable scientific hypothesis and used mathematical wonderful method to obtain the general law which can more generally reflect the characteristics of the electromagnetic movements, i.e. the Maxwell's equations. By these two scientific cognition processes from the special to the general on different layers, the electromagnetic theory was sublimed epically, so the uniform rule could be describe the general electromagnetic phenomena. On the new theoretical layer, Maxwell's equations could be reversely utilized to profoundly and theoretically analyze many relatively special electromagnetic problems such as electrics, magnetism and photics. According to the diffusions of the static electric field, the constant magnetic field and the electromagnetic wave, the electromagnetic radiation and various corresponding conditions of concrete electromagnetic problems, the second-level theoretical equation from the Maxwell electromagnetic theory could be used to solve corresponding special problems. For example, as the theoretical references, the Poisson equation and the Laplace Equation applying in the static electric field obtained from the Maxwell's equations could solve more concrete static field problems. By the scientific

evolution from the special to the general and from the general to the special, the electrodynamics made the electromagnetic theory system more systematic and perfect, the contents more abundant and colorful, and the essential of the electromagnetic phenomena more profound.

2. The abstract and the concrete

To accurately describe the electromagnetic movement rules, the electrodynamics adopts many physical models such as point electric charge, electric current element, electric doublet, magnetic doublet, electric multi-pole, magnetic multi-pole, and plane wave. They all have their own corresponding concrete physical ante-types, and they are a group of ideal objects by ignoring subordinate factors and giving prominence to main factors though scientific abstract. For example, the charged body with tiny size can be abstracted as the point charge, and two point charges with equal quantity and different symbols and close distance can be abstracted as the electric doublet, and the magnetic doublet is the abstract of the electric current loop, and the plane wave is the abstract of the large spherical wave in the local range. The physical model established from the concrete to the abstract can also complete the scientific cognition process from the abstract to the concrete, i.e. the abstracted physical model can be utilized to discuss and analyze the concrete electromagnetic problems. For example, general charged bodies can be divided into numerous charge elements (point charges), and the field formed by the former can be regarded as the iterative of the fields produced by the latter. The electric media and the magnetic media can respectively equal to corresponding combinations of point charges and electric doublets under certain conditions. The electromagnetic wave can be divided into the iterative of the plane waves with various frequencies. The charged bodies can equal to corresponding physical combinations of point charge, electric doublet, magnetic doublet, electric multi-pole and magnetic multi-pole on different levels, and the force stimulated by the former is the iterative of the forces induced by the latter. And spread of the magnetic multi-pole and the multi-pole spread of the radiated force are also similar with above phenomena.

The physical model processing method of the electrodynamics concretely embodies the philosophical thoughts from the concrete to the abstract to the concrete. To obtain the ideal model of scientific thinking from the abstract of the concrete electromagnetic object and ascend to the concrete subjective electromagnetic phenomena from the abstract model will continually enhance the layer of the scientific cognition, and the scientific cognition will be continually deepened, so the electromagnetic phenomena will more and more present their own abundant contents and profound connotations.

3. The local and the whole

The physical prospect of the electrodynamics is described by a group of strict physical concepts and a set of accurate relations with them. Both the electrical field strength and the magnetic induction intensity are the local attributes to describe the field, and the charge density and the electric current density are respectively to denote the local distribution characteristics of charge and electric current. These electromagnetic concepts are all used to describe the point characteristics of corresponding physical quantities, and belong to local physical concepts, and their property is a local physical property. The concepts including the electric flux, the magnetic flux, the charge intensity, and the electric current intensity are used to describe the total physical attribute of corresponding objects, and belong to the total concepts, and their property is the total physical property. The local associations in physics exist among local physical quantities. For example, the Gauss Law was to describe the total relation between the electric flux and the charge, and the Ampere Loop Law was to describe the total relation between the magnetic field circulation and the electric current intensity. The integer equation of the electromagnetic theory could actually reflect the comprehensive behaviors of the electromagnetic movement point according to special mode. For example, the electric flux on certain curve surface is the integer result of the scalar product of the point surface element and the electric field intensity, and the magnetic flux has the similar corresponding comprehensive relation with the magnetic induction intensity, and the charge of the system is the integer result of the scalar product of the point volume element with the charge intensity.

The local and the whole are a kind of opposite and uniform. The review of the local electromagnetic flux can help use to cognize the total electromagnetic attribute of the system, and the total electromagnetic attribute of the system can help us to analyze the local characteristics of the electromagnetic phenomena. Properly using the local electromagnetic relation, the whole relation and the relation between the local and the whole to discuss various concrete electromagnetic problems can help us to understand the laws of the electromagnetic movement.

4. The matter and the movement

Energy and momentum are the representations and scales of the matter's movement, and both the matter and the movement depend on each other for existence. The theory and the experiment of the electrodynamics all indicate that the electromagnetic field has energy and momentum, i.e. the electromagnetic field has abundant movement connotation, and the electromagnetic movement and the electromagnetic matters can not leave each other, so the electromagnetic field is a moving matter. The field and the matter compose two basic formations of the matter, and the field and the matter can convert each other, and the disappearing of the matter will certainly company with the production of the field matter. On the contrary, the disappearing of the field matter will certainly company with the production of the matter,

that is not only the disappearing of the matter, not the virtual production of the matter, and it is the mutual conversion of the matter movement form and the existence state, and its energy scale of the conversion process is dominated by the Einstein mass-energy relation, and still follow the conservation of energy and the conservation of momentum laws at the same time. For example, the positive charges and the negative charges can disappear and turn into photons, and here, though the electron as the matter form has disappeared, but the photons as the field formation also generate with that, and the moving matter still exists, and the energy and the momentum which could measure the movement of the matter are still equal, only the concrete form of the matter changes. In fact, the conversion form of the form between the field and the matter is very similar with the physical connotation of the phase change of gas, liquid and solid on the molecule layer, and the conversion between the field and the matter is a kind of phase change of the matter on the deeper layer. Therefore, to utilize the philosophical matter view to further consider the characteristics of the electromagnetic field can deepen the understanding of the matter attribute connotation of the electromagnetic field.

5. The time and the space

Space is the spreading representation of the matter movement, and time is the sustainable representation of the matter movement. This philosophical opinion is hard to exactly be opened out in the static electrostatics. Newton thought that time and space liked a big box, and time liked a flowing river, and relation didn't exist among time, space and movement. Facing the conflict between the old theory and the new experimental fact, Einstein established the narrow relativity based on original experiences at the beginning of the twenty century, and proposed the new time-space view. The core problem of the narrow relativity is the problem of simultaneity and relativity, and there is not the absolute simultaneity in the world, and the simultaneity is related to the special movement frame of reference. The simultaneity is closely related with the time-space scale, and the relativity of the simultaneity will certainly induce the relativity of space and time. The scientific conclusion of the relativity shows that the moving scale will shrink, and the moving clock will delay, and the size of the shrinking and delaying is always related with the concrete movement frame of reference, and this time-space effect is the result of the change of the space spreading and the time durative with the change of the matter movement state, and it indicates that the time-space attribute is related with the movement, and the time, space and matter movement are closely associated.

In the teaching of electrostatics, not only the scientific knowledge should be transferred accurately, but the philosophical thoughts in the electromagnetic theory should be analyzed properly. The philosophical spirit can be opened out in the interaction of scientific knowledge, and the essence of the scientific knowledge could be further understood profoundly under the instruction of philosophical thoughts.

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