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Adults engaged in lifelong learning in Taiwan: Analysis by gender and socioeconomic status

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This study examines the nature of adult engagement in lifelong learning in Taiwan. Previous studies have shown that gender and socioeconomic status (SES) are key variables related to equal access to education. Are these variables related to adults' engagement in lifelong learning in a specific country? This study analysed data from a survey of adults that was administered by the Ministry of Education in 2009. The results show a strong relationship between gender, SES and the learning experiences of adults. Women in low and middle SES groups were more likely to engage in lifelong learning. This study reveals that women's engagement in lifelong learning depended on their family concerns. Men's engagement in lifelong learning, in contrast, was often for career or work-related reasons. By explaining the connections between the gender and SES of adult learners engaging in lifelong learning, the results of this study will enrich the context of lifelong learning.

***Keywords**: lifelong learning, adult education, educational policy, engagement theory*

Introduction

The concept of lifelong learning was introduced in the 1960s. In the 1970s, international organisations such as UNESCO adopted the concept. However, there was little focus on lifelong learning from the 1970s to the 1990s. In the 1990s, the world witnessed the impact of globalisation, the effects of an aging society, and the influence of information technology. At that time, many countries started to focus on lifelong learning, and new regulations were introduced to ensure its implementation (Jarvis 2007; Kang 2007). Because lifelong learning became a widely-accepted concept in a knowledge-based economy, the Taiwanese government launched the legislative process for the Lifelong Learning Act, which was implemented in 2002. By implementing this Act, the government has placed great importance on the practice of lifelong learning.

The different backgrounds of lifelong learners may lead learners to engage in different learning activities. In a multi-cultural society, learners can develop different learning perspectives and behaviours (Chang 2004; Moen, Kelly & Magennis 2009). However, even though people understand the importance of lifelong learning, it is not easy to provide learners with equal access to limited educational resources. Research has shown that gender differences or low socio-economic status (SES) can affect the educational opportunities of individuals (Nesbit 2006). Generally, women have fewer opportunities for formal education due to their family responsibilities or social expectations (Gunawardena, Rasanayagam, Leitan, Bulumulle & Dort 2006; World Bank 2005, 2007). Desjardins, Rubenson and Milana (2006) found that generally gender differences are small for the developed countries considered, but this partly depends on the level of formal

education. Overall, in countries where women tend to have lower levels of formal education than men, women are less likely to participate in adult learning. Furthermore, employer support tends to be a less common source of financing for women than for men.

- Desjardins, Rubenson and Milana (2006) also showed the significance of education as a socio-economic marker, revealing that in many countries there is a strong connection between home background, educational attainment and further learning. This connection points to a cycle of intergenerational reproduction of inequalities that is strongly linked to lifelong learning processes. Those who have higher levels of formal education, and hence a greater likelihood of engaging in further learning, exhibit a tendency to pass the importance of formal education onto their children. Based on the results of previous research, we explore the following questions in a specific country to enrich the knowledge of this field:What are the experiences of adults engaged in lifelong learning in Taiwan?
- Do women of different SES face unequal situations when attempting to engage in lifelong learning?
- Do women and men have similar access to lifelong learning programs? Is this similar to other developed countries?
- What are the key reasons that adults might choose to not engage in lifelong learning in Taiwan?

Literature review

In 1972, UNESCO published *Learning to be* which was the first time that UNESCO promoted the concept of lifelong learning (Faure, Herrera, Kaddoura, Lopes, Petrovsky, Rahnema & Ward 1972). The Organization for Economic Co-operation and Development (OECD) also provided a significant contribution towards developing lifelong learning in a global setting. In 1973, its *Recurrent education: A strategy for lifelong learning* argued for recurrent education as an important strategy for lifelong learning (OECD 1998a). The most significant year for the development of the idea of lifelong learning

was 1996, when the International Commission on Education for the Twenty-first Century announced the report, *Learning: The treasure within*, and indicated that lifelong learning would be key in the twenty-first century (Delors 1996). In the following year, UNESCO held the Fifth International Conference on Adult Education, CONFINTEA V, and proposed the Hamburg Declaration on Adult Learning which positioned lifelong learning as the key to helping society face challenges in the next century (UNESCO Institute for Education 1997).

The OECD's *Education policy analysis 1998* selected lifelong learning as a special issue topic with its analysis of lifelong learning policies in different countries (OECD 1998b). In addition, the European Union (EU) proposed *A memorandum on lifelong learning* to discuss the strategies of lifelong learning implementation (European Commission 2000). In 2005, the EU proposed *Key competences for lifelong learning: A European reference framework* to reframe the eight key competencies for lifelong learning (Commission of the European Communities 2005; The European Association for University Lifelong Learning 2009).

Based on the promotion of lifelong learning in these various international organisations, many countries have been exposed to the importance of lifelong learning and become devoted to developing lifelong learning for all. Hasan (2001) analysed lifelong learning and examined the various definitions, policy and praxis in different countries, including Australia, Finland, Norway, the Netherlands, the United Kingdom, France, Italy, Japan, Korea, the United States. However, many countries set their lifelong policy based on national adult education surveys. For instance, Australia, Germany, the United Kingdom, the United States, and Canada have surveyed their populations on the topic approximately once every two to three years (see Table 1).

Table 1: The major national surveys of adult education

Countries	Survey institute	year	Age of adults	Method	Samples	Final/ report	Survey frequency
Germany	Infratest Burke Sozialforschung	1979	19–64	Telephone	7,108	2006	3 years
United Kingdom	National Institute of Adult Continuing Education (NIACE)	1996	17 & over	Not available	4,932	2008	1–3 years
United States	National Center for Educational Statistics	1991	16 & over	Telephone	8,905	2006	3–5 years
Canada	Statistics Canada	1984	17 & over	Telephone	33,410	2001	3–4 years
Australia	Australian Bureau of Statistics	1995	25–64	Telephone	14,190	2007	not regular

Initiating a national policy for lifelong learning development

The importance of implementing lifelong learning is to eliminate a gap in access to education within the community and to provide more equitable access to educational resources (Williamson 1998). Reframing policy to enhance lifelong learning is an effective approach in a democratic society (Nerland 2008). In many countries, the purpose of lifelong learning policies is to eliminate the unequal distribution of educational attainment, which might result in intellectual, social and economic disparities. Research has shown that adult education participation rates are positively correlated with a country's level of economic development as measured by per capita gross domesticproduct. On average, the more prosperous the country, the higher the participation rate reported (UNESCO Sixth International Conference on Adult Education 2009). Furthermore, for each additional year of education in the adult population on average, there is a corresponding increase of 3.7% in long-term economic growth and a 6% increase in per capita income. Therefore, adult learning and education are not only financial expenditures but also investments in the future (UNESCO Institute for Lifelong Learning 2009).

In 1998, the Taiwanese government published a white paper called *Toward a learning society*, and listed 14 action programs to establish lifelong learning in society. Subsequently, the Lifelong Learning Act was announced in 2002, illustrating that the promotion of lifelong learning and the establishment of education's importance to society had become a clear concept and a national policy. In 2010, the Ministry of Education proposed 'The Action Year for Lifelong Learning 331', encouraging the public to spend at least thirty minutes for learning (3), thirty minutes for doing exercise (3) and to undertake one activity for the common good (1) per day (Ministry of Education, Taiwan 2010). To reduce the policy implementation gap, Taiwan has emphasised the social role of lifelong learning and encouraged

the general public's acceptance of its importance. According to the purposes of the EU's announcement of *A memorandum on lifelong learning* the intention is to promote active citizenship and employability. Lifelong learning has emphasised the responsibility of citizens to pursue personal self-fulfilment. In instances where the government has played a neutral role in policy implementation, lifelong learning may become a market-driven activity to satisfy the increased demands. Some programs based on lifelong learning policy have been implemented in Taiwan, but there is still a growing gap between the lifelong learning policy and its practice (Wang 2008). The gap causes concern about the engagement of disadvantaged groups, such as females and individuals of lower SES, in lifelong learning activities.

Gender and socio-economic status explanations in lifelong learning

Many structural inequalities have been found to limit the participation of different social groups in lifelong learning. In general, those who are female, older, less educated, less skilled, in low-skill jobs or unemployed, immigrants or from poor socio-economic backgrounds are the least likely to participate in adult education and training (Desjardins, Rubenson, & Milana 2006). Within a country, levels of participation vary according to socio-economic, demographic and regional factors, revealing structural deficiencies in access to adult education. Infrequent participation by certain groups illustrates structural inequalities in society, that there is unequal access to lifelong learning when general participation is low, or that infrequent participation in lifelong learning may create inequalities in society. Gender, geographical location, age and socio-economic status all play a part in lifelong learning engagement (UNESCO Institute for Lifelong Learning 2009).

Gender is a key element in the discourse of lifelong learning (Rogers 2006). In many developing countries, women's literacy rates

are lower than those of men. Comparing rates of different countries, there is a significant gender gap (Mulenga & Liang 2008). There are multiple constraints that may prevent women from participating in adult education, such as domestic duties, child care and submissive behaviour (Gouthro 2007; Lind 2006). Women generally have responsibilities and connections to the home. However, ongoing social changes have encouraged women to be more independent, and they have begun to expect to engage in more learning activities.

SES is a major determining factor in the attainment of different levels of education, and it is possibly another important factor in lifelong learning. In many countries, SES has been one of the strongest factors associated with educational differences in access as well as outcomes (OECD 2001). Generally, we may assume the higher an adult's SES, the greater the likelihood of his/her engagement in education. At the same time, effective adult learning may play a critical role in providing opportunities for social mobility, which may decrease social inequality (Nesbit 2006). However, Desjardins, Rubenson and Milana (2006) indicated that the observed relationship is not necessarily direct.

Engagement and lifelong learning

Generally, 'engagement' is defined as what students do, feel and think during school. When learners are engaged in learning activities, they need to learn through interactions with others if they want to make the activity meaningful (Kuh 2009). The quality of effort and involvement in productive learning activities further defines engagement (Kuh 2009). Many articles on student engagement at the college level have been guided by the concepts of behavioural, emotional and cognitive engagements, while articles at the K-12 level have mainly focused on psychological and behavioural engagements (Fredricks, Blumenfeld & Paris 2004). The literature defines cognitive engagement in terms of self-regulation, and students

use meta-cognitive strategies to plan, monitor, and evaluate their cognition when accomplishing tasks (Fredricks et al. 2004).

Adults, in general, may have the ability to engage in self-directed learning, and adults can be seen as self-directed learners. When they engage in lifelong learning, they may evaluate the learning outcomes. Adult students engaging in learning activities in a social context are very different from students in a school context. The differences include, for example, their purpose, motivation, work limitations, family responsibilities, available time and financial abilities.

Method

To answer the research questions, the study analysed data from the Adult Survey in Taiwan in 2009. The following section will discuss the framework of analysis, data collection, sampling, data transformation and method of analysis.

Framework of analysis

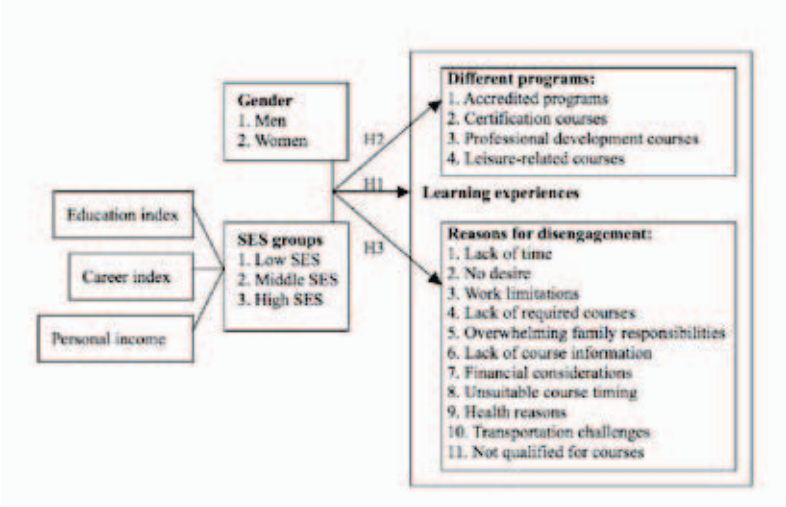
To investigate adults engaging in lifelong learning activities, we propose the analytical framework shown in Figure 1. Using this framework, this study tested the following hypotheses:

H1: Women of different SES face unequal situations when they engage in lifelong learning.

H2: Women and men do not engage in similar lifelong learning programs.

H3: The reasons for adult learners' disengagement from lifelong learning vary.

Figure 1: Framework of analysis



Data collection

To understand Taiwanese participation in lifelong learning, we implemented the survey supported by the Ministry of Education and the findings may serve as a basis for developing relevant policies.

To collect the views of the subjects in a short period, this study used the telephone questionnaire method Computer Assisted Telephone Interview (CATI) to randomize the digit dialling. The survey was implemented from Monday to Sunday during the evening from 6 to 10 o'clock from 1 June to 1 July, 2009. The total calls numbered 48,463, and the validated sample included 10,000. In this study, we specifically selected individuals 18–64 years old, and the validated sample in this group was 4,065. There were only 1,323 people who reported experiencing engagement in lifelong learning activities, which is 32.55% of the total sample. Based on the population distribution, this study employed post-stratification weighting to calculate the reasonable sampling distribution. In this study, the margin of sampling error was lower than 3%, at a confidence level of 95%.

According to the *Annual report* by the Ministry of the Interior of Taiwan, the total population in Taiwan aged 18 to 64 years was 15,970,678. Overall, 50.11% was male, and 49.89% was female. In this study, the data set consisted of 4,065 valid respondents, ranging in age from 18 to 64, with 40.91% male and 59.09% female. Chi-square test results revealed a statistically significant difference in gender distribution between the data set and the total population ($p < .001$), as shown in Table 2. This finding means that the gender distribution in the sample is different from that in the population. Therefore, the samples needed to be weighted to facilitate statistical evaluation. This study employed post-stratification weighting to calculate the gender values and analysed the derived figures through statistical means. The equation is as follows:

$$W_i = \frac{N_i}{n_i} \times \frac{n}{N}$$

Note: W_i: the weight value of group i; N_i: the total value of the ith group in the population; N: the total value of the population; n_i: the number of valid samples in group i; n: the total value of the samples

Table 2: Gender distribution in the samples and the population

Variables	Classification	Sample		Population[a]		χ^2
		Frequency	Percentage	Frequency	Percentage	
Gender	Men	1,663	40.91	8,002,553	50.11	137.55***
	Women	2,402	59.09	7,968,125	49.89	
Total		4,065		15,970,678		

Note: a. The population of Taiwan aged 18 to 64 was 15,970,678.
***$p < .001$.

Data transformation

Educational background and occupation in the database were on a nominal scale. For the data to fit the statistical model, this study adapted these two variables, educational attainment and occupation, into an education index and a career index. The adaptation process was based on the International Standard Classification of Education (ISCED) proposed by the OECD (1999). ISCED 1 (primary education) was designated as 1, which was presented in the questionnaire as 'primary school graduate or below'. ISCED 2 (early secondary education) was designated as 2, which was presented in the questionnaire as 'junior high school or junior vocational schoo'. ISCED 3A, 3B, 3C (upper secondary education or vocational education) was designated as 3, which was presented in the questionnaire as 'senior high school (vocational school) (including the first three years of junior college)'. ISCED 4 (junior college) was designated as 4, which was presented in the questionnaire as 'junior college'. ISCED 5A, 5B (higher education) was designated as 5, which was presented in the questionnaire as 'university'. ISCED 6 (higher education) was designated as 6, which was presented in the questionnaire as 'graduate school or above'.

The occupation data were adjusted according to Hwang's (2003) proposal in 'New occupational prestige and socioeconomic scores for Taiwan'. Occupations presented in the questionnaire as 'agricultural, forestry and fishery workers' and 'non-technical workers and manual labor' were designated as 1. 'Sales and service personnel', 'technical workers and related workers' and 'machine operators and assembly-line workers' were designated as 2. 'Administrative staff' was designated as 3, and 'technical workers and assistant professional personnel' were designated as 4. 'Human resource, supervisors and managers' and 'professionals' were designated as 5. The mean and standard deviation of the adapted education career indices are shown in Table 3.

Table 3: The mean and standard deviation of education and career indices

Variables	Categories	Indices	
		Education	Career
Educational attainment	Primary school graduate or below	1	
	Junior high school or junior vocational school	2	
	Senior high school (vocational school)	3	
	Junior college	4	
	University	5	
	Graduate school or above	6	
Mean = 3.598, Standard Deviation = 1.275			
Occupation	Human resource, supervisors and managers		5
	Professionals		5
	Technical workers and assistant professional personnel		4
	Administrative staff		3
	Sales and service personnel		2
	Agricultural, forestry and fishery workers		1
	Technical workers and related workers		2
	Machine-operators and assembly-line workers		2
	Non-technical workers and manual labour		1
Mean = 3.322, Standard Deviation = 1.416			

This study applied a two-step classification to analyse the data. The education index, career index and personal income were included in the model. The results of the analyses were categorised into three different SES groups (high, middle and low-income groups), as shown in Table 4.

Table 4: Two-step cluster analysis of SES groups

SES groups	N	% of combined	% of total	Education index		Career index		Personal income[a]	
				M	SD	M	SD	Categories	Frequency
High	722	26.52	17.76	4.468	1.083	4.031	1.280	18,000–24,000	304
								24,000–30,000	203
								30,000–45,000	144
								45,000	71
Middle	1,161	42.65	28.56	3.600	1.200	3.115	1.340	6,000–9,000	559
								12,000–18,000	602
Low	839	30.82	20.64	3.081	1.270	2.813	1.400	0–6,000	431
								9,000–12,000	408
Combined	2,722		66.96	3.777	1.238	3.328	1.406		
No response items	1,343		33.04						
Total	**4,065**								

Note: a. Measured in US$.

This study used SPSS Version 15.0 for Windows to conduct a logistic regression analysis and χ^2 test. The logistic regression model was used to analyse the experiences of lifelong learning among adults with different characteristics. In this study, we designated the engagement in lifelong learning as a dependent variable and the disengagement from lifelong learning as the reference variable. Gender (χ_{gen}) and SES (χ_{ses}) were designated as independent variables of the logistic regression model to verify hypothesis H1. The logistic regression model was as follows:

$$\log \frac{p}{1-p} = \alpha + \beta_n \chi_{gen} \cdot \chi_{ses}$$

Note. p as the probability of engaging in lifelong learning refers to disengaging.

To verify hypotheses H2 and H3, this study adopted the χ^2 test to conduct a cross-analysis of the types of adults engaging in lifelong learning and the reasons why adults disengage from lifelong learning. The *a posteriori* comparison of the χ^2 tests was based on the comparison of adjusted residuals. The Z-score 1.96 was used for the 0.05 significance level, 2.58 was used for the .01 significance level, and 3.30 was used for the .001 significance level (Haberman 1978).

Results

In this section, we address the results according to the purposes of the study. The results show the adults' lifelong learning experiences and the distribution of gender engagement in lifelong learning. The results also show the relationship of gender, socioeconomic status and engagement in lifelong learning. The adults' program selection and their reasons for not engaging are then discussed at the end.

The results showed that 67.45% of adults did not engage in lifelong learning, and that only 32.55% of adults reported they had lifelong

learning experiences (see Table 5). The percentage of women (56.34%) engaged in lifelong learning was higher than that of men (41.87%). The percentage of low SES groups engaging in lifelong learning (41.59%) was higher than that of other SES groups.

Table 5: Crosstab analysis by gender and SES for lifelong learning

Engagement	Gender			Socio-economic status (SES)			
	Men (%)	Women (%)	Total (%)	Low (%)	Middle (%)	High (%)	Total (%)
No	1,483 (54.08)	1,259 (45.03)	2,742 (67.45)	353 (19.81)	770 (42.73)	659 (35.73)	1,782 (63.55)
Yes	554 (41.87)	769 (56.34)	1,323 (32.55)	425 (41.59)	405 (38.08)	192 (17.43)	1,022 (36.45)
$\chi 2$	53.219***			183.834***			

***$p < 0.001$.

Women engaged in lifelong learning

Using a logistic regression model, we analysed engagement in lifelong learning as the dependent variable, p is the probability of not participating in lifelong learning , $\chi_{gen(1)}$ as women refers to men, $\chi_{ses(1)}$ as low SES, $\chi_{ses(2)}$ as middle SES refers to high SES. In this model, gender and SES were treated as independent variables. The result was as follows:

$$\log \frac{p}{1-p} = -0.847 + 1.751\chi_{ses(1)*gen(1)} + 0.656\chi_{ses(2)*gen(1)}$$

Note: a. p as the probability of participating in lifelong learning refers to not participating; b. $\chi_{gen(1)}$ as women refers to men, $\chi_{ses(1)}$ as low SES, $\chi_{ses(2)}$ as middle SES refers to high SES.

There were statistically significant gender and SES differences in this model. The results indicated the model was fitted (see Table 6). Women in the low and middle SES groups engaged in lifelong learning 5.762 and 1.926, respectively, times more than did men. The fitted logistic regression model showed the data supported hypothesis H1.

Table 6: Coefficients of the logistic regression model

Variables[a]	Coefficients			Fit of model[b]		
	β	Exp(β)	Wald	-2LL	HL	Percentage Correct
SES* Gender			157.709***			
SES(1)* Gender(1)	1.751	5.762	133.929***	3504.756	.000	67.1%
SES(2)* Gender(1)	0.656	1.926	44.134***			
Constant	-0.847	0.428	304.477***			

Note. a. SES(1) refers to low SES; SES(2) refers to middle SES;
b. -2LL is -2 log likelihood, and HL is the Hosmer-Lemeshow goodness-of-fit statistic.
***$p < .001$.

Engagement in different programs

Among the adults who engaged in lifelong learning activities, 8.74% were in accredited programs, 17.73% were in certification courses, 53.52% were in professional development courses, and 20.02% were in leisure-related courses. This indicates that a larger number of adults preferred to engage in professional development courses than any other kind of lifelong learning activity. This study further analysed the engagement in different programs by gender and SES (see Table 7). According to the results of the χ^2 test, there were no significant differences between men's and women's engagement in different programs by different SES. The result of the χ^2 test did not provide sufficient evidence to support hypothesis H2.

Table 7: Crosstab analysis of engaging in different programs

Programs	Low SES				Middle SES				High SES				Total (%)
	Men (%)		Women (%)		Men (%)		Women (%)		Men (%)		Women (%)		
Accredited programs	26	(8.81)	24	(11.59)	10	(5.68)	25	(8.83)	6	(8.57)	12	(8.11)	103 (8.74)
Certification courses	42	(14.24)	35	(16.91)	33	(18.75)	57	(20.14)	16	(22.86)	26	(17.57)	209 (17.73)
Professional development	185	(62.71)	118	(57.00)	85	(48.30)	142	(50.18)	31	(44.29)	70	(47.30)	631 (53.52)
Leisure-related courses	42	(14.24)	30	(14.49)	48	(27.27)	59	(20.85)	17	(24.29)	40	(27.03)	236 (20.02)
$\chi 2$	2.172				3.520				0.932				

Note: there is no significant difference between categories in the crosstab analysis

Reasons for not engaging in programs

The reasons for not engaging in lifelong learning activities are listed in Table 8. The most popular reasons included lack of time (58.43%), no desire (12.65%) and work limitations (10.95%). According to the analysis, we found that lack of desire and work limitations were the main reasons why men did not engage in lifelong learning. The main reason for women's lack of engagement was also lack of time, but women also commonly noted overwhelming family responsibilities. Hypothesis H3, stating that reasons would vary for adult learners' disengagement from lifelong learning, was not fully supported by the data.

Table 8: Crosstabs analysis of reasons for not engaging

Reasons	Gender				SES					
	Men (%)		Women (%)		Low (%)		Middle (%)		High (%)	
Lack of time	754	(62.52)	452	(37.48)	242	(20.07)	533	(44.20)	431	(35.74)
No desire	189	(72.41)	72	(27.59)	52	(19.92)	98	(37.55)	111	(42.53)
Work limitations	157	(69.47)	69	(30.53)	46	(20.35)	90	(39.82)	90	(39.82)
Lack of required courses	72	(66.67)	36	(33.33)	28	(25.93)	48	(44.44)	32	(29.63)
Overwhelming family responsibilities	28	(31.11)	62	(68.89)	10	(11.11)	44	(48.89)	36	(40.00)
$\chi 2$	62.32***						29.49			

***$p < .001$.

Discussion

Based on the above analysis, the study showed different experiences of lifelong learning among Taiwanese adults. The similarities and differences in experiences are now discussed.

Generally, women had less access to formal education due to factors such as family responsibilities and social expectations, which might affect their participation in lifelong learning (World Bank 2005, 2007). Recently, women have gradually surpassed men in lifelong learning participation (Bryans 2001; Moen, Kelly & Magennis 2009; Wu 2010). The results of this study showed that women, in comparison with men, had greater lifelong learning engagement, especially in the low SES group. In fact, the opportunities to access lifelong learning for both gender groups were not quite equal. Although many women are entering the job market in Taiwan, they are still expected to shoulder most of the responsibility for raising children and maintaining households. However, the social environment has changed gradually, and women are more aware of their self-development. This awareness will motivate many women to engage in lifelong learning in Taiwan.

Daines, Daines, & Graham (2006) indicated the reasons for adult engagement were categorised into vocational or professional development, aspirations for further learning or creativity, personal development goals, or a social need. Because more Taiwanese adults engage in professional development courses, there appears to be an emphasis on the vocational category. Governments have generally set budgets for lifelong learning programs. The key focus is usually on youth, professional training or special interest courses. Many adults have chosen to improve their professional skills, and there is greater benefit when learning programs are arranged at a time and a place suitable for them.

Previous studies have shown that a lack of time and finances are prime reasons why adults choose not to engage in lifelong learning (Desjardins, Rubenson & Milana 2006). Family responsibility was another reason given by adults for non-participation (Merriam, Caffarella & Baumgartner 2007). This study also showed that lack of time was the main reason for not engaging in lifelong learning. From a situational point of view, reasons for non-participation due to lack of time can be problematic because it is a vague concept (Rubenson 1999). The value ascribed to learning will affect a person's perception of whether they have time for it or not (Desjardins, Rubenson & Milana 2006). In a previous study, the response 'no money' was the second most common reason stated for not participating in a course (Desjardins, Rubenson & Milana 2006). However, this study did find a similar rationale because many programs were provided by the government or non-profit organisations in Taiwan.

In comparison with men, women were more likely to engage in lifelong learning. However, they reported a lack of time due to family responsibilities. This is a major barrier preventing women from engaging in lifelong learning. Men were often unable to engage in lifelong learning due to work-related factors and lack of desire. Typically, men involved in lifelong learning were deeply influenced by work-related factors, such as improving professional development and achieving their career goals. However, when the attraction of work decreases, the rate of male participation may also decrease (Porfeli & Vondracek 2009).

Conclusion

If we analyse lifelong learning experiences based on social status, we may obtain different results. For instance, adults from different cultures in the same society might view lifelong learning differently or might engage in learning activities in very different ways. The economic development stage of a country influences the resource

allocation for adults' learning programs and differs depending on the stage of development. The experiences of adults in Taiwan may provide an explanation for lifelong learning engagement. In this study, gender and socio-economic status are significant variables that were found to be closely related to adults' lifelong learning experiences. The results indicate that many men do not engage in lifelong learning. It is important to rethink how to eliminate or at least minimise the barriers that affect adults' engagement in lifelong learning.

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