The Quality of Life in Taiwan

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Abstract   The AsiaBarometer survey of 1,006 respondents shows that in Taiwan, people have access to modern utilities and digital media, signs of materialistic achievement, and yet are more concerned with physical security and financial safety than with personal growth. Regardless of their demographic backgrounds and value priorities, the Taiwanese, like other Confucian publics, are most satisfied with the interpersonal life sphere and least satisfied with the public life sphere. Their satisfaction levels concerning various life domains affect their sense of well-being more than does their prioritization of values. Assessments of material and nonmaterial life domains contribute to their sense of well-being more than those of interpersonal and public domains do. Access to modern utilities and a high income, however, detract from their sense of well-being. As is the case elsewhere, a better set of objective life circumstance does not necessarily make for a greater quality of life in Taiwan. The government, therefore, should seek to provide more than economic goods and services.

Keywords   AsiaBarometer survey · Taiwan · Quality of life

1 Introduction

1.1 Geography and Population

Taiwan is a small island that lies on the western edge of the Pacific Ocean, between Japan and the Philippines. It has an area of about 36,000 km^2 (14,400 miles^2) and, about

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two-thirds of which are covered with forested mountains. Consequently, the population is concentrated along the comparatively flat western plain. As of July 2007, Taiwan's population was near 23 million, representing the ninth densest population in the world (Wikipedia—List of countries by population density). Taiwan's population is composed of aborigines (<2%), Fukienese and Hakka (85%, the early immigrants from southern China), and later immigrants (<15%) from China after World War II, mostly in 1949 after the defeat of the Nationalists.

1.2 History and Democracy

Since the seventeenth century, Taiwan has been occupied by a number of different foreign powers, including the Dutch (1624–1661), the Spanish (1626–1642), and most recently the Japanese (1895–1945). At the end of World War II, Taiwan came under the administrative control of the Chinese Nationalist Party (Kuomintang, KMT). In 1987, after forty-two years of autocracy, the suppression of political factions officially ended and newspaper licenses were deregulated. Taiwan continued to move gradually toward democracy, with the direct election of the president by a national vote in 1996, and a peaceful transfer of leadership to the opposition party in 2000. It is now ranked 32nd of 167 countries on the Economist Intelligence Unit democracy index (2007).

1.3 Economy

Because Taiwan has limited natural resources, foreign trade plays an important role in its economy. From the 1950s to the 1970s, the rapid development of light industry helped to accumulate a large sum of foreign currency and established a solid foundation for the industrial environment. The development of a hi-tech industry since the 1980s has made Taiwan the largest original digital manufacturer in the world. These achievements have increased the national income to (GDP (PPP)) = US$29,600 per capita, making Tawan the 42th most wealthy county or region out of 229 worldwide (CIA World Fact Book 2007c). Moreover, in 2006, Taiwan became one of the top twenty leading exporters and importers in world merchandise trade (WTO International Trade Statistics 2007). Taiwan's hi-tech labor output value made its foreign exchange reserves are the fourth largest in the world (out of 153 countries, CIA World Fact Book 2007d). However, not everyone in Taiwan is benefiting from the prosperity. Income inequality and polarization have been rising in recent years. The ratio of disposable income for those in the top 20% income bracket to those in the lowest 20% bracket grew from five to six over the past 10 years. The unemployment rate was approximately 2% in 1991, 5% in 2002, and grew to 4% in 2006 (Directorate General of Budget, Accounting and Statistics, Executive Yuan, R.O.C. 2006). Although the overall economic performance of Taiwan is not bad in comparison to other countries, it has slowed in recent years. The GDP growth rate in 2007 was 5.5, ranked 93rd of 219 (CIA World Fact Book 2007g).

1.4 Political Dilemmas Faced by Taiwanese

Taiwanese people are puzzled by the question, "Who are we?" Although goods labeled "Made in Taiwan" can be found all over the globe, the country's name remains unsettled; it is variously called "Taiwan," "the Republic of China," or "Chinese Taipei" in the

international arena due to the uncertainty surrounding Taiwan's sovereignty. Even residents of Taiwan have different opinions about the island's future.

The people of Taiwan currently have de facto independence from China. A consensus has developed in Taiwan that whatever the ultimate outcome regarding reunification or independence, Taiwan's people must have the deciding voice. The question of independence versus unification is a hot topic of political debate. Pro-sovereignty advocates have been pushing for joining the UN and gaining international recognition. Taiwan has done well with the transformation of its economy and political system, but given its historical context and the changing international context, prudent cultivation of domestic policy is the most important challenge for Taiwan at present.

1.5 Purpose of the Study

The purpose of this study is to (1) understand how Taiwanese live their lives; (2) explore what value priorities Taiwanese have; and (3) investigate both the overall quality of life in Taiwan and the quality of specific life domains. Results from the AsiaBarometer survey (ABS), which was conducted in China, Hong Kong, Japan, Korea, Singapore, and Taiwan during the summer of 2006, were used in this study. The ABS has four parts in addition to demographic data questions: lifestyles, value priorities, overall quality of life (QOL) and quality of specific life domains. We report respondents' attitudes toward these four major parts and also examine the relationships between each of the four parts and demographic variables. The determinants of overall quality of life are also investigated.

In this study, each item in the questionnaire was treated as an interval variable if a rating scale was used and as a nominal variable if a categorical scale was used. Descriptive statistics (including mean, standard deviation, maximum, minimum, skew, and kurtosis), and the percentage for each category of a variable were first calculated. Inferential statistics were also calculated if applicable. The Pearson's correlation coefficient was calculated between each pair of interval items. Chi-square tests were conducted to test the relationships between nominal variables. T-tests and ANOVAs were conducted to test the mean differences between and among groups. Because a large number of respondents were sampled in this study, the significance level for statistical analyses was set to $\alpha = .01$.

1.6 The Respondents

One-thousand and six respondents were sampled nationwide by an opinion research company from August 14 to 24, 2006 (the sample territory excepted the eastern mountainous regions of Hualien and Taitung, where only about 3% of the population resides). The respondents were sampled in three stages: (1) following the government classification, the primary sampling units (PSU) for each county and city were determined; (2) in each district (PSU), five to fifteen sampling units (secondary sampling units, SSU) were identified to represent the population by sampling with probabilities proportional to the population; (3) in each SSU, interviewers started walking from the address of the head of the neighborhood (*li*) (an elected official for which the address was available; neighborhoods are the second smallest units used by the government in Taiwan for household registration and normally consist of a population of around 5,000). Neighborhoods are the standard smallest unit for door-to-door sampling. Interviewers then conducted at most five interviews in each neighborhood through random household visits. To make the samples representative, the completed samples were set up in advance with gender and age quotas consistent with Taiwan's population.

The demographic data for the respondents are listed in Table 1. The respondents were between the ages of 20 and 69 (40.6 ± 12.3), with only 3% over 65. The percentage of those over age 65 was lower than the 10% indicated by the data from the Directorate General of Budget, Accounting and Statistics, Executive Yuan R.O.C. (2006). The percentage of men and women were roughly equal (51% vs. 49%) and were the same as the 2006 social indicator for Taiwan (51% vs. 49%, Directorate General of Budget, 2006).

Thirty-two percent had a junior high level education or below, 39% had a high school education, and 28% had at least a college education. This is similar to the government data (36%, 33%, and 32% respectively; Directorate General of Budget, Accounting and Statistics, Executive Yuan R.O.C. 2006). Younger respondents tended to have more education than older ones. Seventy-one percent of those aged 60–69 had only an elementary school education or were illiterate. In contrast, 60% of those aged 20–29 had at least a college education.

Twenty-six percent were single and 71% were married, with more married women (75%) than married men (66%). According to the government data, 34% of the population

Table 1 Demographic data	Demographic variables	Frequency	%
	Age		
	20–29	250	25
	30–39	240	24
	40–49	243	24
	50–59	181	18
	60–69	92	9
	≧65	34	3
	Gender		
	Male	514	51
	Female	492	49
	Education		
	No formal education	18	2
	Elementary school	143	14
	Junior high school/Middle school	164	16
	High school/Vocational school	395	39
	College school	256	25
	University/Graduate school	30	3
	Marital status		
	Single	258	26
	Married	709	71
	Divorced/Separated	20	2
	Widowed	18	2
	Other	1	0
	Monthly household income		
	≦NT$49,999	212	21
	NT$50,000–NT$99,999	609	61
	≧NT$100,000	163	16

over 15 is single (Directorate General of Budget, Accounting and Statistics, Executive Yuan R.O.C. 2006). Twenty-one percent had a monthly family income below NT$50,000 (US$1,500); 61% were between NT$50,000 and NT$100,000; and 16% were above NT$100,000. Respondents with more education tended to have a higher income; no relationship seemed to exist between age and family income.

1.7 Lifestyles

Lifestyle refers to the way in which people live their lives in terms of spending time and money, and their interaction with other people at home and abroad. The five aspects of lifestyle explored were: lifestyle and standard of living, access to and use of utilities, religious beliefs, political and social involvement, and foreign experience and self-identity.

1.8 Lifestyle and Standard of Living

We found that 53% of families have four or five members, and 82% have three to six. Eighty-nine percent of families live in their own house or apartment, and 9% rent. The household composition was slightly higher than the social indicators reported by the Directorate General of Budget, Accounting and Statistics, Executive Yuan R.O.C. (2006) (mean = 3.1), but the percentage of home ownership was similar.

Respondents were asked to choose two usual eating patterns for breakfast and dinner respectively (see Fig. 1). For breakfast, respondents bought ready food outside and ate at home (63%), cooked and ate at home (52%), or ate out at food stalls (40%). For the evening meal, more respondents ate at home (85%) than bought food outside (45%) or ate out at food stalls (29%). Women, older people, people with little education, and married people were more likely to eat breakfast and dinner at home than out; while men, young people, educated people, and single respondents were more likely to eat meals out than in.

Respondents were also asked to indicate what they liked to eat from a list of 11 foods, none of which were traditional Taiwanese fare. The results showed that the number of favorite foods differed by age, education level, income, and marital status. Specifically, those who were younger, more educated, could speak English better, and/or had a higher income chose more favorite foods. The foods most chosen were Beijing duck (52%), sushi (45%), dim sum (37%), sandwiches (31%), instant noodles (30%), kimchi (27%), curry
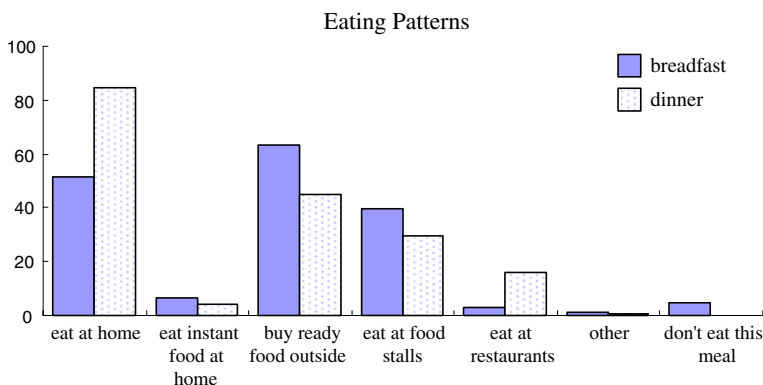

Fig. 1 Lifestyle—eating patterns

(25%), hamburgers (23%), pizza (21%), tom-yum-goong (18%), and pho (16%). The results reflect a multicultural influence, especially from Chinese and Japanese cultures. The eleven foods were further classified into Eastern and Western foods, with sandwiches, hamburgers, and pizza in the Western category. Men liked more Western foods and women liked more Eastern foods. Respondents who were younger, had more education, higher income, no religion, and/or who were single liked both Eastern and Western foods more than did their counterparts. Older respondents tended to choose "none of the above" more than younger respondents.

1.9 Utilities

Respondents were asked about the accessibility of public utilities, computers, and mobile phones. In Taiwan, 100% of families have access to electricity. More than 95% of families have access to all other kinds of utilities (such as the public water supply, gas, fixed-line phone, mobile phone, and cable TV). Only 28% of families have a fax machine. These numbers indicate that life in Taiwan is quite modern and convenient in terms of basic living facilities. However, the percentage of families with access to public utilities may be overestimated. For example, the mean water supply rate in 2006 was 90%, but it ranged from 45% in Pingtong to 100% in Tainan (Taiwan Water Corporation). Furthermore, no respondents were sampled from the eastern regions of Hualien and Taitung where many aboriginals live in the mountains and where access is likely limited.

Less than half of the respondents said that they used the internet (43%) or sent e-mail (34%) daily or weekly. Nearly half had never used the internet (44%) or sent email (49%). Thirty-six percent of respondents used a mobile phone to read or write messages frequently (either daily or weekly), but 51% never or seldom did. Thus the population was largely divided into two extremes concerning computer and mobile phone use. Single respondents, those who were younger, those with a high education, those with better spoken English, and those with a high income were more likely than their counterparts to use a computer and mobile phone. There was no gender difference.

1.10 Religion

Forty-one percent of respondents indicated belief in Taoism, which is the local traditional religion; 31% indicated Buddhist beliefs; and 3% indicated they were Christians (which includes Catholics and Protestant Christians). A quarter (24%) indicated that they do not have any specific religion. According to the Department of Statistics of the Ministry of the Interior (2005), 37% of the population believes in Taoism/*Yi Guan Dao*, 35% believe in Buddhism, and 4% are Christians. Married respondents, those who were older, those with less education, and those with less skill speaking English were more likely to have a specific religion than their counterparts. Single people, young people, and highly educated people were the most likely to indicate no religion.

Although about three-quarters of the respondents believed in a specific religion, nearly half (49%) never prayed or mediated, or only did so on special occasions. Only 11% of respondents practiced these activities frequently (daily or weekly). For those who prayed daily, 41% were Christian, 5% were Taoist, and 12% were Buddhist. This finding may reflect that the main religious exercise of Taoism is not praying or meditation but rituals practiced according to the lunar calendar. Females, married respondents, older respondents, less-educated respondents, and higher-income respondents prayed or mediated more frequently.

1.11 Political and Social Involvement

To tap political involvement and social attitudes, the ABS asked questions about respondents' political involvement, interpersonal trust, and social involvement. In Taiwan, political involvement is quite high. Seventy-nine and 73% of respondents had voted frequently (every or most elections) in national and local elections, respectively. Only 9 and 11% of respondents never or rarely voted, respectively. According to statistics from the Central Election Commission, the participation rate was 80% in the 2004 and 76% in the 2008 presidential election, 59% in the 2008 legislative elections, and 66% in the 2006 local elections. No gender difference was found in voting behavior. Respondents who were older, less educated, and/or married were more likely than their counterparts to vote in national and local elections. Younger voters were not as enthusiastic about politics as older voters.

Sixty percent of respondents thought that one should be careful in dealing with people, but 40% thought that most people could be trusted. An increase in education was tied to an increase in trust, while no gender, age, income, or marital status effects were found.

Respondents were asked to indicate important social circles from a list of twelve: family, relatives, place of work, club/hobby group, school, where one grew up, people who speak the same language/dialect, neighborhood, agricultural/commercial cooperative or industry group, labor union, political party, or religion (see Fig. 2). The respondents indicated family (94%), relatives (59%), place of work (51%), neighborhood (45%), where you grew up (28%), and club/hobby group (24%) were the most important social circles or groups. However, when the respondents were asked to choose the most important social
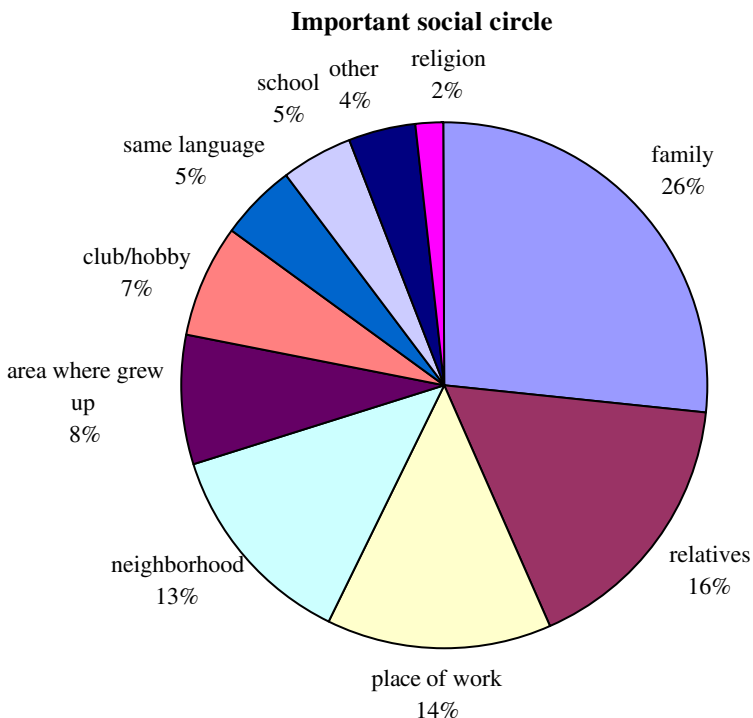

Important social circle

Fig. 2 Lifestyle—important social circle
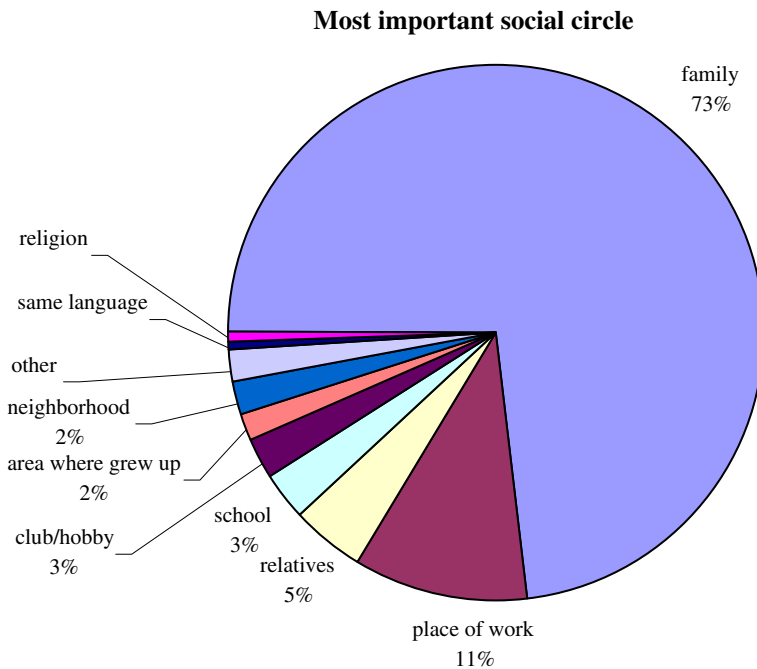
Most important social circle

Fig. 3 Lifestyle—most important social circle

circle, most (74%) thought that "family" was the most important and 11% thought that "place of work" was the second most important. "Relatives" were often deemed some- what important but hardly ever considered "most important" (59% vs. 5%) (see Fig. 3). Respondents who were female, married, older, less-educated, and/or who believed in a specific religion were more likely to choose "family" as most important than other respondents.

1.12 Foreign Experiences and Self-Identity

Ninety-two percent of respondents indicated that their ability to speak English was very low or nonexistent. Only 8% of respondents said that their ability to speak English was good or fluent. In comparison to other Asian countries such as Singapore (82%), Hong Kong (27%), and Korea (17%), Taiwan has the fewest residents who are able to speak English well. Respondents who were young, single, who had more education and/or who had more income were more likely than their counterparts to speak English well.

The most common foreign experiences were via TV programs (46%), overseas family members (17%), and foreign friends in Taiwan (12%). Forty percent of respondents had no foreign experience. This result implies that international interaction for Taiwanese is low.

Eighty-six percent of respondents labeled themselves as Taiwanese and 13% said that they were Chinese. For those who identified themselves as Taiwanese, 73% were some- what or very proud of being Taiwanese, but 27% had a negative feeling about being Taiwanese. Most respondents said that they were Taiwanese, but more than one-fourth of them did not like being Taiwanese. No gender, age, education, income, or marital status effects were found for self-identity.

Eighty-four percent of respondents could recite the national anthem by heart, especially those who were younger, more-educated, had a higher income, and/or were single. Sixty-one percent of respondents identified themselves as Asian, 17% identified with an ethnic group that has a common genealogy or ancestry, and 12% identified with people of the same language group.

2 Value Priorities

Value priorities refer to the resources and activities that people consider important to living a good life. Respondents were asked to choose five lifestyle aspects that were important to them from a list of 25. The most often chosen were being healthy (72%), being able to live without fear of crime (42%), having a comfortable home (39%), earning a high income (34%), having a job (32%), spending time with family (32%), being successful at work (26%), and raising children (26%) (see Table 2).

The rank order of the most important value priorities was physical (e.g., health), environmental (e.g., safety, comfortable home), work (e.g., high income, employment, success at work), and family (e.g., spending time with family, raising children). These correspond to the first three basic needs of Maslow's needs hierarchy: physiological, safety, and loving/belonging needs (Maslow 1943). Dressing up (3%), being devout (3%), freedom of expression and association (3%), appreciating art and culture (4%), and being famous (4%) were the least important lifestyle aspects. These items relate to the next two basic needs on Maslow's needs hierarchy: esteem and self-actualization (Maslow 1943). The fact that earning a high income and having a job were listed prior to being successful at work implies that being able to afford household expenditures is required for a feeling of achievement. These findings imply that global public values (e.g., freedom, altruism) and spirituality are relatively unimportant to Taiwanese. These results are consistent with the results of Wang et al. (2001). They are also compatible with Maslow's theory of needs; other values (esteem and self-actualization) are inessential if the basic needs (physiological, safety, and loving/belonging) are not satisfied (Maslow 1943).

Respondents' answers were stratified according to gender, age, education, marital status, and income. Comparisons were conducted among the 25 value priorities for each of the demographics. We found that no matter the gender, age, education, marital status, or income of respondents, being healthy was always their most important value priority. Furthermore, both genders chose being able to live without fear of crime and having a comfortable home as the next two most important values. Men thought being successful at work and having a job were more important than women did, while women thought spending time with family, raising children, and having a safe and clean environment were more important than men did. This result indicates that men are work-oriented and women are family-oriented.

Older respondents were more likely than younger respondents to say having enough to eat, being healthy, having access to good medical care, being able to live without fear of crime were important, while younger respondents were more likely than older respondents to say that earning a high income, having a job, being on good terms with others, being successful at work, and enjoying a pastime were important. Respondents aged 20 to 29 and 40 to 49 indicated that having a job was important. This may reflect the fear of after-school or middle-age unemployment. Respondents aged 20 to 29 were more likely to consider expressing one's personality or using one's talent as important than were the other age groups. Middle-aged respondents (30–50 years old) considered raising children to be more

Table 2 Value priority ranking and the percentage of value chosen by different socioeconomic groups: Respondents chose 5 from a list of 25 lifestyle aspects or life circumstances that were most important for them in living a good life

Dimensions	Value items	Total	SES		
			Low	Mid	High
Personal	Being healthy**	72	78	70	66
Public	Being able to live without fear of crime	42	45	40	41
Material	Having a comfortable home	39	38	44	35
Material	Earning a high income	34	29	37	37
Personal	Having job	32	30	33	34
Interpersonal	Spending time with your family	32	34	30	33
Personal	Being successful at work*	26	21	29	30
Interpersonal	Raising children***	26	34	37	15
Material	Having enough to eat***	24	35	24	12
Interpersonal	Being on good terms with others***	23	17	24	31
Public	Safe and clean environment*	20	25	19	17
Personal	Having access to good medical care	20	21	17	21
Public	Pleasant community to live	15	15	17	13
Public	Living in a country with a good government	14	13	14	16
Nonmaterial	Enjoying a pastime*	11	7	13	13
Personal	Expressing your personality or using your talents***	9	3	8	16
Personal	Winning over others*	8	5	8	11
Material	Owning lots of nice things	7	4	7	9
Personal	Having access to higher education	6	4	7	9
Public	Contributing to your local community or to society	6			
Personal	Being famous	4	3	4	4
Nonmaterial	Appreciating art and culture	4	2	3	5
Public	Freedom of expression and association	3	2	2	4
Nonmaterial	Being devout	3	3	3	3
Material	Dressing up	3	2	3	5

* $p < .05$; ** $p < .01$; *** $p < .001$ (chi-square test)

important than did other respondents. This result indicates that older respondents are more practical, while younger respondents are more idealistic and focus more on self-actualization.

The focus of the respondents also differed according to marital status. The results showed that married respondents were more likely than unmarried respondents to say that raising children, being able to live without fear of crime, spending time with family, and being healthy were important. Single respondents were more likely than married respondents to call expressing one's personality or using one's talents, being successful at work, having a job, being on good terms with others, and earning a high income important.

Moreover, since education and income were both correlated to many items, we grouped both education and income into the three levels of low, middle, and high (coded as 1, 2, and 3 respectively). Then we summed the two items into a five-point socioeconomic resource index scored from two to six. Finally, we collapsed values of the socioeconomic index into high (scored 5 to 6, 288 respondents), middle (scored 4, 356 respondents), and

low (scored 2 to 3, 340 respondents) socioeconomic groups. Respondents from a higher socioeconomic group were most likely to value success at work, being on good terms with others, expressing personality and talent, winning over others, and enjoying a pastime (see Table 2). Respondents from the low socioeconomic group were most likely to value health, raising children, having enough to eat, and having a safe and clean environment. Those with lower socioeconomic resources were more practical about their everyday living. On the other hand, those with better resources were more concerned about others and about self-competence. This finding accords with Maslow's needs theory that only those who do not worry about basic needs can afford to pursue higher-level needs such as self-actualization (Maslow 1943).

2.1 The Five Value Dimensions

Since the number of value priorities was large (25), they were further classified into five dimensions:

Dimension 1 (personal):   health, medical care, job, education, successful at work, being famous, winning over others, expressing personality/talents;

Dimension 2 (interpersonal):   family, good with others, raising children;

Dimension 3 (material):   eat, comfortable home, nice things, income, dressing up;

Dimension 4 (nonmaterial):   enjoying pastimes, appreciating art/culture, being devout;

Dimension 5 (public-life):   living without fear of crime, contributing to community/society, freedom, government, community, environment.

We first simply summed the scores (either 1 or 0) for all of the items within each of the value-priority dimensions. We then computed the average percentage chosen of each dimension and found that the interpersonal dimension (27) was the most important, followed by the personal (22), material (21), public-life (16), and nonmaterial (6) dimensions. The respondents rated the personal and material dimensions as the two most important dimensions of their lives.

The relationships between the five dimensions and the demographic data were examined. The results showed no religion effects on any of the dimensions. Female respondents valued the interpersonal dimension more than their male counterparts. Age was negatively correlated with the personal dimension but positively correlated with the public-life dimension. Education was positively correlated with the personal dimension and the nonmaterial dimension, but negatively correlated with the material dimension. Single respondents thought the personal dimension was more important than married respondents while married respondents thought the interpersonal dimension and the public-life dimension were more important than single respondents. Respondents in higher socioeconomic groups valued the personal and nonmaterial dimensions more than those in lower socioeconomic groups. These results were not surprising.

2.2 Overall Quality of Life

Items on happiness, enjoyment, and achievement were used to indicate overall quality of life. The happiness item had a 5-point rating scale ranging from very happy, to very unhappy. The enjoyment item had a 4-point rating scale ranging from often enjoying life to never enjoying life. Similarly, the achievement item had 4-point rating scale ranging from feeling a great deal of achievement to feeling no achievement. Higher scores on the three

items indicate a better quality of life after being recoded from 1 to 5 for happiness and from 1 to 4 for enjoyment and achievement. The three items were again recoded and summed to form a composite index of overall quality of life (QOL hereafter). The recoding system applied to the three items was as follows: the most positive responses (i.e. very happy, often enjoying life, and a great deal of achievement) were coded a 2, the other positive responses (i.e. quite happy, sometimes enjoying life, and some achievement) were coded a 1, and the rest (all either neutral or negative responses) were coded a 0. As a result, a 7-point overall QOL index (ranging from 0 to 6) was formed with higher scores indicating a better QOL.

The results showed that 9% of the respondents were unhappy, 41% were neither happy nor unhappy, and 51% were happy (see Table 3). Thirty-eight percent of the respondents did not enjoy life, but 62% did (see Table 4). Forty-nine percent of the respondents did not feel a sense of accomplishment in their lives, but 51% of respondents did (see Table 5). The means of the three key QOL items were all positive: 3.6, 2.7, and 2.5 (see Table 6), respectively. These scores indicated that Taiwanese are somewhat happy, enjoy life, and have some sense of accomplishment. This result is compatible with the results of the Taiwan Social Trend Survey by Liao et al. (2005).

Of the aforementioned qualities of life—happiness, enjoyment, and achievement, which ones do the Taiwanese experience relatively most and least? In order to address this question, we divided the mean of the three key QOL items by the number of scale points

Table 3 Levels of happiness with demographic categories (%)

	Very happy (1)	Quite happy (2)	Neither happy nor unhappy (3)	Not too happy (4)	Very unhappy (4)	Balanced (1 + 2) − (3 + 4)
Entire sample	17	34	41	7	2	+42
Gender						
Male	16	30	42	9	4	+33
Female	17	37	39	6	1	+47
Age						
20–29	16	42	36	5	1	+52
30–39	16	33	43	6	3	+40
40–49	15	30	42	11	2	+32
50–59	17	28	44	9	3	+33
60+	21	36	36	4	2	+51
Marriage						
Married	16	32	42	7	3	+38
Single	17	39	36	7	1	+48
Education						
Low	19	30	40	9	2	+38
Mid	14	33	43	8	3	+36
High	17	40	38	4	2	+51
Income						
Low	21	29	32	12	5	+33
Mid	15	33	45	6	2	+40
High	14	43	37	6	1	+50

Table 4 Levels of life enjoyment with demographic categories

	Often (1)	Sometimes (2)	Rarely (3)	Never (4)	Balanced (1 + 2) − (3 + 4)
Entire sample	13	49	34	4	+24
Gender					
Male	15	47	35	4	+23
Female	11	51	34	4	+24
Age					
20–29	14	54	30	2	+36
30–39	13	48	36	3	+22
40–49	11	48	38	3	+18
50–59	13	46	35	6	+18
60+	16	44	33	8	+19
Marriage					
Married	12	47	37	5	+18
Single	16	53	28	2	+39
Education					
Low	15	41	39	6	+11
Mid	7	50	39	4	+14
High	18	57	24	1	+50
Income					
Low	14	42	38	6	+12
Mid	12	50	34	4	+24
High	15	49	34	3	+27

(5 for happiness, 4 for enjoyment and achievement) and obtained 0.71, 0.68, and 0.63, respectively. We found that Taiwanese feel much happier, somewhat enjoy their life, and have less feeling of accomplishing what they want out of life. The differences among the three means were statistically significant according to dependent t-tests.

The correlation coefficients among the three QOL items were all high. The correlation coefficient between happiness and enjoyment was 0.49, between enjoyment and achievement was 0.44, and between happiness and achievement was 0.26. People who feel more enjoyable about their life also feel happier and more accomplished. Moreover, the three QOL items were positively correlated with respondents' perceived standard of living (0.11, 0.19, and 0.11 respectively). This result indicates that people who think they have a better standard of living are more likely to feel more happiness, enjoyment, and achievement.

With the exceptions of religion (having or not having religion), all other demographic characteristics are related with some of the three key QOL items to varying degrees. For example, happiness had a significant relationship with gender and income: women and those who had more income were happier. Respondents with a high level of education were happier than those with a middle or low level of education, though those with a low level of education were slightly happier than those with a middle level of education. Enjoyment had a positive relationship with education, as the more highly educated a respondent was, the more likely he or she was to enjoy life. Single respondents enjoyed life much more than married respondents. Achievement had a significant positive relationship with age and

Table 5 Levels of achievement with demographic categories

	Great deal (1)	Some (2)	Little (3)	None (4)	Balanced (1 + 2) − (3 + 4)
Entire sample	5	49	39	7	+8
Gender					
Male	5	49	37	8	+9
Female	4	49	41	6	+6
Age					
20–29	1	38	51	10	−22
30–39	5	46	42	7	+2
40–49	3	57	33	8	+19
50–59	8	54	34	3	+25
60+	10	56	26	9	+31
Marriage					
Married	6	53	35	7	+17
Single	1	37	52	9	−23
Education					
Low	7	50	34	9	+14
Med	3	48	41	7	+3
High	3	49	42	6	+4
Income					
Low	5	45	37	13	0
Mid	4	50	40	6	+8
High	5	50	40	5	+10

Table 6 The correlations among Q4 (happiness), Q5 (enjoyment), Q6 (achievement), their composite index, and Q8 (standard of living)

QOL variables (score range)	Mean/Avg. mean[a]	Q4	Q5	Q6	Composite index
Q4 (1–5)	3.6/0.7				
Q5 (1–4)	2.7/0.7	.49			
Q6 (1–4)	2.5/0.6	.26	.44		
Composite index (0–6)	2.0/0.3	.75	.80	.65	

Q4 = Happiness; Q5 = Enjoyment; Q6 = Achievement; composite index is formed from Q4–Q6

[a] The item mean after being divided by the number of scale points

marital status. More young respondents and single respondents reported *not* experiencing achievement than reported experiencing it, while old respondents and married respondents were more likely than not to experience achievement.

The mean (standard deviation) of the overall QOL composite index was 2.0 (1.5) on a 0-to-6-point scale (see Table 7). Being far below the midpoint of the index, this mean score indicates a very low QOL for Taiwanese. The correlation coefficients between the overall QOL composite index and happiness, enjoyment, and achievement were 0.75, 0.80, and 0.65, respectively (see Table 6). Those who had high score on this QOL composite index indicated that they had high scores on the three individual QOL items. Surprisingly, for the

Table 7 7-Point index with demographic categories

	Scale points							Mean points	Positive[a] (1)	Negative[b] (2)	Balance (1) − (2)
	0	1	2	3	4	5	6				
Entire sample	21	20	22	20	11	5	1	2.0	79	21	+58
Gender											
Male	23	19	21	19	11	6	1	2.0	77	23	+54
Female	19	21	24	20	11	5	1	2.0	81	19	+62
Age											
20–29	19	21	23	23	9	5	0	2.0	81	19	+62
30–39	21	23	19	19	11	5	1	1.9	79	21	+58
40–49	24	17	22	21	10	6	0	1.9	76	24	+52
50–59	23	16	24	16	15	5	1	2.0	77	23	+54
60+	15	19	26	16	12	9	3	2.4	85	15	+70
Marriage											
Married	22	19	23	18	12	5	1	2.0	78	22	+56
Single	20	21	22.	22	9	6	0	2.0	80	20	+60
Education											
Low	24	17	20	17	14	6	2	2.0	76	24	+52
Med	23	22	24	18	10	3	0	1.8	77	23	+54
High	15	19	23	25	11	7	1	2.2	85	15	+70
Income											
Low	26	16	22	17	10	8	1	2.0	74	26	+48
Mid	20	22	23	19	11	5	1	2.0	80	20	+60
High	20	18	20	23	14	4	1	2.1	80	20	+60

[a] Denotes the percentage of participants with a scale score of 1–6

[b] Denotes the percentage of participants with a scale score of 0

overall QOL composite index, the only demographic variable found to have an effect was education. Respondents who had received more education had a better QOL composite index.

One in every five respondents (21%) scored the lowest score of zero on the QOL composite index, which implies that they did not respond positively to any of the three QOL items (see Table 7). Only nine respondents (1%) scored the highest score of 6, which indicates they experienced happiness, enjoyment, and achievement all to the highest degree possible. Fifty-three respondents (5%) scored 5, the second highest score on the index. To compare the demographic and other differences between the respondents reporting the high and low levels of overall QOL, we first tried to include the respondents with scores of 6 on the composite QOL index to form a "better QOL group" ($n = 9$). This group was compared to the "worse QOL group," which had a score of zero on the composite index ($n = 209$). However, since the sample size of the "better QOL group" was to small compared to the "worse QOL group," we then included respondents with scores of 5 ($n = 53$) in the "better QOL group".

We conducted t-tests or chi-square tests to compare these two QOL groups. We found that self-reported standard of living, educational level, spoken English ability, and religion differed significantly between the two groups. In other words, respondents with a better

overall QOL were more likely to have a higher standard of living, more education, better spoken English ability, and to be Christian than the worse QOL group. When religion was coded as "belief" versus "no belief," no effect of religion was found. Moreover, no significant difference was found for gender, age, marital status, occupation, or income.

We also examined whether respondents in different socioeconomic groups have a different quality of life. Results indicated that high socioeconomic respondents were happier, had more enjoyment, and thus scored significantly higher on the composite index than the other two groups. However, people in the low socioeconomic group did not differ from the middle group in the four quality of life items, i.e. those tapping the three separate QOL indicators and the overall QOL index.

3 Life Domain Assessments and Their Relationships with Overall QOL

In addition to assessing QOL from a global or holistic perspective, we also assessed it at the level of specific life domains. Sixteen life domains were explored including housing, friendships, marriage, standard of living, household income, health, education, job, neighbors, public safety, environmental conditions, social welfare, democratic system, family life, leisure, and spiritual life. Respondents were asked to indicate their satisfaction with each of the 16 life domains on a scale with points ranging from 1 to 5. Scores were then converted to a scale with points ranging from -2 (very dissatisfied) to $+2$ (very satisfied). The results showed that the means of two of the 16 life domains, public safety and welfare, were negative, meaning, on average, respondents were dissatisfied with these domains (see Table 8). The respondents were most satisfied with friendships (0.9), marriage (0.9), family life (0.7), neighbors (0.7), housing (0.6), and health (0.6); while they were least satisfied with public safety (-0.5), welfare (-0.2), the democratic system (0.1), environmental conditions (0.2), household income (0.3), and education (0.3). In general, respondents were satisfied with interpersonal relationships and dissatisfied with domains related to the government.

The percentage difference index (PDI) was defined as the difference between the percentages expressing satisfaction (coded as $+2$ and $+1$) and dissatisfaction (coded as -2 and -1) for each item. Higher scores indicated a larger discrepancy between satisfaction and dissatisfaction, with a positive score representing more satisfaction and a negative score representing more dissatisfaction. The domains registering the highest, most positive PDI scores were friendships (71), family life (63), neighbors (54), health (51), and housing (50), while the domains registering the lowest, most negative PDI scores were public safety (-34), social welfare (-15), the democratic system (13), job (18), and environmental conditions (19). The PDI results were consistent with the results from item means.

The correlation between the 16 life domains and the four QOL scores (happiness, enjoyment, achievement, and their composite index) showed that almost all 16 domains had a high correlation with the four key QOL scores, except for democratic system, which had no relationship with the four key QOL scores (see Table 9). Public safety had a low correlation with happiness and the overall QOL composite index. Social welfare system had a low correlation with enjoyment.

The highest correlation coefficients were found between happiness and spiritual life (.35), health (.27), household income (.27), job (.27), and leisure (.27), between enjoyment and leisure (.31), spiritual life (.30), and marriage (.28), between achievement and marriage (.27), household income (.27), and housing (.25), and between the overall QOL composite

Table 8 Assessments of 16 domains of satisfaction

Domains of life satisfaction	Scale points (%)[a]					Mean	Percentages[b]		PDI (1) − (2)
	−2	−1	0	1	2		Satisfied (1)	Dissatisfied (2)	
Personal									
Health	1	8	31	47	12	0.6	59	9	50
Education	1	11	46	37	5	0.3	42	12	30
Job	2	14	44	30	4	0.5	34	16	18
Interpersonal									
Friendship	0	2	26	54	19	0.9	73	2	71
Marriage	0	2	18	36	15	0.9	51	2	49
Family	0	3	30	55	11	0.7	66	3	63
Neighbor	0	4	37	47	12	0.7	59	4	55
Material									
Housing	1	7	34	45	13	0.6	58	8	50
Living	0	7	49	40	5	0.4	45	7	38
Income	2	12	49	35	3	0.3	38	14	24
Nonmaterial									
Leisure	0	8	41	46	6	0.5	52	8	44
Spiritual	0	7	40	46	7	0.5	53	7	46
Public									
Public safety	13	39	31	15	2	−0.5	17	52	−35
Environment	1	16	47	33	3	0.2	36	17	19
Welfare	8	28	44	19	1	−0.2	20	36	−16
Democracy	4	16	46	31	2	0.1	33	20	13

[a] The scale points are indicated as follow: −2 = very dissatisfied; −1 = somewhat dissatisfied; 0 = neither satisfied nor dissatisfied; +1 = somewhat satisfied; +2 = very satisfied

[b] The percentage of satisfied responses equals to sum of scale points +1 and +2; the percentage of dissatisfied responses equals to sum of scale points −1 and −2

index and spiritual life (.36), marriage (.33), and leisure (0.30). Thus, in general, people who were satisfied about their spiritual life, standard of living, marriage, leisure, household income, and job tended to be happier, and feel more enjoyable and accomplished about their lives. However, satisfaction about government performance (such as democratic system, public safety, and social welfare system) did not as related to their QOL as other life spheres did.

3.1 Five Life-Domain Spheres

To study the relationship between the demographic data and the large clusters of life domains, the 16 life domains were further classified into five spheres:

Sphere 1 (personal sphere):   health, education, and job;
Sphere 2 (interpersonal sphere): friendships, marriage, family life, and neighbors;
Sphere 3 (material life sphere): housing, standard of living, income;
Sphere 4 (nonmaterial sphere):   leisure, spiritual life;
Sphere 5 (public-life sphere):   public safety, environmental condition, welfare, democratic system.

Table 9 The correlation between life satisfaction and quality of life measures

	Happiness	Enjoyment	Achievement	Composite index
Personal				
Health	.27**	.21**	.14**	.26**
Education	.20**	.18**	.14**	.22**
Job	.27**	.22**	.22**	.28**
Interpersonal				
Friendship	.21**	.22**	.16**	.27**
Marriage	.25**	.28**	.27**	.33**
Family	.24**	.23**	.22**	.28**
Neighbor	.13**	.15**	.16**	.18**
Material				
Housing	.20**	.23**	.25**	.28**
Living	.24**	.25**	.23**	.29**
Income	.27**	.25**	.27**	.31**
Nonmaterial				
Leisure	.27**	.31**	.21**	.30**
Spiritual	.35**	.30**	.25**	.36**
Public				
Public safety	.08*	.11**	.13**	.14**
Environment	.16**	.18**	.22**	.23**
Welfare	.12**	.06*	.12**	.11**
Democracy	.03	−.01	.01	−.02

* $p < .01$; ** $p < .001$

We first summed the domain satisfaction scores within each sphere. In order to determine in which sphere people were relatively most satisfied, we divided the means of the five spheres by the number of items within each sphere and obtained for the five domains listed above a mean score of 0.4, 0.8, 0.4, 0.5, and −0.1, respectively. This result suggested that respondents were more satisfied with the interpersonal sphere and less satisfied with the public-life sphere. Respondents had similar levels of satisfaction with the nonmaterial, material, and personal spheres. This result coincides with the results based on domain levels. Liao et al. (2005) also found a similar outcome. Evidently, Taiwanese are quite satisfied with their personal lives and less satisfied with their social/public lives.

The five spheres correlated with the four key QOL scores (see Table 10). Generally speaking, the composite index had the highest correlation with each of the spheres. The Public Sphere had the lowest correlations with the four key QOL scores (0.13, 0.12, 0.15, 0.15). The Nonmaterial Sphere had strong correlations with happiness, enjoyment, and the composite index (0.34, 0.33, 0.36), and the Material Sphere had strong correlations with achievement and the composite index. Moreover, the Personal Sphere had a higher correlation with happiness (0.31) and the composite index, while Interpersonal Sphere (married) correlated with enjoyment (0.32) and the composite index (0.37).

The differences between demographic characteristics on the one hand and the mean ratings of the 16 life domains and five spheres on the other were examined (see Table 11). In general, men were more satisfied with marriage than were women. Married respondents

Table 10 The correlation between the quality of life measure and the five life spheres of satisfaction

	Personal	Interpersonal	Interpersonal (married)	Material	Nonmaterial	Public
Happiness	.31	.27	.29	.28	.34	.13
Enjoyment	.26	.26	.32	.28	.33	.12
Achievement	.22	.24	.29	.31	.25	.15
Composite index	.32	.32	.37	.35	.36	.15

Notes: All correlations have $p < .001$. Interpersonal: did not include the satisfaction with marriage item; Interpersonal (married): included satisfaction with marriage and so contained only married respondents

were more satisfied with their neighbors and family life than were singles; single respondents were more satisfied with public safety as well as the personal and nonmaterial spheres than were married respondents. Younger respondents, compared to older respondents, were more satisfied with the personal and nonmaterial spheres, but older respondents were more satisfied with their neighbors. The respondents with a specific religion were more satisfied with their neighbor and housing than were nonreligious respondents, while nonreligious respondents were more satisfied with their health and education.

Because education and income level were significantly related to more than half of the domains, these two resources were combined into one index to see how respondents' socioeconomic status affects each life domain (see Table 12). The results showed that respondents with a higher socioeconomic status indicated more satisfaction than did their counterparts in the personal, interpersonal, material, and nonmaterial spheres, except for marriage, housing, and neighbors. Respondents with low socioeconomic status had the highest satisfaction only with their neighbors. Respondents with the middle range of socioeconomic status were most satisfied solely with the democratic system.

4 Determinants of the Overall Quality of Life

In this section, the determinants of overall quality of life were explored. The criterion variables were the three key QOL items and their composite index. The predictor variables were the demographics, lifestyles, the five dimensions of the value priorities, and the five spheres of life satisfaction. Regression analyses using all of the predictor variables were conducted to find the determinants of the overall quality of life.

In order to obtain more concise results, some variables were recoded before conducting the regression analyses. Religion was classified into two categories: belief and non-belief in a specific religion. Likewise, marital status was classified into two categories, single and married, home ownership was classified into two categories, own and rent, eating habits were classified into eating at home or eating out, and self-identity and nationality were classified into Taiwanese and non-Taiwanese. The number of accessible public utilities was counted, as was the number of foods liked and the number of foreign experiences.

We conducted two regressions predicting each of the four QOL variables (i.e., happiness, enjoyment, achievement, and the composite index). For the first model, only married respondents were analyzed because single participants did not answer any questions on satisfaction with marriage. Therefore, the demographic item on marriage in model 1 was excluded because all the respondents were married. The second model included all of the

Table 11 Means and comparisons for life satisfaction by demographics

	Personal, 0.4			Interpersonal, 0.8				Material, 0.4		
	Health	Education	Job	Friendships	Marriage	Family life	Neighbor	Housing	Stand of living	Income
Gender										
Male	0.7	0.4	0.3	0.8	1.0*	0.7	0.7	0.6	0.4	0.3
Female	0.6	0.3	0.2	0.9	0.8	0.8	0.7	0.7	0.5	0.3
Marital status										
Single	0.8**	0.6	0.2	1.0*		0.6**	0.5***	0.6	0.5	0.3
Married	0.6	0.3	0.2	0.9		0.8	0.7	0.6	0.4	0.3
Age										
20–29	0.9***	0.4***	0.2*	1.0*	0.9	0.8	0.5***	0.6	0.5	0.2
30–39	0.7	0.4	0.3	0.9	0.9	0.7	0.5	0.6	0.4	0.3
40–49	0.6	0.3	0.2	0.8	0.9	0.7	0.7	0.7	0.4	0.2
50–59	0.5	0.2	0.1	0.8	0.9	0.8	0.8	0.7	0.4	0.3
60–69	0.3	0.1	0.0	1.0	1.0	0.9	0.9	0.8	0.4	0.3
Education										
Low	0.4***	0.0***	0.0***	0.9	0.9	0.7	0.8***	0.7	0.3***	0.1**
Medium	0.6	0.4	0.2	0.9	0.9	0.7	0.6	0.6	0.4	0.3
High	0.8	0.6	0.4	0.8	1.0	0.8	0.6	0.6	0.6	0.5
Income										
Low	0.5**	0.2***	−1.9***	0.8	0.9	0.6**	0.8	0.6	0.2***	0.0***
Middle	0.6	0.4	0.3	0.9	0.9	0.8	0.7	0.7	0.5	0.3
High	0.8	0.4	0.5	0.9	0.9	0.8	0.8	0.7	0.6	0.5
Religion										
Yes	0.6*	0.3**	0.2	0.9	0.9	0.7	0.7*	0.7*	0.4	0.3
No	0.7	0.5	0.3	0.8	0.9	0.8	0.6	0.5	0.4	0.3

Table 11 continued

| | Nonmaterial, 0.5 | | Public, −1.9 | | | |
	Leisure	Spiritual life	Public safety	Environment	Welfare	Democratic system
Gender						
Male	0.5	0.5	−1.6	0.2	−1.8	0.1
Female	0.5	0.6	−1.5	0.2	−1.8	0.1
Marital status						
Single	0.6***	0.6*	−1.7*	0.3	−1.8	0.1
Married	0.4	0.5	−1.5	0.2	−1.8	0.1
Age						
20–29	0.7***	0.7**	−1.2	0.2	−1.8	−1.9
30–39	0.4	0.4	−1.6	0.1	−1.8	0.1
40–49	0.4	0.5	−1.6	0.2	−1.8	0.1
50–59	0.4	0.5	−1.5	0.3	−1.8	0.2
60–69	0.4	0.6	−1.4	0.3	−1.8	0.1
Education						
Low	0.4***	0.5**	−1.5*	0.2*	−1.8	0.1
Medium	0.4	0.5	−1.5	0.2	−1.8	0.1
High	0.7	0.7	−1.7	0.3	−1.8	0.1
Income						
Low	0.3***	0.4***	−1.4	0.1	−1.7*	0.1
Middle	0.5	0.5	−1.6	0.2	−1.8	0.1
High	0.7	0.6	−1.4	0.2	−1.8	0.2
Religion						
Yes	0.5	0.5	−1.5	0.2	−1.8	0.1
No	0.5	0.5	−1.4	0.2	−1.7	0.1

* $p < .05$; ** $p < .01$; *** $p < .001$

Notes: Means were computed from the original 5-point scale (larger numbers denote more satisfaction). Satisfaction with marriage was measured only for married respondents, so no comparison can be made by marital status

Table 12 The differences in satisfaction by socioeconomic resources

Domain of satisfaction	Difference between SES groups
Personal	
Health***	3 > 2 > 1
Education***	3 > 2 > 1
Job***	3 > 2 > 1
Interpersonal	
Friendships*	3 > 2 = 1
Marriage	
Family life*	3 > 2 = 1
Neighbor*	1 > 2 = 3
Material	
Housing	
Standard of living***	3 > 2 > 1
Income***	3 > 2 > 1
Nonmaterial	
Leisure***	3 > 2 = 1
Spiritual life***	3 > 2 = 1
Public	
Public safety	
Environment	
Welfare	
Democratic system*	2 > 3 = 1

$* \ p < .05$; $** \ p < .01$; $*** \ p < .001$ (ANOVA)

Notes: The star signs at the left side of the table denoted the significance level of the main effect of ANOVA on each satisfactory level. The numbers at the right side denoted the post-hoc comparison among the three socioeconomic groups. 3: high socioeconomic; 2: middle socioeconomic; and 1: low socioeconomic

respondents, so the question on satisfaction with marriage was excluded. At the same time, the demographic item of marriage was included. Since the patterns of the two regression models were similar, we used the second model for the following discussion. The results are shown in Table 13. The standardized regression coefficients of the predictor variables are shown.

In general, the predictability (R^2 value) for the two regression analyses was acceptable (between .20 and .30). The regression predicting the composite index resulted in more statistically significant predictor variables and the highest R^2 value than the other three key QOL variables.

In general, the life-domain spheres (especially the nonmaterial and material) had the best predictability of the four key QOL variables. In contrast, only the nonmaterial domain of value priorities significantly predicted the dependent variables.

For the demographic variables, female respondents were happier, older respondents felt more achievement, and more educated people indicated more enjoyment than their counterparts. Single respondents had more enjoyment, but married respondents felt more accomplished. Respondents with a high income had lower enjoyment and a lower composite index score. This result indicates that a higher income does not correspond to a better QOL.

For the lifestyle variables, the smaller the number of utilities and electronics that could be accessed the more enjoyment and happiness. This result may imply that conveniences as indicated by access to public utilities are not keys to a better QOL. Moreover, those who

Table 13 Standard regression coefficients (All sample without Q7(c) marriage)

	Happiness $n = 850$	Enjoyment $n = 847$	Achievement $n = 850$	Composite index $n = 842$
Demographic				
Gender (male = 1)	.08*	−.04	−.05	−.01
Age	−.04	.02	.17**	.07
Education	−.05	.10*	.06	.04
Income	−.03	−.11**	−.06	−.12**
Religion (yes = 1)	.01	.01	.01	.01
Marriage (single = 1)	−.07	−.10*	.09*	−.05
Lifestyles				
Household compositions	.02	.06	.06	.03
Home ownership	.01	.00	−.05	−.00
Eating at home	.05	.02	.01	.04
Eating outside	.05	.01	.01	.03
Food liked	−.05	−.02	−.02	−.08*
Utilities	−.11**	−.03	.00	−.06
Electronic techniques	−.06	−.10*	.00	−.06
English speaking ability	.10*	.06	−.03	.06
Interactions with people overseas	.01	.05	.06	.06
National identity	−.01	.05	.03	.03
Proud of Taiwan	.06	.05	.11**	.11**
Standard of Living	−.01	.06	.01	.03
Pray and meditate	−.01	.07	.04	.02
Trust	.06	.05	.09*	.08*
Domain of satisfaction				
Personal	.15***	.06	.05	.12**
Interpersonal	.06	.08	.02	.08
Material	.10*	.14**	.16***	.17***
Nonmaterial	.21***	.21***	.11*	.20***
Public	−.07	−.07	.02	−.06
Value priorities				
Personal	−.08	.01	−.02	−.01
Interpersonal	−.02	.04	.00	.02
Material	−.02	−.01	−.03	−.01
Nonmaterial	−.02	.07	.09*	.08*
Public	−.01	.04	−.00	.03
R^2	.20	.22	.21	.27

* $p < .05$; ** $p < .01$; *** $p < .001$

were proud of being Taiwanese had a higher achievement score and overall QOL index. In addition, those who could trust more people had a higher overall QOL, especially in predicting accomplishment and the composite index. This suggests that the more people identify with and trust their environments, the better QOL they will experience.

Specifically, the best predictors for happiness were satisfaction with nonmaterial life domains followed by satisfaction with personal life domains, number of utilities (–),

English speaking ability, the material life domains, and being female. The best predictors for enjoyment were satisfaction with nonmaterial life domains followed by satisfaction with material life domains, income (−), being married, usage of electronics (−), and education. The best predictors for achievement were older age, satisfaction with material life domains, satisfaction with nonmaterial life domains, pride in Taiwan, an emphasis on nonmaterial value priorities, trust of others, and being married. The best predictors for the composite index were satisfaction with material and nonmaterial life domains followed by satisfaction with personal life domains, income (−), pride in Taiwan, number of food one likes (−), trust of others, and an emphasis on nonmaterial value priorities (−).

In summary, assessments of life domains, especially those of material and nonmaterial life, are the most powerful forces shaping overall QOL among the Taiwanese. Objective conditions of life alone, such as a higher income and access to utilities, do not contribute significantly to the experience of a better QOL. This finding indicates that such an experience requires much more than meeting basic material needs. For the Taiwanese, a life of happiness, enjoyment, and achievement requires the satisfaction of both material and nonmaterial needs.

5 Conclusion

5.1 Key Findings

This paper examined Taiwanese people's lifestyles, value priorities, and quality of life at global and domain levels. The determinants of overall quality of life were also explored.

5.1.1 Daily Life

In Taiwan, access to public utilities is quite high but two extremes were noted with computer and mobile phone usage. Participants either seldom or frequently used them. Single respondents who were younger and had more education and income were more likely to choose more multicultural foods as well as to indicate more use of computers and mobile phones. However, the propensity for electronics and food did not directly contribute to a higher quality of life, but rather undermined it.

Having pride in Taiwan and trusting others is a good indicator of having a better sense of Achievement and a higher composite index. People who did not identify themselves as Taiwanese were not likely to be proud of Taiwan and did not display the increase of QOL related to self-identity.

Interestingly, not only older people, but most respondents had limited foreign experience and poor spoken English ability. As a result, those with better international language ability may enjoy a benefit from this advantage.

5.1.2 Value Priorities

The most important value priority for Taiwanese was health. The other top five values were to live without fear, to have a comfortable home, to earn a high income, and to have a job. The least important value priorities were related to public values and spiritual aspects. The order of importance in value priority corresponded to Maslow's needs hierarchy. The value priority for respondents of different socioeconomic levels was different. Respondents from

a higher socioeconomic group tended to value were more about others and self-competence, such as success at work, being on good terms with others, expressing personality and talent, winning over others, and enjoying a past time. On the other hand, the value priority of respondents from a lower socioeconomic group was more concerned about daily-life, such as health, raising children, have enough to eat, and having a safe and clean environment.

After clustering the 25 value priorities into five dimensions, we also found that the sequence of importance in value-priorities was interpersonal, personal, material, public-life, and nonmaterial. However, only the nonmaterial dimension of value could predict Achievement and the composite index. It was interesting that the items in the nonmaterial dimension were the lease chosen values from the descriptive data, but predicted the QOL best. Namely, Taiwanese people tended to value basic needs when they could choose only five among others (the respondents could only choose five values from 25 items). However, rather than basic needs, nonmaterial dimension such as appreciating art and culture and being devout corresponded to a better quality of life.

5.1.3 Overall Quality of Life

We found that respondents who had a better QOL also had a better perceived standard of living, but not a better objective income. They also tended to be older, have more education, better spoken English ability, and were more likely to be Christian or not have a specific religion. In contrast, young and undereducated participants had a lower quality of life.

5.1.4 Quality of Life at Domain Levels

Respondents were more satisfied with interpersonal relationship items and more dissatisfied with public-life items related to government performance. As we expected, respondents with more socioeconomic resources were more satisfied in many life domains.

The order of importance for value-priority dimensions was as follows: interpersonal, personal, material, public-life, and nonmaterial. The order for life-domain spheres was: interpersonal, nonmaterial, material, personal, and public-life spheres. This result indicated that people who thought interpersonal value was the most important also indicated the greatest satisfaction with this value. People who thought personal value was important were dissatisfied with it. People with lower expectations for nonmaterial values indicated more satisfaction with the value. Those who indicated less importance for public-life value also indicated lower satisfaction with it. To clarify the relationship between satisfaction and importance, future study is needed.

High correlations with overall QOL items were noted not only at the item level, but also at sphere levels. The material, nonmaterial, interpersonal (satisfaction of marriage included), and personal spheres of life satisfaction had high correlations with overall QOL items. The public-life sphere had the lowest correlation with overall QOL items; it did not predict overall QOL as well as the other life-domain spheres.

5.1.5 The Determinants of QOL

Life-domain spheres had greater predictability of overall QOL than the value-priority dimensions. The nonmaterial and material spheres had better predictability than the personal, interpersonal (satisfaction of marriage excluded), and public-life spheres. For the

five value-priority dimensions, the nonmaterial dimension had better predictability than the other four dimensions.

Subjective variables such as the satisfaction items, the value-priority items, pride in Taiwan, and interpersonal trust were more important in predicting overall QOL than objective variables (such as demographics, number of utilities, and frequency of using the internet or a mobile phone).

5.2 Policy Implications

Generally speaking, domains of satisfaction were better predictors of overall quality of life while some demographic variables correlated highly with satisfaction. In other words, different demographic conditions such as education and income may correspond to satisfaction or dissatisfaction in different domains, and thus result in different quality-of-life statuses. The direct effect of objective demographic items, such as income, even undermined the quality of life. In following section, we discuss these phenomenon and policy implications from two aspects: material and objective as well as nonmaterial and subjective. Since interpersonal trust and the national-identity of Taiwanese also played an important role in predicting quality of life, we also discuss democracy, trust, and identity.

5.2.1 Material and Objective Aspect

According to our analysis of socioeconomic status, those who had more income and education tended to be more satisfied with domains of satisfaction. At the same time, domains of satisfaction indicated a better quality of life. For those of lower SES, however, were more dissatisfied with their material and nonmaterial domains of satisfaction and thus led to lower quality of life. Consequently, ensuring that Taiwan has good economic condition and standard of living may be crucial for governmental policy because when the income and education level rises, satisfaction and quality of life would also increase.

Moreover, except valuing economic related items such as having a job and enough to eat, raising children and having a safe environment were also valued by people with lower SES. As the result, safe and clean environment, appropriate children rearing and education opportunities are also important.

In addition, since being healthy was the most important value among all the participants, especially for those who could not afford expensive medical care, government policy should continuously improve and maintain the National Health Insurance (NHI) system. Since its beginning in 1995, the NHI not only helped more than 60,000 disadvantaged people, each with an average of NT\$ 295,000 (US\$ 90,000) every year, but also spent 24% of insurance premiums on catastrophic illness (Bureau of National Insurance). From 1995 to 2007, the actual insured rate went from 59% to 99%, and the satisfaction rate moved from 39% to 83%. Moreover, the high quality of the NHI has even brought Taiwan a second place ranking in the 2000 Economist's world healthcare ranking. Although there is some deficit between insurance costs and revenue, the NHI is successful and worth further improvement.

English ability is also worth improving. Since Taiwan depends highly on trading, language ability is an essential requirement for operation in the global marketplace. Although students in Taiwan begin to learn English in elementary school and continue through college, general English ability and confidence in speaking English is relatively low. Thus, Taiwan's educational policy should try to improve the environment for learning English.

5.2.2 Nonmaterial and Subjective Aspects

In this study, an interesting finding showed that higher objective income had a negative correlation with better quality of life. Since objective factors do not lead directly to a happy life, what does?

In our study, satisfaction of nonmaterial domains was a powerful predictor of quality of life. Among all the value spheres, nonmaterial sphere were the best predictor. Therefore, to make people more satisfied and to create nonmaterial values would be a possible path to better QOL. In addition to economic efforts, to create an environment that makes people can enjoy a pastime, being devout, as well as appreciate art and culture would also be crucial. The government should consider policies not only on the hardware but also software of cultural, spiritual, and leisure development.

5.2.3 Attitude Toward Politics and Interpersonal Trust

Because of rapid democratization, political involvement is quite high. Taiwanese hoped to oversee government policy and action through national and local elections, although they seemed disappointed with the result as demonstrated by the negative feelings towards public life and government performance.

Most respondents identified themselves as Taiwanese, however, more than one-fourth of the respondents were not proud of being Taiwanese. Taiwanese people's sense of dignity may be diminished because of the lack of acknowledgement of their country by the international community. Moreover, political instability and the slow-down economic growth may also be a cause of the low confidence of Taiwanese people.

Because of problems described above, younger, single, and more educated respondents may be tired of political conflict and unwilling to vote. However, our research indicated that those who are more proud of Taiwan and trusted others have a better quality of life. As a result, governmental policy should be aimed at making people in Taiwan have something to be proud of from their education, cultural development, international involvement, as well as economic strength. Moreover, the government should also create an environment that allows people with different opinions and distinct backgrounds to communicate with and trust each other.

In summary, people in Taiwan actually are enjoying the fruit of economic growth and political freedom. Most of them have convenient access to utilities and are free to vote and express their own opinion. However, higher income even corresponded to reduced quality of life; political freedom may provide the opportunity to see the insufficiency of the government. According to the findings in this research, being subjectively satisfied with income, education, and standard of living as well as with leisure and spiritual life were the crucial points of Happiness. In addition, valuing art and culture, being devout, trusting others, and being proud of Taiwan also led to better quality of life. As a result, the balance between remaining and even improving the standard of living as well as leisure and spiritual development is the challenge for Taiwanese government policy.

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