Research on Different Happiness Factors in the Asia-Pacific Area: Economics, Politics, and Social Capital

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Abstract

This study identifies what factors make people satisfied with their daily lives (happiness) in the context of many countries' cultures. In this analysis, three categories are tested: economics, politics, and social capital. Economic factors, especially income, are basic and important to people's daily lives; political systems decide people's freedom, control, and security in their daily lives. Moreover, social capital has a significant effect on their happiness in their daily lives. This study performs experimental tests to identify the independent variables of happiness of people living in many kinds of society using data from a cross-national comparative survey: the Asia–Pacific Values Survey 2010–2014 (conducted in Japan, the United States, Beijing, Shanghai, Hong Kong, Taiwan, Korea, Singapore, Australia, India, and Vietnam). This survey includes developed and developing countries, democratic and nondemocratic states, and many cultures such as Buddhism, Hindi, Islam, and Confucianism. This study tries to examine the differences in the variables that have an important impact on life satisfaction in each culture and society.

Keywords

cross-national survey, happiness, income, democracy, social capital

Satisfaction with daily life is important for people's happiness. All people need to have food, clothing, and shelter, however, only the minimum needed for survival can never satisfy their lives in the modern society. People wish for better living conditions for happiness, but it is unclear which conditions make people happy. This study attempts to identify the social factors that enrich people's lives, and in more detail, which factors work for which cultures.

In this study, factors of three categories for happiness are analyzed: economics, politics, and social capital. In economics, income is regarded as one of the most important factors in people's lives. As the

gross domestic product (GDP) per capita of countries is always positively correlated to the population's happiness (Ortiz-Ospina and Roser 2017) (Figure 1), income is fundamental to life satisfaction regardless of people's culture and social construction. However, income alone never determines people's happiness, as Easterlin's paradox

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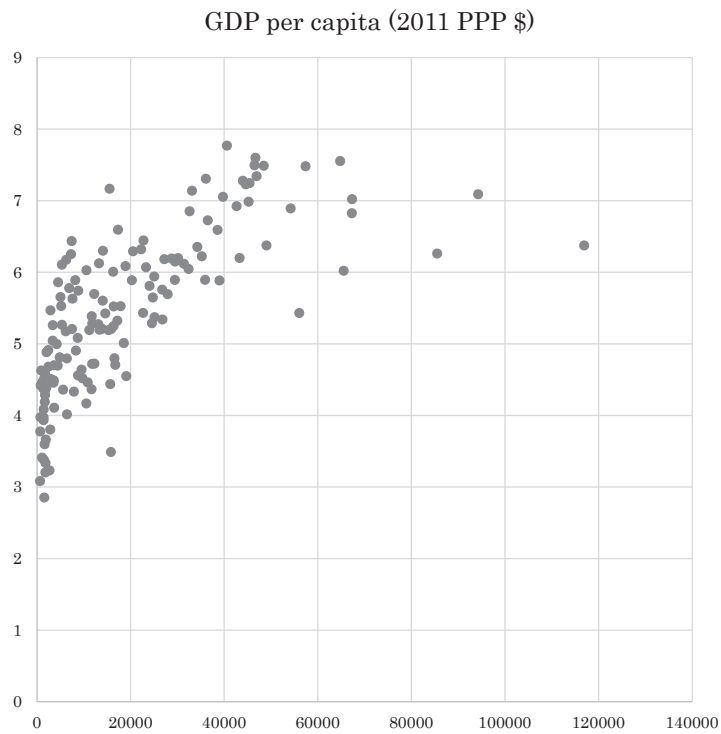Email: kshibai@ism.ac.jp

GDP per capita (2011 PPP $)

Figure 1. Correlation between GDP per Capita and the Happiness Index
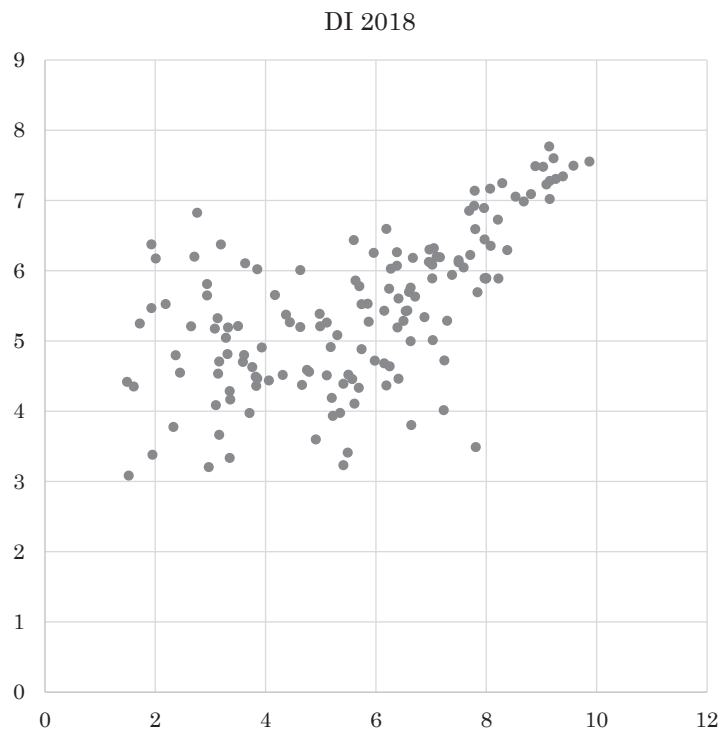
DI 2018

Figure 2. Correlation between the Democracy Index and the Happiness Index
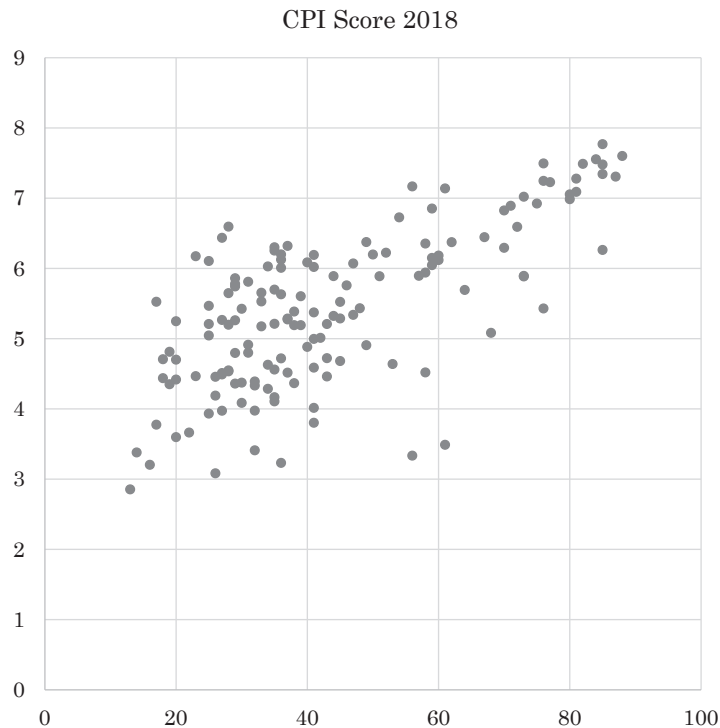
CPI Score 2018

Figure 3. Correlation between the Corruption Perceptions Index and the Happiness Index

showed (Easterlin 1974) and the effect of income is limited (Jebb et al. 2018; Kahneman and Deaton 2010); other variables affect people's satisfaction. Not only physical benefits but also non-physical ones are important. Another important category is politics because the preservation of human rights and more democratic politics improve the quality of people's lives and society (Sen 1999).

The correlation coefficients between the Happiness Index and the Democracy Index and between the Happiness Index and the Corruption Perception Index are positive: $R = 0.62$, $R = 0.70$ (Figures 2 and 3), which means people living in democratic countries are happier than those living in less democratic ones. In addition, in this theme, characteristics of communism are an important target because a previous study showed that it has a bad effect on people's virtue (Shibai 2015; Shibai and Sasaki 2016). According to Ariely et al. (2014), Germans who were born and lived in East Germany tend to live for increasing profit more than those who were born and lived in West Germany. Similarly, China and Vietnam, which are communist countries, showed characteristic results in our survey data. Which there are any differences between people in the two communist states and people in the other democratic states or not is an interesting question.

The third category is social capital: the importance of reciprocity of human networks. According to Putnam, "Whereas physical capital refers to physical objects and human capital refers to properties of individuals, social capital refers to connections among individuals—social networks and the norms of reciprocity and trustworthiness that arise from them. In that sense, social capital is closely related to what some have called civic virtue" (Putnam 2000: 19), and in a later work "Social capital comes in many forms, not all fungible. Not all networks have the same effects: friends may improve health, whereas civic groups strengthen democracy. Moreover, although networks can powerfully affect our ability to get things

done, nothing guarantees that what gets done through networks will be socially beneficial. … Nevertheless, much evidence suggests that where levels of social capital are higher, children grow up healthier, safer and better educated, people live longer, happier lives, and democracy and the economy work better." (Putnam 2007: 138). The richness of social capital makes people's lives fulfilled. Harvard University's Grant Study also shows the richness of good human relations make people happier and healthier (Shenk 2009).

DATA AND METHODS

This study aims to show how the development of economics, different political systems, and the amount of social capital have different effects on people's happiness in different cultures.

In this study, data from the Asia–Pacific Values Survey (APVS) is used for comparative analyses (http://www.ism. ac.jp/~yoshino/). The data comes from a survey of 11 countries and cities in the 2010s including Japan, the United States (US), Beijing, Shanghai, Hong Kong, Taiwan, South Korea, Australia, Singapore, India, and Vietnam. They are many variants of cultural characteristics. According to Huntington (1996), Japan is a unique and isolated culture. China and Vietnam are Confucian cultures and also communist states. Hong Kong and Taiwan are Confucian cultures but

democratic city-states. The US and Australia are Christian with Western cultures. India has its original religion, Hindi and many other religions, languages, and ethnicities. Singapore is a small but multinational country. To identify the homogeneity and divergence, this study makes comparative analyses using the survey data.

The questions from the abovementioned survey used in this study are as follows:
Q.20 Now I would like to ask about your life as a whole. How satisfied are you with your life as a whole these days? Which number on this card comes closest to your feelings?
Q.19 All things considered, how satisfied are you with your family life?the time you spend and the things you do with members of your family? Just call off the number that comes closest to your feelings.
Q.51a Now let me ask you some questions about feelings you have toward your daily life. Do you feel that I have a belief system that guides my life and encourages me?
Q.51b Now let me ask you some questions about feelings you have toward your daily life. Do you feel that the challenges I face in my life are meaningful?
Q.51c Now let me ask you some questions about feelings you have toward your daily life. Do you feel that I am doing something useful for my family or the world?
Q.51d Now let me ask you some questions about feelings you have toward your daily life. Do you feel that my family or others

Table 1. Summary of APVS

	Sample Size	Research Period
Japan	852	Dec 2010
United States	1,002	Dec 2010–Jan 2011
Beijing	1,000	Oct 2011
Shanghai	1,000	Nov 2011–Dec 2011
Hong Kong	1,000	Nov 2011–Apr 2012
Taiwan	1,000	Dec 2011–Jan 2012
Korea	1,005	Oct 2012–Nov 2012
Singapore	1,000	Nov 2012–Jan 2013
Australia	800	Oct 2012–Dec 2012
India	2,000	Oct 2012–Dec 2012
Vietnam	1,000	Dec 2013–Jan 2014

believe I am able to do something important for them?

Q.52a How much confidence do you have in the following? would that be very confident, somewhat confident, not confident, not confident at all - Religious organization

Q.52b The law and the legal system.

Q.52c The press and television.

Q.52d The police.

Q.52e National government bureaucracy.

Q.52f Parliament.

Q.52g NPO/NGOs (Non-Profit and Non-Governmental Organizations).

Q.52h Social welfare facilities.

Q.52i The United Nations.

Q.52j Science and technology.

These variables are four or five ordinal scale. Gender is a dummy variable (Male = 1) and age, education and income are in three categories.

The dependent variable is "Q.20 How satisfied are you with your life as a whole these days?": measuring people's satisfaction with their daily lives. In this study, this is used for measuring people's happiness.

Q.19 and Q.51a–d are the independent variables which are related to social capital, mainly family. Q.52a–j, on trust in political and social organizations, are related to the effect of the political system. Income is used to measure the effect of economics, and gender, age, and education are control variables.

RESULTS

This study uses a regression analysis and Table 1 is the result of significance ($p < 0.05$). It shows that satisfaction with family life is significant in all survey countries/cities. The number of estimates in all countries/cities is positive and the satisfaction with family life increases the happiness of each nation. It indicates that family, an important factor of social capital, is a general variable for the happiness of human beings.

Conversely, the effect of "Q51c I am doing something useful for my family or the world" and "Q51d My family or others believe I do something important for them" are limited. Their variables indicate how people feel that their family needs them. Q51c affects Japan, the US, Hong Kong, and Australia and Q51d, the US, Australia, and India. There is a certain amount of regularity about Q51c that it is significant in the northeast Asian countries, but it is not to do with common political, economic, or cultural characteristics.

In Q52, many of the items are not significant. "Q52a Religious organizations" is significant only in Taiwan and Korea. It was expected that this would not be significant in some developed countries, especially Japan, but it was not expected that religious organizations have no effect in India where religions are such important factors in the society. There is no country in

Table 2. Summary of Dependent Variables

	Mean	s.d.	Scale of Q.20
Japan	3.913	1.100	5 Satisfied
United States	4.139	1.031	4 Somewhat satisfied
Beijing	4.274	1.040	3 Neither satisfied nor dissatisfied (neutral)
Shanghai	4.140	0.943	2 Somewhat dissatisfied
Hong Kong	3.867	1.214	1 Dissatisfied
Taiwan	4.179	0.947	
Korea	3.681	0.915	
Singapore	4.212	0.438	
Australia	4.263	0.908	
India	4.511	0.394	
Vietnam	4.018	0.734	

Table 3. Significance of Independent Variables

	jp	us	bj	sh	hk	tw	kr	au	sg	in	vn
"Q19 How satisfied are you with family life?"	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
"Q51a I have a belief system that guides my life and encourages me"					<0.05						<0.05
"Q51b I feel that the challenges I face in my life are meaningful"	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				
"Q51c I am doing something useful for my family or the world"	<0.05	<0.05			<0.05			<0.05			
"Q51d My family or others believe I am able to do something important for them"		<0.05						<0.05		<0.05	
"Q52a Religious organizations"						<0.05	<0.05				
"Q52b The law and the legal system"											
"Q52c The press and television"											
"Q52d The police"							<0.05				
"Q52e Federal bureaucracy"				<0.05							
"Q52f Congress"		<0.05									<0.05
"Q52g NPO/NGO"		<0.05			<0.05						
"Q52h Social welfare facilities"					<0.05						
"GenderM1"						<0.05					
Age	<0.05	<0.05	<0.05					<0.05			<0.05
Education		<0.05		<0.05						<0.05	
Income	<0.05	<0.05	<0.05								<0.05

Table 4. Results of Regression Analyses

	jp			us			bj		
	Estimate	Std. Error	t value	Estimate	Std. Error	t value	Estimate	Std. Error	t value
(Intercept)	-0.432	0.343	-1.260	0.463	0.295	1.568	-0.219	0.349	-0.628
"Q19 How satisfied are you with family life"	0.673	0.040	16.794 ***	0.369	0.035	10.617 ***	0.630	0.049	12.782 ***
"Q51a I have a belief system that guides my life and encourages me"	0.033	0.056	0.590	-0.041	0.048	-0.859	-0.040	0.035	-1.138
"Q51b I feel that the challenges I face in my life are meaningful"	0.226	0.058	3.903 ***	0.069	0.053	1.302	0.275	0.047	5.856 ***
"Q51c I am doing something useful for my family or the world"	-0.123	0.057	-2.161 *	0.200	0.053	3.753 ***	-0.058	0.039	-1.465
"Q51d My family or others believe I am albe to do something important for them"	0.084	0.055	1.543	0.128	0.056	2.287 *	0.030	0.030	0.998
"Q52a Religious organizations"	0.062	0.051	1.232	-0.020	0.039	-0.518	0.027	0.035	0.786
"Q52b The law and the legal system"	-0.072	0.063	-1.142	0.052	0.051	1.013	-0.041	0.050	-0.818
"Q52c The press and television"	0.028	0.062	0.452	-0.046	0.051	-0.898	0.067	0.046	1.463
"Q52d The police"	-0.060	0.063	-0.959	0.046	0.047	0.982	0.022	0.047	0.471
"Q52e Federal bureaucracy"	0.122	0.075	1.633	0.051	0.060	0.854	-0.003	0.062	-0.056
"Q52f Congress"	0.040	0.072	0.545	0.145	0.062	2.356 *	0.107	0.055	1.959
Q52g NPONGO	0.025	0.062	0.402	-0.121	0.047	-2.546 *	-0.025	0.034	-0.740
"Q52h Social welfare facilities"	-0.052	0.067	-0.770	-0.043	0.047	-0.920	-0.020	0.046	-0.439
"GenderM1"	-0.106	0.071	-1.495	0.044	0.064	0.688	-0.062	0.064	-0.955
Age	0.033	0.013	2.492 *	0.034	0.010	3.331 ***	0.036	0.012	2.977 **
Education	0.049	0.058	0.855	0.079	0.055	1.420	-0.003	0.044	-0.076
Income	0.189	0.068	2.782 **	0.203	0.053	3.816 ***	0.117	0.054	2.195 *

Adjusted R^2	0.452			0.294			0.286		

Significant codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

	sh			hk			tw		
	Estimate	Std. Error	t value	Estimate	Std. Error	t value	Estimate	Std. Error	t value
(Intercept)	-0.171	0.333	-0.514	0.305	0.307	0.991	0.827	0.256	3.233 **
"Q19 How satisfied are you with family life"	0.530	0.049	10.717 ***	0.584	0.036	16.350 ***	0.745	0.031	23.667 ***
"Q51a I have a belief system that guides my life and encourages me"	-0.074	0.045	-1.662	0.118	0.045	2.614 **	-0.014	0.034	-0.409
"Q51b I feel that the challenges I face in my life are meaningful"	0.302	0.047	6.481 ***	0.166	0.045	3.692 ***	0.185	0.032	5.811 ***
"Q51c I am doing something useful for my family or the world"	-0.012	0.045	-0.265	-0.139	0.046	-3.035 **	-0.002	0.034	-0.057
"Q51d My family or others believe I can do something important for them"	0.031	0.037	0.846	0.009	0.035	0.258	0.010	0.031	0.329
"Q52a Religious organizations"	0.024	0.038	0.634	0.042	0.043	0.978	-0.080	0.040	-2.023 *
"Q52b The law and the legal system"	-0.066	0.058	-1.147	0.035	0.059	0.597	-0.049	0.043	-1.123
"Q52c The press and television"	0.014	0.054	0.265	0.082	0.057	1.439	-0.039	0.041	-0.961
"Q52d The police"	0.036	0.060	0.599	0.028	0.056	0.497	-0.035	0.047	-0.735
"Q52e Federal bureaucracy"	0.140	0.068	2.047 *	-0.012	0.089	-0.129	0.102	0.052	1.944
"Q52f Congress"	-0.016	0.058	-0.270	0.060	0.087	0.697	-0.008	0.051	-0.155
"Q52g NPO/NGO"	-0.017	0.048	-0.351	0.116	0.054	2.172 *	0.006	0.039	0.154
"Q52h Social welfare facilities"	0.104	0.055	1.894	-0.132	0.060	-2.201 *	-0.022	0.044	-0.489
"GenderM1"	-0.079	0.069	-1.150	-0.077	0.069	-1.121	-0.129	0.050	-2.575 *
Age	0.025	0.013	1.943	0.019	0.015	1.257	0.012	0.011	1.106
Education	0.100	0.048	2.083 *	-0.012	0.051	-0.240	-0.047	0.045	-1.049
Income	0.077	0.059	1.299	0.057	0.089	0.641	-0.007	0.049	-0.143

Adjusted R^2			0.321			0.338			0.483

Significant codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

	kr			au			sg		
	Estimate	Std. Error	t value	Estimate	Std. Error	t value	Estimate	Std. Error	t value
(Intercept)	0.519	0.224	2.312 *	1.036	0.350	2.957 **	0.915	0.173	5.291 ***
"Q19 How satisfied are you with family life"	0.680	0.026	25.967 ***	0.448	0.041	10.989 ***	0.659	0.026	24.900 ***
"Q51a I have a belief system that guides my life and encourages me"	-0.054	0.038	-1.425	-0.032	0.041	-0.790	0.000	0.026	-0.015
"Q51b I feel that the challenges I face in my life are meaningful"	0.178	0.039	4.521 ***	0.008	0.055	0.145	-0.014	0.035	-0.386
"Q51c I am doing something useful for my family or the world"	0.077	0.041	1.869	0.116	0.057	2.034 *	0.010	0.040	0.242
"Q51d My family or others believe I am able to do something important for them"	-0.046	0.038	-1.202	0.121	0.060	2.015 *	0.016	0.039	0.400
"Q52a Religious organizations"	0.074	0.031	2.410 *	0.062	0.041	1.495	0.029	0.029	1.020
"Q52b The law and the legal system"	-0.057	0.039	-1.447	0.051	0.058	0.882	0.049	0.040	1.220
"Q52c The press and television"	0.073	0.042	1.735	0.034	0.048	0.709	0.060	0.031	1.954
"Q52d The police"	0.085	0.042	1.996 *	0.034	0.060	0.567	0.011	0.040	0.267
"Q52e Federal bureaucracy"	-0.076	0.043	-1.754	-0.067	0.066	-1.017	-0.084	0.044	-1.906
"Q52f Congress"	0.006	0.040	0.157	0.062	0.062	1.008	-0.001	0.041	-0.026
"Q52g NPO/NGO"	0.042	0.036	1.170	-0.094	0.056	-1.672	0.073	0.037	1.959
"Q52h Social welfare facilities"	-0.029	0.038	-0.756	-0.020	0.060	-0.329	-0.037	0.035	-1.054
"GenderM1"	-0.056	0.047	-1.200	0.105	0.070	1.485	-0.007	0.033	-0.205
Age	-0.015	0.011	-1.353	0.029	0.011	2.589 **	0.009	0.007	1.298
Education	-0.031	0.044	-0.716	0.041	0.055	0.755	-0.011	0.025	-0.421
Income	-0.033	0.048	-0.689	0.051	0.061	0.832	0.039	0.030	1.303

Adjusted R^2			0.527			0.259			0.448

Significant codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

	in			vn		
	Estimate	Std. Error	t value	Estimate	Std. Error	t value
(Intercept)	1.495	0.216	6.935 ***	0.429	0.214	2.003 *
"Q19 How satisfied are you with family life"	0.582	0.030	19.212 ***	0.718	0.025	28.358 ***
"Q51a I have a belief system that guides my life and encourages me"	0.036	0.035	1.035	0.055	0.024	2.352 *
"Q51b I feel that the challenges I face in my life are meaningful"	-0.042	0.030	-1.421	0.015	0.030	0.494
"Q51c I am doing something useful for my family or the world"	0.001	0.030	0.040	-0.027	0.038	-0.709
"Q51d My family or others believe I am able to do something important for them"	0.065	0.031	2.084 *	0.002	0.035	0.066
"Q52a Religious organizations"	-0.005	0.025	-0.198	-0.001	0.031	-0.033
"Q52b The law and the legal system"	-0.018	0.028	-0.657	0.032	0.044	0.715
"Q52c The press and television"	0.022	0.027	0.808	0.023	0.034	0.674
"Q52d The police"	0.023	0.023	1.010	-0.062	0.038	-1.631
"Q52e Federal bureaucracy"	0.014	0.028	0.520	-0.074	0.050	-1.478
"Q52f Congress"	0.018	0.025	0.717	0.211	0.056	3.786 ***
"Q52g NPO/NGO"	0.022	0.027	0.817	-0.063	0.038	-1.659
"Q52h Social welfare facilities"	-0.021	0.027	-0.774	-0.032	0.040	-0.801
"GenderM1"	-0.044	0.037	-1.179	-0.045	0.040	-1.113
Age	-0.002	0.008	-0.251	0.017	0.009	1.991 *
Education	0.055	0.028	1.986 *	0.012	0.032	0.370
Income	-0.027	0.050	-0.537	0.143	0.040	3.618 ***

Adjusted R^2			0.367			0.533

Significant codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

which "Q52b The law and the legal system" and "Q52c The press and television" are significant. "Q52d The police" is significant only in Korea. "Q52e Federal bureaucracy" is significant only in Shanghai. "Q52f Congress" is significant in the US and India. "Q52g NPO/NGO" is significant in the US and Hong Kong. "Q52h Social welfare facilities" is significant only in Hong Kong.

"Q52b The law and the legal system," "Q52c The press and television," "Q52d The police," "Q52e Federal bureaucracy," and "Q52f Congress" are important for this study but they are almost not significant in all countries/cities. People living in a democratic society can criticize and complain against the power of the state, but it is very hard or impossible for them in nondemocratic societies to act or speak against their government. Therefore, it is expected that Japan, the US, Korea, Taiwan, Australia, Singapore, and India, which are democratic states, have common tendencies, and Chinese cities and Vietnam, which are communist states, have too. However, there is seldom regularity in the result of regression analyses.

As a control variable, gender is not significant, excluding Taiwan. However, age is significant in Japan, the US, Beijing, Australia, and Vietnam and all of them have a positive effect on happiness. In this analysis, education is seldom significant even though the education level is important and is at the root of many social problems.

Against a general opinion which much money makes people happier, "Income" is not significant in many countries; only in Japan, the US, Beijing, and Vietnam is income significant and has a positive effect on happiness. Not only is there no regularity but also income itself does not affect many countries. The results do not match the general theory by which income and life satisfaction are positively correlated. However, there is a theory that income is regarded as one of the most important variables of people's happiness, but the effect is sometimes limited (Jebb et al. 2018; Kahneman and Deaton 2010) and the results partly support this theory.

There are 4–7 significant variables in almost all survey countries/cities. Japan, Hong Kong, and India have two significant variables related to family: Q19 and Q51c are significant in Japan and Hong Kong, and in India, Q19 and Q51d. In the US and Australia, three variables related to family are significant (Q19, Q51c, and Q51d). In the other countries, only one variable related to family (Q19) is significant. The US has the most with seven significant variables while Hong Kong has six. However, four of Hong Kong's variables are related to family (Q19 and Q51c) and purpose in life (Q51a and Q51b). Such an important result for social capital is only salient in Hong Kong's analysis and it indicates that people living in Hong Kong have the highest family values. By contrast, Singapore has just one significant variable, satisfaction with family life, although the same cultural countries/cities have four or more than five significant variables. The results indicate the possibility that Singapore has original or isolated social values about family.

However, these regression analyses do not show any endorsement that common characteristics exist. There are a few homogeneities in this analysis, but they are too weak to be common denominators.

DISCUSSION

According to the results of data analyses, the independent variables which affect life satisfaction are very different between countries in the Asia–Pacific area. This study showed that there were almost no independent variables of the happiness common to politically, economically, and politically categorized groups. If they are categorized by politics, they are divided by two regimes: democracy (Japan, the US, Taiwan, Korea, Hong Kong, Australia, Singapore, and India) and communism (Beijing, Shanghai, and Vietnam). If they are categorized by culture, they are grouped by Japan (isolated Japanese culture), Confucian culture (Beijing, Shanghai, Hong Kong, Taiwan, Korea, and Vietnam), Western

culture (the US and Australia), Singapore (mainly Confucian but some other cultures are mixed), and India (Hindi culture). If they are categorized by economics, the developed countries are Japan, the US, Taiwan, Korea, Singapore, and Australia and the others are developing countries. They are grouped by many kinds of categories. However, as a summary, culturally, politically, or economically, there is almost no common denominator of happiness in the Asia–Pacific area. Even among communist states, there is no commonality.

However, one clear common denominator among all countries/cities is found: satisfaction with family life. This means the amount of social capital is always important for people's happiness regardless of social construction, politics, culture, and economy. This study does not prove a universal law in the Asia–Pacific area but this result supports the thesis that social capital is necessary for every person to live more happily.

Now, it is much difficult for people under the pandemic to communicate physically with others and such a situation may decrease their happiness. However, if they have good family relations and a willingness to work hard for their family, their happiness will be maintained because the effect of good family relations is the general independent variable for all people.

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References

Ariely, Dan, Ximena Garcia-Rada, Lars Hornuf, and Heather Mann. 2014. "The (True) Legacy of Two Really Existing Economic Systems." Munich Discussion Paper No. 2014-26.

Easterlin, Richard A. 1974. "Does Economic Growth Improve the Human Lot? Some Empirical Evidence." Pp. 89-125 in *Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz*, edited by Paul A. David and Melvin W. Reder. New York: Academic Press.

Huntington, Samuel P. 1996. *The Clash of Civilizations and the Remaking of World Order*. New York: Simon & Schuster.

Jebb, Andrew T., Louis Tay, Ed Diener, and Shigehiro Oishi. 2018. "Happiness, Income Satiation and Turning Points around the World." *Nature Human Behaviour* 2(1):33-38.

Kahneman, Daniel, and Angus Deaton. 2010. "High Income Improves Evaluation of Life But Not Emotional Well-being." *Proceedings of the National Academy of Sciences* 107 (38):16489-93.

Ortiz-Ospina, Esteban, and Max Roser. 2017. "Happiness and Life Satisfaction." *Our World in Data.* https://ourworldindata.org/happiness-and-life-satisfaction.

Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.

Putnam, Robert D. 2007. "E Pluribus Unum: Diversity and Community in the Twenty-first Century The 2006 Johan Skytte Prize Lecture." *Scandinavian Political Studies* 30 (2): 137-74.

Sen, Amartya. 1999. *Development as Freedom*. New York: Knopf.

Shenk, Joshua Wolf. 2009. "What Makes Us Happy? Is There a Formula—Some Mix of Love, Work, and Psychological Adaptation—for a Good Life?" *The Atlantic*. https://www.theatlantic.com/magazine/archive/2009/06/what-makes-us-happy/307439/.

Shibai, Kiyohisa. 2015. "Vietnamese Characteristics of Social Conscience and Values: National Character, Differences between North and South, and Gaps between the Vietnam War Generation and the Post-war Generation." *Behaviormetrika* 42 (2):157-89.

Shibai, Kiyohisa, and Masaaki Sasaki. 2016. "*Minshushugi Seido no Hattendo to Kokuminsei no Kanrensei: Kokusaihikaku o Chushin ni* (Democratic Development and the Nationality: An International Comparison)." *Journal of the Faculty of Letters* (26):81-102.

The Institute of Statistical Mathematics. 2020. "*Ishiki no Kokusaihikaku Chosa* (Cross National Comparative Survey on National Character)." http://www.ism.ac.jp/~yoshino/.

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