

Post-materialism and Political Participation: A Case Study of Asian Countries, 1981-2004

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119

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Abstract

This paper examines the relation between post-materialism and political participation in industrializing countries. It hypothesizes that persons, identifying themselves as post-materialist, are likely to be politically active or participate in public politics. Studying the world value survey in Asian countries, I find that the more likely it is that persons will identify themselves as post-materialist, the more likely they are to participate in local politics. Moreover, the more likely they are to prefer democratic politics. The results imply that post-materialist characteristics (i.e., environmental and public concerns) become a significant factor encouraging the deepening of democracy.

แนวคิดหลังวัตถุนิยม (Post-Materialism) และ การมีส่วนร่วม.... | ธนพันธ์ ไส้ประกอบทรัพย์

Keywords : Democracy, Political participation,
Postmaterialism, World value

แนวคิดหลังวัตถุนิยม (Post-Materialism) และการมีส่วนร่วมทางการเมือง: กรณีศึกษาโพสท์ แมททีเรียลลิสต์ในประเทศไทย ในทวีปเอเชีย ปี ค.ศ. 1981 ถึง 2004

ชนพันธ์ ไส้ประกอบทรัพย์

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121

บทคัดย่อ

บทความฉบับนี้มีวัตถุประสงค์เพื่อตรวจสอบความสัมพันธ์ระหว่างแนวคิดหลังวัตถุนิยม (Post-materialism) กับการมีส่วนร่วมทางการเมือง (Political participation) ในประเทศกำลังพัฒนาอุตสาหกรรม โดยมีสมมุติฐานว่า บุคคลที่ระบุตัวตนเองซึ่งมีแนวคิดหลังวัตถุนิยมมีแนวโน้มที่จะมีความกระตือรือร้นทางการเมืองและมีส่วนร่วมกับการเมืองสาธารณะจากการศึกษาการสำรวจค่านิยมของปัจเจกบุคคลทั่วโลก (World value) ในประเทศในทวีปเอเชีย ผู้เขียน พบว่า ยิ่งบุคคลระบุตัวตนเองมีแนวคิดหลังวัตถุนิยมมากเท่าไร บุคคลเหล่านั้นมีแนวโน้มจะมีส่วนร่วมในการเมืองในระดับท้องถิ่นมากขึ้น นอกจากนี้ บุคคลที่มีแนวคิดหลังวัตถุนิยมมีแนวโน้มที่จะสนับสนุนการเมืองแบบประชาธิปไตย ผลการทดลองมีนัยยะว่าปัจเจกบุคคลที่มีแนวคิด

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แนวคิดหลังวัตถุนิยม (Post-Materialism) และ การมีส่วนร่วม... | ธนพันธ์ ไส้ประกอบทรัพย์

หลังวัตถุนิยม (มีความห่วงใยในสิ่งแวดล้อมและ
สาธารณะ) กลายเป็นปัจจัยสำคัญในการสนับสนุน
การหยั่งรากของระบอบประชาธิปไตย (*The deepening
of democracy*)

คำสำคัญ: การมีส่วนร่วมทางการเมือง, การสำรวจ
ค่านิยมของปัจเจกบุคคลทั่วโลก,
ประชาธิปไตย, โปสท์ แมททีเรียลลิสม

Introduction

This paper examines the relation between post-materialist ideology and political participation. It was aimed to test whether Inglehart's hypotheses regarding materialism/post-materialism can be applied to industrializing countries. Inglehart's study and some others chose to study industrialized democracies or countries in the western hemisphere. On the other hand, I chose to study post-materialism in Asian countries. Few studies of materialism/post-materialism have used data from Asian countries. Japan is usually included in post-materialist study because it is an industrialized country, but what about other Asian countries? Inglehart mentioned the study of Edric Ho (1985), who surveyed materialism/post-materialism in China and Hong Kong. Similar to Inglehart, Ho found that the Chinese and Hong Kong post-materialist generation was less likely to be interested in economic growth or wealth accumulation. However, this study was done in 1985 and it was not a longitudinal research. As a result, I do not see a long-term impact of post-materialist values among Asian people. In other words, this study tests Inglehart's hypotheses as to whether they can be generalized to explain the social transformation in Asian societies.

The question here is whether post-materialist Asians are similar to post-materialist Westerners, or are they outliers. Since post-materialist studies generally assume that the younger generation is more likely to join environmental groups, to participate in social movements, be politically active in civic activities, and to be dissatisfied with the way in which democracy is functioning, the differences between mixed-materialist, post-materialist people, and individuals that are leaning toward a post-materialist in terms of their level of political participation. I know

that materialist people are considerably different from post-materialists in terms of political interests, but previous studies was unclear in explaining us how mixed-materialist/post-materialist people are different from those that lean toward a materialist or post-materialist position in terms of the level of political interest.

Purposes of the Research

1. To explain the relations between post-materialism and political participation in Asian countries
2. To analyze how post-materialism affects people's political participation

Literature Review

Post-materialism is one of several controversial subjects in political science. Political scientists have argued whether post-materialism has a socioeconomic, psychological, or generational impact, and how post-materialist values have had an impact on political participation in terms of encouraging the younger generation to participate in politics. Ronald Inglehart (1990), for example, has argued that in industrial democracies, post-materialism is a consequence of socioeconomic and generational changes which psychologically affect people's political behavior. Post-materialist values are more likely to affect the younger generation than the older one, and the effect is that the younger generation is more likely to participate in politics; however, the tendency of the post-materialist generation is not to join existing political parties (Inglehart, 1990). On the contrary, the post-materialist generation is likely to join social organizations such as environmental movements. The characteristic of its political participation is therefore individualized rather than determined

by social determinants. This is in accordance with the argument that the younger generation is likely to individualize its political participation in that it is not attached to traditional political parties and is less interested in conventional political participation, for example in voting (Dalton and Wattenberg, 2002).

What are the main arguments of materialism/post materialism? Inglehart has indicated that there are two basic hypotheses for the materialist/post-materialist: the scarcity hypothesis and the socialization hypothesis (Inglehart, 1990: 56). The scarcity hypothesis assumes that one's priorities reflect one's socioeconomic environment in that he or she places his or her interest in things, while a socialization hypothesis assumes that one's basic values reflect the conditions that he or she has cultivated during the pre-adult years. As a result, Inglehart hypothesized that compared to the materialist generation, the post-materialist generation is less likely to emphasize economic security and growth. Instead, the post-materialist generation is more interested in environmental issues and civic participation.

Hypothesis

Similar to Inglehart, it is generally hypothesized in this paper that post-materialist Asians are more likely to emphasize environmental protection rather than economic security, to participate in civic organizations, be interested in politics, and to be satisfied with the way in which democratic political systems work. On the other hand, it is hypothesized that post-materialist Asians are less likely to be religious, belong to political parties, and to be satisfied with the way in which democracy is developing.

It is hypothesized that the different probability of joining environmental groups, participating in civic organizations, being interested in politics, being satisfied with the political system and the way in which democracy contributes to the different level of being materialist/post-materialist leads. This hypothesis allows for the test of the difference between materialist, mixed, and post-materialist groups. In other words, the differences at the individual level for each group can be tested. The general hypothesis is that the more likely Asians are to join environmental groups, participate in civic organizations, to be interested in politics and satisfied with how the political system functions, the more likely they are to identify themselves as post-materialist. On the other hand, the less likely Asians are to be religious, to join political parties, or be satisfied with the way that democracy is seen to be developing, the less likely they are to commit to post-materialist values. Eight hypotheses then have been created.

Hypothesis 1: The more likely people are to be concerned about environmental protection rather than economic security, the more likely they are to hold post-materialist values.

Hypothesis 2: The more frequently post-materialist people go to church, mosques, or the synagogue, the less likely they are to be identified as post-materialist persons.

Hypothesis 3: The more likely people are to join civic organizations such as cultural clubs, the more likely they are to be post-materialist.

Hypothesis 4: The more likely people are to be political party members, the less likely they are to be post-materialist.

Hypothesis 5: The more likely people are to become conventionally involved in local politics¹, the less likely they are to be post-materialist.

Hypothesis 6: The more likely people are to be interested in politics, the more likely they are to be post-materialist.

Hypothesis 7: The more likely people are to be dissatisfied with the way in which democracy is seen to be developing, the less likely they are to become post-materialist.

Hypothesis 8: The more likely people are to favor how a democratic political system functions, the more likely they are to identify themselves as post-materialist.

Gender, educational level, and year of birth are controlled for in this study, and therefore there hypotheses were created for the control variables.

Hypothesis 9: Men are more likely to be post-materialist, whereas women are less likely to be post-materialist.

Hypothesis 10: The more likely people are to be educated, the more likely they are to become post-materialist.

Hypothesis 11: The older people, the less likely they are to become post-materialist.

Data and Method

World value survey data from Asian countries from 1981 to 2004 were used for the present study. Except for Japan, the surveys that were conducted for the Asian countries were mostly carried out from 1990 to 2000. Although Western and Eastern European and Latin American countries were affected by the post-materialist trend earlier, the post-

¹ The conventional involvement in local politics refers to whether the interviewees are more likely to sign a petition, join a demonstration or protestation, or turn out their votes for local elections.

materialist tendency continued to impact and even had a greater impact on countries during the 1990s. As a result, since the data were available, it was interesting to look at whether Asian countries were affected by the post-materialist tendency during the 1990-2000 period. The Asian countries that were chosen to be used as the units of analysis were Japan, India, China, Pakistan, South Korea, Taiwan, Singapore, Bangladesh, Saudi Arabia, Singapore, and Indonesia.

The dependent variable is the material/post-materialist index, which is ordered from materialist, mixed, to post-materialist. In order to test the hypotheses, eleven variables were chosen as the independent variables. They were classified into three groups. First were the "social variables," which are environmental protection/economic security, church going/non-church going, and joining civic organizations. The social variables test hypotheses 1, 2, and 3. Second, these variables are called "political variables" and include party member/non-party members, people that are active/non-active in local politics, have political interests, and are satisfied with the democratic process and political system. The political variables test hypotheses 4, 5, 6, 7, and 8. The third group of variables is the control variables. Sex, educational level, and the year of birth were controlled for in order to see whether these had an impact on being materialist/post-materialist. These variables test hypotheses 9-11.

There were two problems regarding recoding. First, some variables were recoded so that they would make more sense because the original coding could have caused confusion. For instance, the political interest variable was originally coded as 1=interested and 4=not interested. To prevent confusion, this variable was recoded to be 1=not interested and 4= very interested. The way in which some of the variables were recoded

is shown in the appendix. Second, and more importantly, some political variables such as party membership were difficult to identify. For instance, the result for the party membership variable reported that people identified themselves as member or not mention. One can not be sure whether the not-mention people actually belong to parties, but they do not want to tell others that they are the members of political parties. As a result, I treat not-mention as ones who do not belong to party or are not politically active.

All of the variables have been summarized in table 1 in order to provide the descriptive statistics of all of the variables and a general picture for each variable. According to the descriptive statistics, people generally tend to identify themselves as mixed-materialist/post-materialist since the mean value of the post-materialist variable was 1.617. Other independent variables looked normally distributed, except for "local political action" and "satisfaction with the political system."

Table 1 Summary Statistics of All Variables

Variables	Observation	Mean	Standard Deviation	Minimum	Maximum
Post-materialist	23177	1.617	0.583	1	3
Envt_econ	14941	1.457	0.498	1	2
Church going	11321	2.559	1.263	1	4
Assoc_life	10984	1.865	1.087	1	4
Party belonging	9387	0.116	0.320	0	1
Local_pol_act	9387	0.062	0.241	0	1
Pol_interest	7376	0.280	1.021	0	4
Dem_satisfy	7871	2.442	0.821	1	4

Table 1 Summary Statistics of All Variables (Continues)

Variables	Observation	Mean	Standard Deviation	Minimum	Maximum
Pol_system	14450	3.398	0.686	1	4
Sex	25223	1.478	0.499	0	1
Education	20851	1.821	0.750	1	3
Birth year	25205	1958.49	15.226	1897	1988

Method

The ordinal regression model (ORM) is a preferred measurement of the effect of post-materialist on political participation. First, the dependent variable in this study is an ordered scale of materialist/post-materialist scale. A logistic model can not be used for measuring ordinal variables such as agree/disagree or materialist/post-materialist since a logistic model is more suitable for a binary variable. Second, we can not assume that the relationship between materialist/postmaterialist and the independent variables is linear. As J. Scott Long and Jeremy Freese mentioned, “the ORM is nonlinear, and the magnitude of change in the outcome probability for a given change in one of the independent variables depends on the levels of all independent variables (Long and Freese 2006, 183).” As a result, an OLS model can not predict the probability that individuals will identify themselves as materialist, mixed, or post-materialist, given the change of independent variables. The second point leads to the third point, which is that the ORM can predict the probability of persons being materialist/post-materialist given the change in the independent variables. I can change the values of the independent variables in order to see the probability of individuals leaning toward the materialist, post-materialist, or mixed type. In other words,

the ORM predicts the probability of being materialist/post-materialist at an individual level.

Results

Table 2 reveals the results of the OLS and ORM models. The sign of coefficients from both models show the same direction, which was expected. Also, the statistical significance of the explanatory variables is the same. For example, in the OLS model, the church going variable was statistically significant at 1 percent, while in the ORM model churchgoing was also statistically significant at 1 percent.

Post-materialist Asians are not necessarily concerned about environmental protection issues. According to table 3, the more people are likely to see the significance of environmental protection, the less likely they are to identify themselves as post-materialist. Statistically, envt_econ was not significant, which implies that materialist people are likely to be concerned more about environmental protection issues. This makes post-materialist Asians different from post-materialist Europeans or Northern Americans in that post-materialist Asians will probably see environmental protection as a significant or insignificant issue. People that usually go to church, mosque or the synagogue are more likely to identify themselves as materialist. On the other hand, people that are more likely to spend time in cultural organizations or at community centers are more likely to identify themselves as post-materialist. This implies that post-materialist people are associative and are more willing to participate in community activities.

People that identify themselves as post-materialist are politically active, but they are not interested in participating in conventional political

Table 2 Materialism/Post-materialism in Asian Countries

Independent variables	Model 1 Ordinary Least Square	Model 2 Ordinal Regression Model
Environmental protection or economic development	- 0.004 (0.020)	- 0.0127 (0.072)
Going to church, mosque, or synagogue	- 0.026*** (0.008)	- 0.091*** (0.030)
Associative life	0.016* (0.010)	0.064* (0.035)
Political variables		
Belonging to a party	- 0.026 (0.029)	- 0.114 (0.104)
Active in local politics	- 0.053 (0.035)	- 0.182 (0.126)
The level of political interest	0.030*** (0.008)	0.107*** (0.032)
Satisfied with the way democracy has developed	- 0.089*** (0.014)	- 0.324*** (0.053)
Favoring democratic political system	0.035** (0.0159)	0.125** (0.058)
Socioeconomic variables		
Sex	- 0.054*** (0.021)	- 0.211*** (0.077)
Education	0.071*** (0.013)	0.260*** (0.047)
The year people were born	- 0.000 (0.001)	0.000 (0.002)
constant	1.756 (1.424)	
N	3312	3312
Log Likelihood	125.912	125.30
F-Stat (11, 3300)	11.62	
Adjusted R2/ Pseudo R2	0.0341	0.0225
AIC	1.673	1.649
X ² (11)		120.87***

*** is signified at $p < 0.01$. ** is signified at $p < 0.05$, and * is signified at $p < 0.10$ (two-tail tested). Numbers in parentheses are standard errors.

activities. They are not likely to be a member of a political party and they are not likely to participate in local political actions. However, they are interested in politics. The political interest variable indicates that the more likely people are to be interested in politics, the more likely they are to identify themselves as post-materialist. Post-materialist people are more likely to be dissatisfied with the way democracy develop has developed since the “dem_satisfy” coefficient showed a negative sign. Furthermore, post-materialists are more willing to favor a democratic political system than are materialist people. That post-materialist Asians are not interested in joining political parties or participate in local politics seems to contradict the fact that they are interested in politics. Post-materialists were to some extent supposed to join political parties or participate in local politics, such as signing petitions, if they would want democracy to be developed or consolidated. However, they do not want to conventionally participate in politics, which makes post-materialist Asians similar to post-materialist people from other continents. They favor a democratic political system and would like to see their countries more developed or democratized. They, however, probably see that conventional political organizations do not help with the democratization their political systems or improve the way in which democracy works.

Demographically, Asian women are less likely to identify themselves as post-materialist than are Asian men. The “sex” coefficient showed a negative sign, which indicates that if people are female, they are less likely to be post-materialist. Further, the “sex” coefficient was statistically significance at 1 percent. As expected, if people are more educated, they are more likely to identify themselves as post-materialist. The “education” variable was statistically significant at 1 percent. On the other

hand, birth year did not have any impact on whether they were materialist/post-materialist. This implies that Asians can be materialist or post-materialist regardless of what year they were born.

According to table 3, religiosity, associative life, the level of political interest, democratic satisfaction and favoring democracy, gender, and the level of education caused the probability that Asians are likely to identify themselves as materialist or post-materialist. According to the ORM model (model 2), other things being equal, a one unit increase in going to church is associated with a 0.026 unit decrease in being post-materialist, on average. Other things being equal, a one unit increase in associative life is associated with a 0.016 unit increase in being post-materialist. Other things being equal, a one unit increase in the level of political interest is associated with a 0.030 unit increase in being post-materialist. And other things being equal, a one unit increase in being satisfied with the way in which democracy has developed is associated with a 0.089 unit decrease in being post-materialist.

On the other hand, environmental protection, party membership, local political action, and the year of birth did not affect whether Asians identified themselves as materialist/post-materialist. Therefore, I can not reject hypotheses two, three, six, seven, eight, nine, ten, or eleven since the explanatory variables in both the OLS and ORM models were statistically significant at the 1 percent level. Even though belonging to a party and local political action were not statistically significant, I can not reject hypotheses four or five because the sign of the coefficient showed the expected direction. Meanwhile, I can reject hypotheses one or and eleven since the variables were not statistically significant and the sign of the coefficient showed the opposite direction from what was expected.

The Probability of Being Materialist/Post-Materialist

Substantively, I would like to know the probability of Asians identifying themselves as either materialist or post-materialist. The ORM model can tell us the probability that each selected group is from all of the given observations. Moreover, the ORM model predicted the probability that people are likely to be post-materialist, given the explanatory factors.

First, the probability that Asian people are likely to identify themselves as materialist, mixed characteristics, and post-materialist was calculated. It was found that Asians are most likely to identify themselves as mixed materialist and post-materialist. Table 4 reveals the probability of each category. Almost sixty percent (0.592) of the respondents identified themselves as mixed materialist and post-materialist. Approximately thirty six percent (0.356) identified themselves as materialist. Only five percent called themselves post-materialist. This suggests that when asked to identify themselves as materialist or post-materialist, Asians are not completely certain whether they are one or the other. It is probable that they do not believe or practice some of the characteristics of post-materialist which post-materialist Westerners have believed or practiced. For instance, it was noted that a small percentage of post-materialists among Asian people and a statistical insignificance of environmental protection appeared in this research. It can be implied then that the concern for environmental issues is not restricted to post-materialist people, but materialists are concerned about environmental protection. Figure 1 reveals the distribution of each category, which indicates that Asians are more likely to identify themselves as mixed between materialist and post-materialist.

Table 3 The Probability of Belonging to Materialist, Mixed Materialist and Post-Materialist, and Post-materialist Category

Pr ($y^*=1$)	0.356229
Pr ($y^*=2$)	0.592947
Pr ($y^*=3$)	0.050824
sum of probability	1

Note: The values of the independent variables were set to their means.

Then the probability that Asians would identify themselves as materialist, mixed materialist and post-materialist, and post-materialist was calculated, given the characteristics that they have. There were three purposes for calculating the marginal effect of the explanatory variables on materialists/post-materialists. First, I can observe the probability that Asians think of themselves as materialist or post-materialist, given what they believe, express, and practice. The calculation of the marginal effect allows us to see what the probability is that individuals think of themselves as materialist or post-materialist. Second, calculating the marginal effect allows us to see whether the probability that people think of themselves as materialist or post-materialist changes if I change the effect of the explanatory variables. Third, the calculation of the marginal effect allows us to see which explanatory variables encourage or discourage the probability that people think of themselves as materialist or post-materialist.

First, the probability that individuals would identify themselves as materialist, mixed, and post-materialist was calculated by changing the value of one explanatory variable and setting others to their means. Table 4 reveals the probability that Asians would identify themselves as

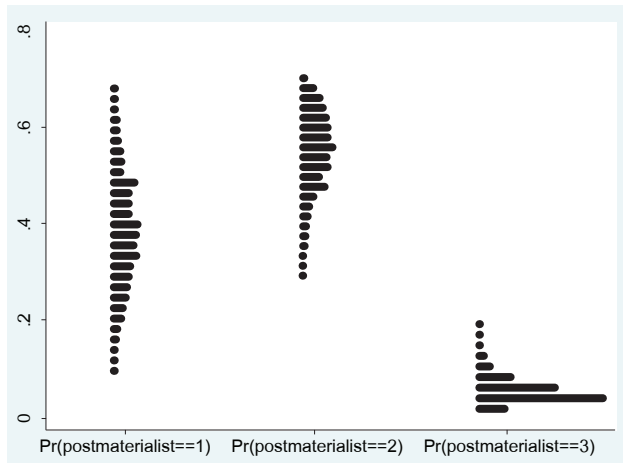


Figure 1 Distribution of the Materialist, Mixed, and Post-materialist Categories

materialist, mixed, and post-materialist, given the change of the values of associative life, political interest, satisfaction with the political system, and education. As expected, the more that individuals are associated with social and cultural organizations, the more they are interested in politics, the more they are satisfied with the democratic political system, the more educated they are, the more likely is the probability that they will be mixed-post-materialist. According to table 5, when the values of associative life, political interest, political system, and education were increased, the probability of the materialist category decreased. On the other hand, the probability of belonging to the mixed and post-materialist categories increased.

On the other hand, the more likely individuals are to be concerned about environmental protection, the more frequent they go to church, the more likely they are to join political parties, the more likely they are

Table 4 The Probability That Individuals Identify Themselves as Materialist, Mixed and Post-materialist, Given the Change of Associative Life, Political Interest, Political System and Education

Dependent/independent Variables					
Post-materialist/ Environmental Protection	Assoc_life=1	Assoc_life=2	Assoc_life=3	Assoc_life=4	
Pr(y=1 x)	0.3809	0.3659	0.3512	0.3368	
Pr(y=2 x)	0.5732	0.5853	0.5969	0.6081	
Pr(y=3 x)	0.0459	0.0488	0.0519	0.0551	
Dependent/independent Variables					
Post-materialist/ Environmental Protection	Pol_interest = 0	Pol_interest = 1	Pol_interest = 2	Pol_interest = 3	Pol_interest = 4
Pr(y=1 x)	0.3812	0.3563	0.3321	0.3088	0.2864
Pr(y=2 x)	0.5729	0.5929	0.6117	0.6290	0.6448
Pr(y=3 x)	0.0508	0.0508	0.0562	0.0622	0.0687
Dependent/independent Variables					
Post-materialist/ Environmental Protection	Pol_system=1	Pol_system=2	Pol_system=3	Pol_system=4	
Pr(y=1 x)	0.4435	0.4129	0.3829	0.3538	
Pr(y=2 x)	0.5206	0.5467	0.5716	0.5949	
Pr(y=3 x)	0.0358	0.0404	0.0456	0.0513	
Dependent/independent Variables					
Post-materialist/ Environmental Protection		Education=1	Education=2	Education=3	
Pr(y=1 x)		0.4236	0.3617	0.3042	
Pr(y=2 x)		0.5377	0.5886	0.6324	
Pr(y=3 x)		0.0388	0.0497	0.0635	

to participate in local politics, and the more likely they are to be satisfied with the way democracy has developed the less likely they are to identify themselves as post-materialist. Table 6 reveals the probability that Asians will identify themselves as materialist, mixed, and post-materialist given

the change of environmental issues, the frequency of churchgoing, belonging to a party, interest in local politics, and democratic satisfaction. As expected, when the value of the environmental issue, church going, belonging to a party, local politics, and democratic satisfaction variables was increased, the probability of belonging to materialist increased. On the other hand, the probability of belonging to mixed and post-materialist categories decreased.

Table 5 The Probability That Individuals Identify Themselves as Materialist, Mixed, and Post-materialist, Given the Change of Associative Life, Political Interest, Political System, and Education

Dependent/independent Variables				
Post-materialist/Environmental Protection			Envt_econ=1	Envt_econ=2
Pr(y=1 x)			0.3672	0.3702
Pr(y=2 x)			0.5842	0.5818
Pr(y=3 x)			0.0486	0.048
Dependent/independent Variables				
Post-materialist/ Environmental Protection	Church going=1	Church going=2	Church going=3	Church going=4
Pr(y=1 x)	0.3770	0.3583	0.3794	0.4010
Pr(y=2 x)	0.6074	0.5913	0.5744	0.5566
Pr(y=3 x)	0.0549	0.0504	0.0462	0.0424
Dependent/independent Variables				
Post-materialist/Environmental Protection		Party belonging=0	Party belonging=1	
Pr(y=1 x)		0.3647	0.3916	
Pr(y=2 x)		0.5863	0.5645	
Pr(y=3 x)		0.0492	0.0440	

Dependent/independent Variables (Continues)				
Post-materialist/Environmental Protection	Local_pol_act=0	Local_pol_act=1		
Pr(y=1 x)	0.3634	0.4066		
Pr(y=2 x)	0.5872	0.5519		
Pr(y=3 x)	0.0493	0.0414		
Dependent/independent Variables (Continues)				
Post-materialist/ Environmental Protection	Dem satisfy=1	Dem satisfy=2	Dem satisfy=3	Dem satisfy=4
Pr(y=1 x)	0.2467	0.3118	0.3853	0.4644
Pr(y=2 x)	0.6703	0.6268	0.5696	0.5026
Pr(y=3 x)	0.0829	0.0614	0.0451	0.0330

Note that gender also matters as to the probability that individuals identify themselves as materialist, mixed, or post-materialist. The probability that individuals identify themselves as materialist, mixed, or post-materialist was calculated. Again I other variables were controlled for by setting them to their means. According to table 6, men are more likely to identify themselves as post-materialists than women.

Table 6 The Probability that Individuals Identify Themselves Materialist, Mixed, and Post-materialist Given They Are Male or Female

Dependent/independent Variables		
Post-materialist/Environmental Protection	Sex=0	Sex=1
Pr(y=1 x)	0.3498	0.3992
Pr(y=2 x)	0.5980	0.5581
Pr(y=3 x)	0.0522	0.0427

To see the aggregated impact of the explanatory variables on the probability of belonging to materialist mixed, or post-materialist, the

probability that individuals would identify themselves as materialist, mixed, and post-materialist was calculated, given the change in environmental protection issues, the frequency of church going, and associative life. On the other hand, the probability that individuals would identify themselves as materialist, mixed, or post-materialist was calculated, given the change in belonging to a party, participation in local politics, political interest, democratic satisfaction, and the desire for a democratic political system. In other words, the independent variables were divided into a social and cultural variable group and a political variable group.

Table 7 shows the relation between Belonging to post-materialism and the environmental protection issue, the frequency of going to church, mosque, or synagogue. As expected, other things being equal, the probability that individuals would identify themselves as mixed or post-materialist decreased if they said that they went to church frequently or that they were more concerned about economic development than environmental protection. The probability that individuals would identify themselves as materialist increased from 34.74 to 37.19 percent when the value of churchgoing and environmental protection was increased. However, the probability that individuals would identify themselves as mixed or post-materialist decreased from 59.99 percent to 58.05 percent and 5 percent to 4.76 percent respectively when the value of associative life was increased. This implies that religiosity in Asia has a strong negative impact on being a post-materialist. However, the change of probability is not.

Then I calculated the probability that individuals identify themselves as materialist, mixed, post-materialist type given the state of political variables. As I expected, when the values of political variables were

Table 7 The Probability that Individuals Will Identify Themselves as Materialist, Mixed, or Post-materialist, Given the Change of Environmental Protection Issue, the Frequency of Church Going and Associative Life

	Envt_econ=1	Envt_econ=2
Dependent/independent Variables	Church going=1	Church going=4
Post-materialist	Assoc_life=1	Assoc_life=4
Pr(y=1 x)	0.3474	0.3719
Pr(y=2 x)	0.5999	0.5805
Pr(y=3 x)	0.0527	0.0476

Note: Political and socioeconomic variables are set to their means.

increased, the probability that individuals would identify themselves as materialist increased. This means that the more likely that individuals will join a political party, participate in local politics, and be satisfied with the way democracy has developed, the more likely they are to be materialist. Table 10 shows that the probability of belonging to materialist increased from 31.07 percent to 41.81 percent when the value of political variables was increased. On the other hand, the probability of individuals belonging to a mixed category decreased from 62.77 percent to 54.23 percent when the value of political variables was increased. Similarly, the probability of belonging to post-materialist decreased from 6.17 percent to 3.96 percent when the value of political variables was increased.

Note that the change in the value of the political variables has relatively more impact on the change of the probability of each category than cultural variables. For instance, when the value of the cultural variable was increased, the probability of individuals belonging to the mixed category changed from 59.99 to 58.05 or a 1.94 percent difference.

However, when the value of political variables was increased, the probability of individuals belonging to the mixed category changed from 62.77 to 54.23 or a 8.54 percent difference. This implies that individuals' political opinion has more influence on the probability that they will identify themselves as materialist, mixed, or post-materialist than cultural factors.

Table 8 The Probability That Individuals Identify Themselves as Materialist, Mixed, or Post-materialist, Given the Change in Belonging to a Party, Participation in Local Politics, Political Interest, Democratic Satisfaction and Democratic Political System

Dependent/independent Variables	Party belonging=0	Party belonging=1
	Local_pol_act=0	Local_pol_act=1
	Pol_interest=0	Pol_interest=4
	Dem_satisfy=1	Dem_satisfy=4
Post-materialist	Pol_system=1	Pol_system=4
Pr(y=1 x)	0.3107	0.4181
Pr(y=2 x)	0.6277	0.5423
Pr(y=3 x)	0.0617	0.0396

Note: Cultural and socioeconomic variables are set to their means.

Moreover, there are some interesting results needed to be discussed. First, the results showed that post-materialists are more likely to participate in local politics (especially environmental issues) and engage in social and cultural organizations. I argued that this is because post-materialists view that conventional politics (i.e. national politics) does not much concern with local problems such as violation of environmental rights of people in local areas by the governmental agencies and the multi-national corporations and violation of local cultures by the governmental agencies and the multi-national

corporations. Post-materialists hope that participating in expressing their voice in environmental concern at local level is more likely to provoke the government to be concerned with the problems (Inglehart, 1990).

Furthermore, the results showed that gender and educational level have an impact on being post-materialism. Inglehart (1990) argued that persons with higher level of education are more likely to be post-materialists because they are more likely to doubt political institutions. This is because they are highly educated and cultivated to suspect the ways conventional politics work and the processes of policy-making in national politics. Men are more likely to be post-materialists because they are likely to be suspicious in politicians and political institutions. Nonetheless, this does not always mean that women in other regions are not suspicious in how the conventional politics is processed since the data this article used were only in Asian countries. Asian women are bounded by cultural and religious traditions so that they are limited in expressing their opinion.

Conclusion

In this paper, it was shown that post-materialist Asians are similar to post-materialist Westerners. They are concerned about environmental protection, they are associative regarding social and cultural organizations, they are dissatisfied with the way in which democracy has been seen to develop in their countries, and they desire a democratic political system. On the other hand, they do not frequently go to religious places such as church or mosques compared to materialist people. Demographically, men are more likely to lean toward the post-materialist than women. The

more likely they are to be educated, the more likely they are to identify themselves as post-materialist. Even though the year in which they were born was not statistically significant, it was seen that people were born in recent years are more likely to identify themselves as post-materialist.

However, Asians are still uncertain about whether they are post-materialist since the probability of people identifying themselves as mixed materialist and post-materialist was almost 60 percent. It was not certain whether the questionnaire was unclear or if it was not applicable to Asian interviewees. It is believed however that some characteristics of Western post-materialists do not represent what post-materialist Asians believe or how they practice. This can be a question for a next research.

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