Title: Citizenship and Governance in the Asian Region: Insights from The International Civic And Citizenship Education Study

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Abstract:
Large scale assessment of student performance is now a regular feature of the international education landscape. The focus has been on traditional areas such as Mathematics and Science through programmes such as PISA and TIMSS. These kinds of assessments have become important policy measures for different countries often leading to significant changes in curriculum and even pedagogy (Ringarp and Rothland, 2010). Rutkowski and Engel (2010) have categorized such assessments as 'hard' measures because they provide governments with the opportunity to realign their education systems in the process of seeking 'world class status'.

The International Civic and Citizenship Education Study (ICCS) is the most recent of these large scale assessments shifting into the area of citizenship knowledge and skills. The potential of this study to inform citizenship issues is explored in this paper. Data is drawn from the ICCS and the focus is on students' political trust. Analytic techniques are used to identify the heterogeneity in the political trust data and the implications of these analyses for a better understanding of citizenship and citizenship education are identified.

Large scale assessment of student performance is now a regular feature of the international education landscape. The focus has been on traditional areas such as Mathematics and Science through programs such as OECD's *Program of International Student Assessment* (PISA) and the International Association of Educational Evaluation's (IEA) *Trends in Mathematics and Science Studies* (TIMMS). These kinds of assessments have become important policy measures for different countries often leading to significant changes in curriculum and even pedagogy (Ringarp and Rothland, 2010). Rutkowski and Engel (2010) categorized such assessments as 'hard' policy measures because they provide governments with the opportunity to realign their education systems as part of the process of seeking 'world class status'.

Rutkowski and Engel (2010) have also noted the shift of large scale assessments into the area of citizenship knowledge and skills in the form of the International Civic and Citizenship Education Study (ICCS 2009). While PISA and TIMSS have demonstrated the potential of large scale assessment to influence curriculum and pedagogy, ICCS has the potential to go beyond educational settings to demonstrate how citizenship itself can also be conceptualized as measurable knowledge, skills, and values. Moreover, these measures can then be "ranked" to create league tables of countries performing well, or not, on basic citizenship measures. Policy makers across the region are now confronted with such data and need to assess the implications.

The issue of how ICCS 2009 might influence policy remains an open question. Because of the age cohort of the study, approximately 13-14 years old, ICCS 2009 can be seen at the very least as providing indicators of junior secondary students' political and social attitudes. A particularly important feature of ICCS 2009 was the inclusion of five Asian societies (Korea, Taiwan, Hong Kong, Indonesia and Thailand) so that such indicators can be examined in distinctly Asian contexts and may serve as a guide for policy makers concerned with how young people may undertake their future roles as citizens. The benefit of such work is that it can take on a comparative perspective looking both within and across societies. Such further studies will take the form of secondary data analysis that has the potential to inform not only new policies but new theoretical perspectives as well (see, for example, Kennedy, Hahn, & Lee, 2008).

In order to demonstrate the potential of ICCS 2009 to inform policy and practice in citizenship issue, this paper will draw on the data from Asian students to explore their attitudes towards political trust. In particular, attention will be focused on the heterogeneity of the data. This focus will provide a more nuanced interpretation of the results and at the same time will demonstrate the care that needs to be taken in interpreting the results of international large scale assessments. This approach is necessary because as shown in the ICCS 2009 report (Schulz et al., 2010) the emphasis in reporting results was on identifying uniform scales across participating countries. Yet as Willse (2011) has pointed out there may be unobserved heterogeneity in data that when analyzed may provide multiple classes with unique characteristics. Left unanalyzed, failure to recognize this unobserved heterogeneity may result in severe distortions in any interpretation of the results.

The ICCS 2009 Study and the Political Trust Scale

ICCS 2009 was carried out in 2008 – 2009 involving 38 educational systems, 120,000 students and 15,000 teachers. (Schulz et al., 2010). Students were asked a range of questions across content and cognitive domains. The full range of questions is shown in Table 1. In the study, to be reported here, analyses and discussion will focus on a series of questions students' were asked about "trust in institutions", which were related mainly to Content Domain 1 (Civic Society and Systems). There were a total of 11 core items answered by all students. Out of these 11 items, the IEA selected, 6 based on their psychometric and statistical properties to form a scale of "trust in institutions". The scale had a reliability (Cronbach's alpha) of 0.84 for the pooled ICCS sample and the country reliabilities ranged from 0.76 to 0.89 (Schulz et al., 2010).

The six questions related to national government, local government, courts of justice, the police, political parties, and national parliament (See Appendix A). This paper will focus on how students in five participating Asian countries performed on these six items, which we will call the "Political Trust Scale". Measurement issues related to this scale will be discussed in more detail in the following paragraphs. Before discussing the measurement issues, however, it is important to understand why we have focused our discussion on the Political Trust Scale since there were many others we could have chosen.

[Insert Table 1 about here]

Political trust – Why is it important?

Political trust is a long debated issue in the political science literature and beyond. Warren (1999, p2) argued that a society in which there is trust in institutions is likely to be a society where there are "fewer regulations and greater freedoms". Offe (1999) explored the more basic issue of how trust might be developed in a democratic society. He suggested that under certain conditions vertical trust i.e. trust amongst fellow citizens, can be established through the institutions that serve society. He set very high standards for these institutions relating to truth ("truth telling and promise keeping" and justice ("fairness and solidarity"). The extent to which institutions are characterized by these values is the extent to which they are capable of generating trust among citizens. Levy & Fukuyama (2010) have recently shown the importance of liberal democratic political institutions in limiting the power of the state and how such institutions can increase the legitimacy of the state and also provide the foundations of economic growth.

It is also of interest to note that in the recent so called "Arab spring" institutional trust has played a fundamental role. Islam Lofti, a lawyer and leader of the Muslim Brotherhood Youth in Egypt is reported as saying in relation to the protesters that "most of the group are liberals or leftists, and all - including the brotherhood members among them- say they aspire to Western constitutional democracy where civic institutions are stronger than individuals. When asked whether he could imagine an Egyptian president who was a Christian woman he paused, 'If it is a government of institutions', he said, 'I don't care if the president is a monkey'" (Kirkpatrick, 2011). Brancati and Snyder (2011) have highlighted the importance of institutions in post Qaddafi Libya, "post-electoral violence is significantly less likely when the country has had a chance to build up impartial, rule-based, and non-corrupt institutions, including courts, police, and other governmental bureaucracies… Qaddafi left Libya bereft of modern institutions". Thus trust in institutions is seen as a necessary precondition for democracy in these new and volatile contexts.

Yet it has also been argued that political trust has its limitations. Jamal and Nooruddin (2010) have

argued that the 'democratic utility' of trust is effective only in democratic contexts since trust in institutions linked to authoritarian regimes has no 'spin off'. Thus the efficacy of trust may well depend on context to the extent that Offe (1999) has argued that building trust in other citizens is more important than building trust in institutions. This is a particularly important point for the current study because of the five Asian societies to be included one is not democratic (Hong Kong), one is newly democratic (Indonesia), one has a history of democracy but also instability (Thailand) and two have developed democracy on the post- World War II period but after an initial experiences with authoritarian rule (Korea and Taiwan). This variation in democratic experience might be expected to produce variations in levels of political trust and this can be tested with the data available for this study.

Finally, the importance of developing political trust – especially in a society's institutions - has recently been reviewed by Kennedy, Mok & Wong (in press) with a special emphasis on the important role schools can play in this process. Across the five Asian societies included in their study it was found that schools do appear to contribute to the development of political trust in their respective societies. This is an important point for citizenship education that, in Asian contexts, often tends to focus on either the moral aspects of citizenship development or activities that seek to build national identity. Building political trust, however, may deserve more attention as a feature of citizenship education if the 'spin off' effects support the development of democracy. The results of the present study will help to shed further light on this issue.

Review of measurement issues related to unobserved heterogeneity.
In the previous section, the theoretical and practical issues related to political trust were reviewed. In the following section issues related to the measurement of large scale assessment data will be reviewed since in the end we wish to bring to ensure both theoretical adequacy and measurement validity and reliability.

Traditional approach to analysis of large scale assessment data
From the traditional international perspective, country-by-country comparisons are often the focus of large scale assessments. They result in the international ranking of countries and these

rankings are often referred to as 'league tables'. This approach emphasizes uniformity of students' characteristics within a single country as well as across countries. In ICCS 2009, for example, the participating countries were ranked in a league table by each county's students' trust in civic institutions (Schulz,et al., 2010, p. 106). A country where students had a high level of trust in civic institutions was ranked higher than a country where of students showed lower levels of trust. There are at least two assumptions behind this ranking process: 1) all students have the same conception of trust towards the civic institutions irrespective of the country in which they live, and 2) all students within the whole sample use the rating scales in the questionnaire more or less the same, so that their performance can be reasonably summarized by a particular single scale/ sample mean scores to represent the country's performance. Traditional analyses, therefore, produces single scale scores representing the level of students' political trust in civic institutions (using classical test theory or item response theory) to represent and compare one feature of students' attitudes towards citizenship.

Heterogeneity: observed and unobserved

Even in the production of single scale scores to represent students' achievements or attitudes it is recognized that certain individuals or groups may respond in particular ways. For example, gender, socioeconomic status, immigrant status, language proficiency etc may affect students' responses to questions in particular ways. There are analytical techniques such as differential item functioning (DIF) in Rasch analysis to detect these influences and account for them. Multiple regression analysis can also detect the relationship between particular groups and specified outcomes measures. Schulz et al. (2010) have provided many examples of the latter. In statistical terms these kinds of groups are often referred to as 'manifest' groups where the observable difference can be well specified in advance. Where such differences are shown to exist they can be referred to as observable differences and can be regarded as *observed heterogeneity*.

Recent research in statistical modeling, however, has suggested that identifying heterogeneity on the basis of manifest or observable groups only ignores the possibility that there may be other forms of heterogeneity within a population (Wang, & Hanges, 2011). Such heterogeneity, if it exists, might not be related to the observed characteristics of groups (gender, SES, immigrant

status etc) but could be relevant to outcome measures or other variables of interest. The assumption of such an approach is that heterogeneity or lack of it cannot be assumed – rather it needs to be identified empirically. In the end this kind of heterogeneity – often called *unobserved heterogeneity,* might be linked with some manifest groups but this might not always be the case. There may be groups that cannot be identified *a priori* but that emerge from the data. These *unobserved* groups may be very important to identify particularly if they represent a sizable proportion of the sample whose characteristics suggest there is considerable divergence from what might be expected as behavior or attitudes.

If we wish to understand the data more fully, therefore, we should identify not only the observed heterogeneity but also the unobserved heterogeneity. To investigate the latter within a population, 'mixture modeling' has been applied in various disciplines, such as education, marketing, personality psychology research (Austin, Deary, & Egan, 2006; De Jong, Steenkamp, & Fox, 2007; Willse, 2011). Mixture modeling combines latent variable modeling (item response theory modeling) and latent class modeling, where both the latent variable and the latent class for the respondents are estimated. These approaches, though applied in different contexts, have in common their potential to reveal from the data the unobserved heterogeneity that may characterize samples. In this paper, we shall argue that the potential heterogeneity within a sample is worth investigating and will show how it can be empirically tested with data relating to students attitudes to political trust. In particular we shall make an assessment of the relevance of 'unobserved heterogeneity' in making judgments about students' level of political trust across five Asian societies and the implications this might have for governance.

Analysis of political trust data for five Asian societies

The items in the Political Trust Scale identified in the international report of ICCS 2009 (Schulz et al., 2010) were subjected to mixture modeling (Rost, 1990, 1991) in the program mixRasch (Willse, 2009) to investigate the possibility of unobserved heterogeneity in the samples of the five participating Asian societies in the ICCS: Hong Kong, Taiwan, Thailand, Indonesia, and South Korea; sample sizes were 2902, 5167, 5263, 5068 and 5254 students respectively. The results of the mixture modeling were evaluated by three traditional criteria: Akaike information criterion (AIC), Schwartz's Bayesian information criterion (BIC) and Bozdogan's consistent AIC

(CAIC) (For an overview, see Read, & Cressie, 1988). In general practice, these criteria indicate that when different models representing different number of classes (e.g. 2 versus 3 classes) are compared the model with the lowest indices best reflects the data. However, in this paper we will focus on comparing a two-class solution across the five societies. The reasons for this is to serve as a very first demonstration to show how consideration of heterogeneity in a sample can potentially help us learn about the students more precisely than when heterogeneity is not considered.

Results

It needs to be kept in mind that when results are provided in the international report of ICCS 2009 (Schulz et al., 2010) a single scale score is given to represent student responses to the questions. In the results reported below, attention is being paid to the diversity or heterogeneity represented in the data so the issues of the adequacy of single scale scores can be assessed. Basically, the results indicated two possibilities for country level results

Commonality of responses: Indonesia, South Korea, Taiwan and Hong Kong

Figure 1 shows that four out of the five Asian societies, (Hong Kong, Taiwan, Indonesia, and South Korea) showed very similar pattern of student responses (from the respective threshold use of response categories) distinguishable by the response style of the students. Each showed a majority of students (around 80-90%) used the rating scale rather "typically" with a considerably large distance between adjacent categories. These responses fall into Class1. Yet a minority of students (around 10-20%) used the scale rather "narrowly" with a very small distance between categories Figure 1).

[Insert Figure 1 about here]

[Insert Figure 2 about here]

Distinctive responses: Thailand

The responses of Thai students diverged from the more general response pattern of students from other Asian societies. Figure 1 shows clearly that Thai students' responses both within and across

classes were different from those of their regional peers. First, there was an almost equal distribution of students across classes (Class 1: 52.4%, Class 2: 47.6%) which is in contrast to the other societies. Yet within each class there were also more extreme responses. What seems to differentiate the students in these two classes, as shown on comparisons between their category thresholds usage, is their attitude towards "courts of justice" and "political parties": Students in Class 2 showed greater trust towards "courts of justice" but less trust in "political parties" than students in Class 1.

Do the latent classes matter?

The existence of latent classes questions the assumptions that the attitudes of all students within a society can be summed up in a single score. Yet the real issue is to identify the distinctiveness between the latent classes. The latent classes have been identified statistically, but what does it mean? We chose a number of indicators on which to compare the students between the two classes in each society. They are, namely, Highest parents' occupational status, Father's occupational status, Mother's occupational status, Father's educational level, Mother' s educational level, Highest parental educational level, Home literacy, Male percentage, and Civic knowledge. Yet the results were mixed as shown below.

Using pairwise t-test comparison between the students in the two classes, father's occupational status did differentiate the classes in Thailand, Taiwan, Korea and Indonesia but not in a uniform way. In Thailand ($t=3.55$, $p<0.01$), Taiwan ($t=2.74$, $p<0.01$) and Indonesia ($t=3.53$, $p<0.01$) students in Class 2 tended to have fathers from a highly ranked occupational group but in Korea similar students were in Class1 ($t=-2.79$, $p<0.01$). At the same time Korean students from families whose mothers' occupational status were higher also represented in Class 1 ($t=-2.27$, $p<0.01$). None of the other socioeconomic indicators differentiated between the groups. The same applied to Home Literacy that only differentiated the classes in Korea with students in Class1 characterized by homes with significant levels of home literacy resources ($t=-4.55$, $p<0.001$). Civic knowledge scores differentiated classes in Thailand ($t=5.39$, $p<0.001$), Taiwan ($t=2.20$, $p<0.05$) and Indonesia ($t=5.29$, $p<0.001$) where Class 2 students tended to have higher scores. Yet in Korea it was Class 1 students who had higher scores ($t=-5.46$, $p<0.001$). Gender was not a marker of difference between the groups except in Korea where 69.4% of Class 1

students were male.

When it came to within society comparisons, however, it was a different story. In Hong Kong, for example there was no difference between the groups on any of the indicators. In Thailand, fathers' occupational status and higher civic knowledge scores characterized Class 2 as was also the case in Taiwan and Indonesia. In Korea similar indicators characterized students in Class 1 in addition to gender (significantly more boys than girls) and home literacy resources. It should not be surprising that the identified unobserved heterogeneity could not be easily identified by manifest variables - it is heterogeneity that, by definition, is not easily identified. The implications of this finding will be discussed in the next section.

Discussion

In the study reported here we have shown that the practice of reporting country scale scores on key citizenship attitudes underestimates the complexity and diversity of these attitudes. Using mixture modeling we have shown the existence of at least two classes or groups of students within each country. Thus groups are quite distinctive across societies— they cannot be accounted for by the same manifest variables— and this is the same within countries. The presence of this diversity within societies has a number of important implications.

First, as shown in Figure 2, in four of the societies (Korea, Taiwan, Indonesia and Hong Kong) the diversity of student attitudes to political trust is not great, but it needs to be understood. Students in Class 2 across societies (by far the majority) have a narrow range of attitudes to political trust than students in Class1 whose responses fit a much broader range of responses categories– some negative and some positive. Though the responses of students in Class 1 are more extreme, overall their performances do not differ much from Class 2's across these four societies. It is, however, worth noting that Class 1 always showed a little wider range of trust than Class 2, suggesting Class 1 having an ability to differentiate between institutions – for example between the courts that are endorsed uniformly positively across these societies and political parties that are endorsed negatively by all students. This ability to discriminate between those institutions that can be trusted and those that cannot is an important aspect of democratic

living and an ability that needs to be developed in young people. The preliminary indicators referred to earlier suggested that Class 2 students, at least in Thailand, Indonesia and Taiwan, were associated with their higher father's occupation and higher civic knowledge scores. The implications of this are that political socialization for this group of students maybe be most influenced by the family and the school.

Second, the interpretation offered above for Thailand, Indonesia and Taiwan cannot be applied to Hong Kong or Korea. There is no explanation offered by the manifest variables for the different classes in Hong Kong although in substance the differences are similar to those from the other societies. In Korea the explanatory variables apply to Class 1, which is the class that uses extreme response categories (i.e. categories options 1 or 4). This is entirely the opposite of the results for the other societies. This indicates that while classes can be identified across the societies and their characteristics are broadly similar that the explanations for them appear to be different in different contexts.

Third, Thailand stands out in the results because there is almost an equal number in each class while in the other societies at least 80% are in one class (i.e. Class 2). Yet unlike the other societies, the Thai students in Class 2 are more extreme in their responses— indeed they are the most extreme group. This extremism is characterized by more trust in the courts and less trust in political parties. It appears to be influenced by the father's occupational status and higher civic knowledge scores. If this is the case (and it is subject to further investigation) does it mean young people develop their attitudes to political institutions from their parents? If this is so, can it be expected that lower SES students will have lower levels of trust in courts and higher levels of trust in political parties? This seems to reflect an important aspect of modern Thai politics where political parties are used by lower SES groups to challenge much of what is taken for granted in Thai politics. The courts often seem to act in the interests of the Thai elite while political parties can be used to work on behalf of the disadvantaged. This is an important area for future research.

Finally, these results make it difficult to talk about 'regional identity' since it seems that context, history and culture have worked to produce different country responses. Yet this diversity is also reflected within countries. Given the size of the classes in Hong Kong, Korea, Taiwan and

Indonesia, the within country diversity is not great but it does need to be acknowledged. Levels of adolescent political trust vary in all societies but especially in Thailand. The single scale score provided by ICCSS 2009 (Schulz et al., 2010) does not acknowledge this heterogeneity. Yet its existence has implications for social stability, institutional functioning and citizenship education. Heterogeneity needs to be given much higher priority in future studies so the implications can be followed up and action taken to address what could be very real social and political issues.

Conclusion

If the above analysis is correct, further empirical work needs to be done to explore the measurement issues and further theorizing needs to take place about the nature of political trust and the ways adolescents develop such trust. While it appears that socioeconomic factors may be important in understanding different levels of trust, it is by no means a universal answer. Thus more work is needed on the factors influencing the development of political trust. Yet it is unlikely there will be a uniform answer to this issue – the differences between societies are significant so answers will most likely be within societies. Yet what is clear is that by identifying these different groups through mixture modeling opens up a line of inquiry and investigation that has significant implications for governance. Societies characterized by diversity need to be able to mange that diversity so that it is productive rather than unsettling. One response to diverse views on political trust is for governments to ensure that the institutions are always protected in carrying out their specific roles and functions and that they act fairly and impartially. This will help to build trust. At the same time, citizenship education can ensure that young people understand the role and function different institutions that govern society. It does appear that civic knowledge is one of the variables that can influence levels of political trust as explained by Kennedy et al. (in press). Schools cannot do this important work alone; but if it is complemented by the open and transparent operation of political institutions then all young people should be able to develop the kind of political trust that can at once be supportive and critical in evaluating an institution's contribution to democratic development.
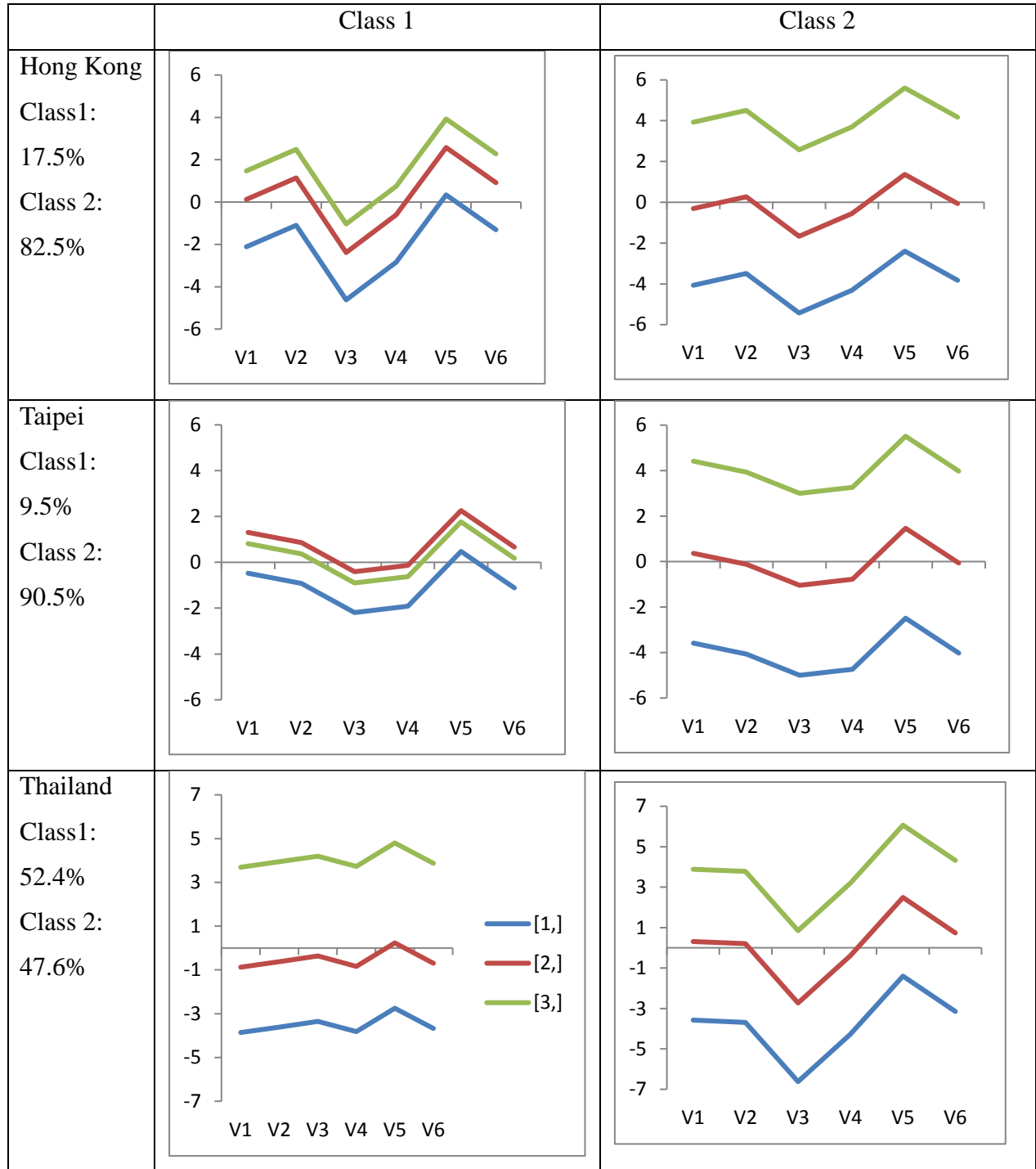
References

Austin, E. J., Deary, I. J., & Egan, V. (2006). Individual differences in response scale use: Mixed Rasch modelling of responses to NEO-FFI items. *Personality and Individual Differences, 40*, 1235–1245.

Brancati, D & Snyder, J. (2011). The Libyan rebels and electoral democracy. *Foreign Affairs*, *90*(5). Retrieved on 18 September 2011 from http://www.foreignaffairs.com/articles/68241/dawn-brancati-and-jack-l-snyder/the-libyan-rebels-and-electoral-democracy

De Jong, M. G., Jan Benedict E.M. S., and Jean-Paul F. (2007). Relaxing Measurement Invariance in Cross-National Consumer Research Using a Hierarchical IRT Model, *Journal of Consumer Research*, 34, 260-278.

Kennedy, K. J., Hahn, C. L., & Lee, W.-O. (2008). Constructing citizenship: Comparing the views of students in Australia, Hong Kong and the United States. *Comparative Education Review*, 52(1), 53-91.

Kennedy, K.J., Mok, MMC. & Wong, MYW. (in press). Developing political trust in adolescents: Is there a role for schools? In Bernadette Curtis (Ed.). *Psychology of Trust* [*Series: Psychology of Emotions, Motivations and Actions*]. New York: Nova Publishers,

Jamal, A., & Nooruddin, I. (2010). The democratic utility of trust: A cross-national analysis. *The Journal of Politics, 72* (1), 45-59.

Kirkpatrick, D. Youth plotters reveal their strategies and identities. *International Herald Tribune* (11 February).

Levy, B., & Fukuyama, F. (2010). Development Strategies - Integrating Governance and Growth. *World Banking Policy Research Paper*.

Offe, C. (1999). How can we trust our fellow citizens? In M. E. Warren (Ed.), *Democracy and Trust* (pp. 42-87). Cambridge: Cambridge University Press.

Read, T.R.C., & Cressie, N.A.C. (1988). *Goodness-of-fit statistics for discrete multivariate data*. New York: Springer.

Ringarp, J., & Rothland M. (2010). Is the grass always greener? The effect of the PISA results on education debates in Sweden and Germany, *European Educational Research Journal*, 9(3), 422-430.

Rost, J. (1990). Rasch models in latent classes: an integration of two approaches to item analysis. *Applied Psychological Measurement*, 14, 271-282.

Rost, J. (1991). A logistic mixture distribution model for polytomous item responses. *British Journal of Mathematical and Statistical Psychology*, 44,75-92.

Rutkowsi, D., & Engel, L.C. (2010). Soft power and hard measures: Large-scale assessment, citizenship and the European Union, *European Educational Research Journal*, 9(3), 381-395.

Schulz, W., Ainley, J., Fraillon, J., Kerr, D., & Losito, B. (2010). *ICCS 2009 International Report: Civic knowledge, attitudes and engagement among lower secondary school students in thirty-eight countries*. Amsterdam: IEA

Wang, M, & Hanges, P. J. (2011). Latent class procedures: Applications to organizational research. *Organizational Research Methods, 14*(1), 24-31.

Warren, M. E. (Ed.) (1999). *Democracy and Trust*. Cambridge: Cambridge University Press.

Willse, J. T. (2009). *mixRasch: Mixture Rasch Models with JMLE* (Version 0.1). Retrieved from http://CRAN.R-project.org/package=mixRasch

Willse, J. T. (2011). Mixture Rasch models with joint maximum likelihood estimation. *Educational and Psychological Measurement,* 71(5), 5-19.

Table 1. Assessment Domains for ICCS 2009

	Content Domain				Total
	Civic society & systems	Civic principles	Civic participation	Civic identities	
Cognitive domains					
Knowing	15	3	1	0	19
Analyzing and reasoning	17	22	17	5	61
Total	32	25	18	5	80
Affective-behavioral domains^					
Value beliefs	12	12	0	0	24
Attitudes	12	18	18	14	62
Behavioral intentions			21		21
Behaviors			14		14
Total	24	30	53	14	121

Figure 1. Threshold profiles across latent classes

| Korea
Class1:
18.0%
Class 2:
82.0% | | |
| Indonesia
Class1:
15.9%
Class 2:
84.1% | | |
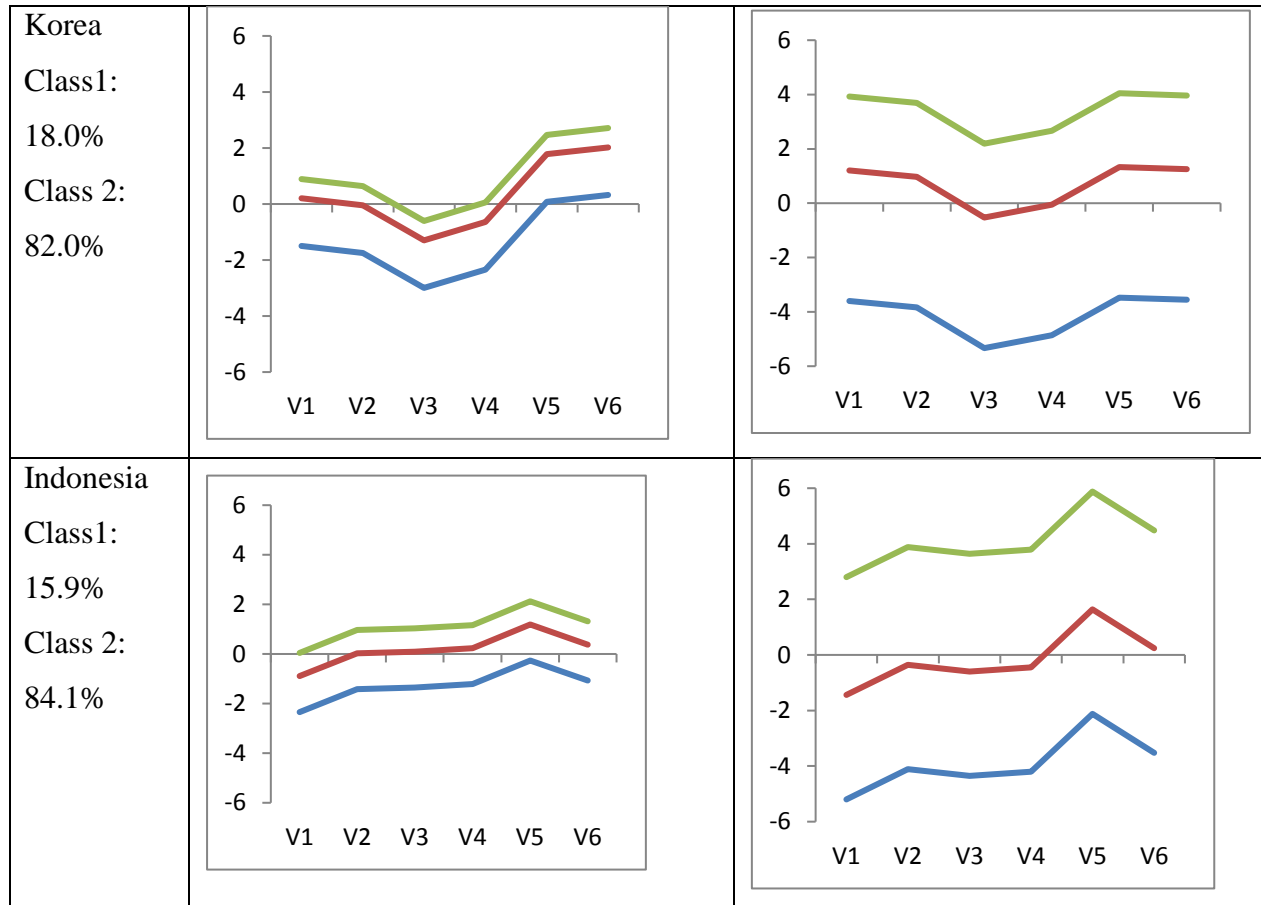
Figure 2. Class 1 and Class 2 overall performance

	Class 1 vs. Class 2
Hong Kong Class1: 17.5% Class 2: 82.5%	
Taiwan Class1: 9.5% Class 2: 90.5%	
Thailand Class1: 52.4% Class 2: 47.6%	

Korea Class1: 18.0% Class 2: 82.0%	
Indonesia Class1: 15.9% Class 2: 84.1%	
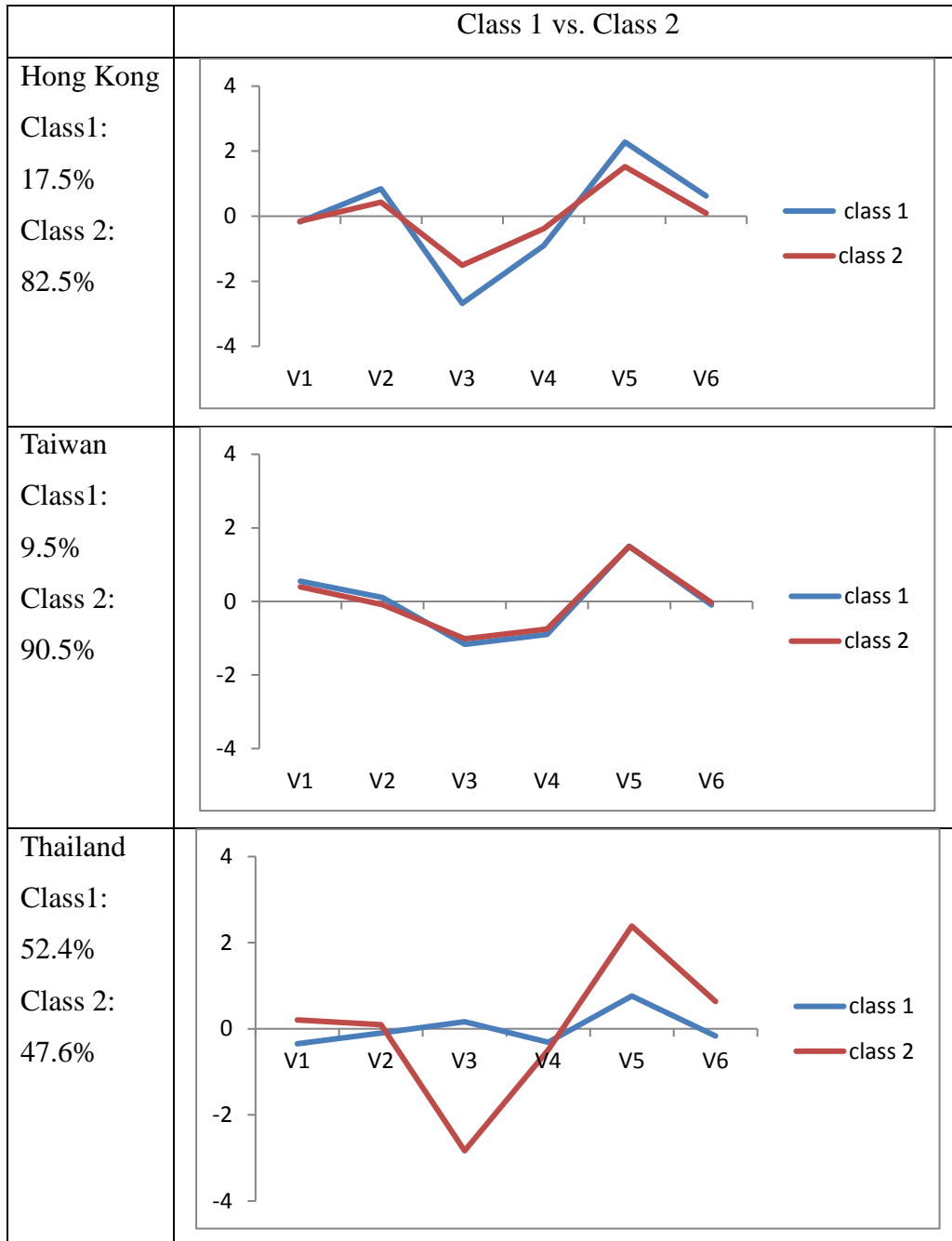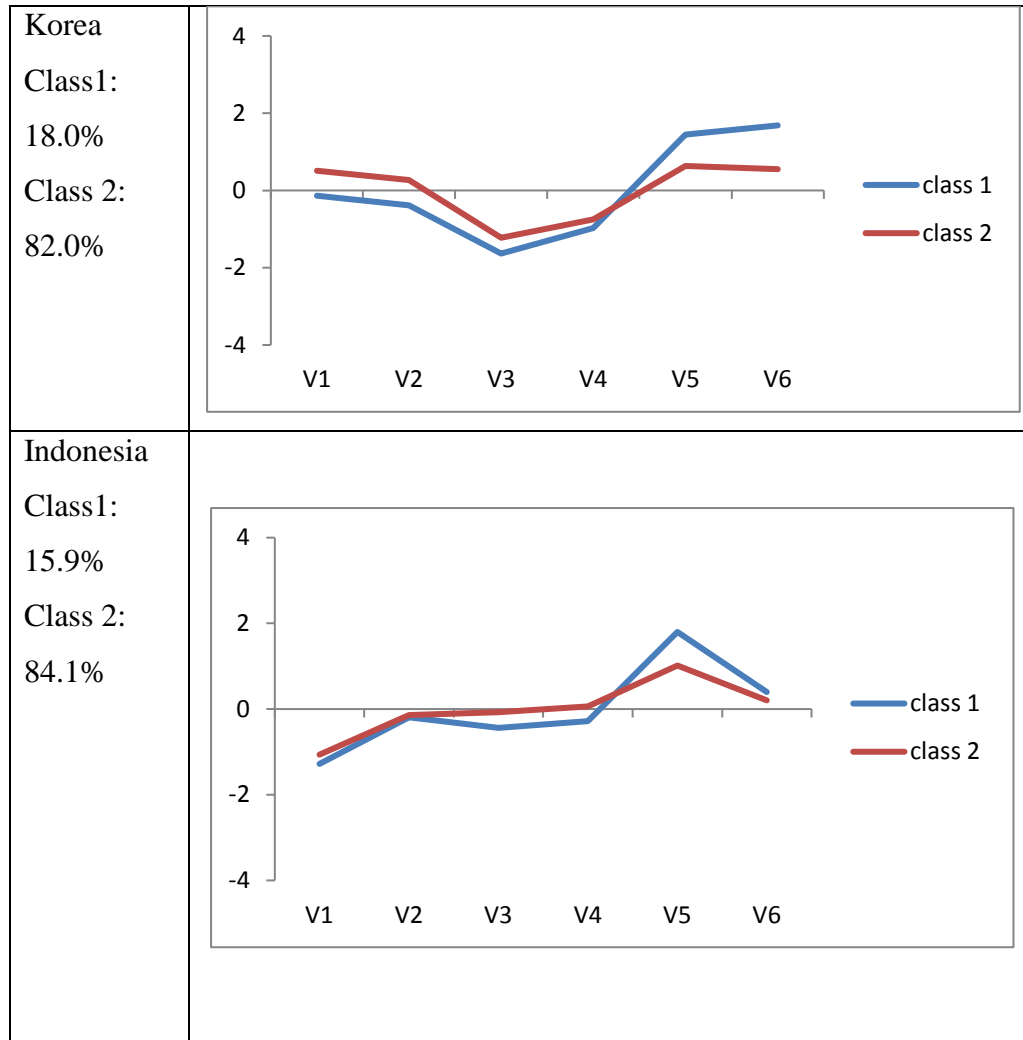
Appendix A. The question on students' trust on a number of civic institutions

How much do you trust each of the following groups or institutions?

(Please tick only one box in each row)

		Not at all	*A little*	*Quite a lot*	*Completely*
	The \<national government\> of \<country of test\>	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b)	The \<local government\> of your town or city	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c)	Courts of justice	$\square_1$	$\square_2$	$\square_3$	$\square_4$
d)	The police	$\square_1$	$\square_2$	$\square_3$	$\square_4$
e)	Political parties	$\square_1$	$\square_2$	$\square_3$	$\square_4$
f)	\<National Parliament\>	$\square_1$	$\square_2$	$\square_3$	$\square_4$
g)	The media (television, newspapers, radio)	$\square_1$	$\square_2$	$\square_3$	$\square_4$
h)	\<The Armed Forces\>	$\square_1$	$\square_2$	$\square_3$	$\square_4$
i)	Schools	$\square_1$	$\square_2$	$\square_3$	$\square_4$
j)	The United Nations	$\square_1$	$\square_2$	$\square_3$	$\square_4$
k)	People in general	$\square_1$	$\square_2$	$\square_3$	$\square_4$