Relationships amongst cultural dimensions, educational expenditure and class size of different nations

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Abstract

Many studies have concentrated on investigating educational expenditure and pupil–teacher ratio to see how these two factors can influence the quality of education. This study chooses to examine these two educational factors from a different perspective. If educational expenditure and pupil–teacher ratio really have a significant impact on the quality of education as many studies have claimed, it is important to step back and understand why some regions choose to have high/low educational expenditure and high/low pupil–teacher ratios. This study found that culture has an important impact on these two educational factors. Hofstede's cultural dimensions, namely Power Distance and Individualism, were applied and results showed that these two cultural dimensions, when applied to 43 regions around the world, demonstrated a significant impact on educational expenditure and pupil–teacher ratio.
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1. Introduction

Educators around the world are investigating different factors that might improve the quality of education. Generally speaking, education quality refers to "the extent that an educational system is able to achieve the generally accepted goals of education" (Chapman et al., 2005), and the common educational goals across countries for education quality include students having higher level of achievement and increasing the amount of

knowledge and skills students learn (Adams, 1998; Heyneman, 1997). Peters and Hall's (2004) study indicated that to raise education quality, variable such as input (e.g. resources) and process (e.g. internal school context) must be sufficient to have significant outputs (e.g. academic achievement) and outcomes (e.g. employment and earnings). From an economical perspective, the outcome of having education quality is associated with economic productivity, growth in personal income, and development of a nation so as to improve its competitiveness within the global economy (Aber-šek, 2004; Heyneman, 2004; Jang and Kim, 2004; Šlaus et al., 2004).

From a macro or input perspective, expenditure on education is a major issue to be discussed at national level (Ram, 1995). From a micro or process

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perspective, class size is a contentious issue these days. In fact, class size is dependent upon a government's expenditure on education since resource use per student goes up when the average class size is reduced (Falch and Rattso, 1999; Hartman, 1999; Hymon, 1997). Many studies have concentrated on the educational benefits of having high educational expenditure and low teacher–pupil ratios.

In terms of expenditure on education, cost-effectiveness research has focused on finding relationships between expenditure or cost of education and students' academic achievement (Creemers and van der Werf, 2000). Very often studies have found an indirect relationship between these two factors. For instance, Jones and Zimmer's (2001) study suggested that educational expenditure influences the 'capital' of schools, and eventually the academic achievement of students. Capital is defined as the physical assets that a school owns, and these assets are essential inputs in the production of education. When a government does not provide enough educational expenditure, schools have less and poorer capital, and thus lower student academic achievement. For example, overcrowded schools lead to greater distractions within the classroom and lower the morale and health of students, and older schools lack the infrastructure for the latest technology for teachers to teach and students to learn. All these affect the academic achievement of students. Moreover, Willms and Somers' (2001) study found that instructional materials, size of the library and teacher trainings have significant positive effects on schooling outcomes; thus without the financial support from the government on education, none of these can happen.

In terms of class size, many studies have been carried out to find out the impact this has on students' academic achievement. Akerhielm's (1995) study reviewed 112 studies on class size and found that some studies showed significant positive or negative relationships between class size and academic achievement and some found no relationship at all. In fact, the relationship between low teacher–pupil ratios and high academic achievement may not be a linear one. There may be many other factors influencing this relationship. For example, Bonesronning's (2004) study showed that parents who value academic achievement will deliberately seek schools with low teacher–pupil ratios for their children, whereas some schools will allocate students with poor parental support to smaller classes.

Some studies have also suggested that reducing class sizes beyond a certain point may not be very cost effective in terms of increasing learning at certain grades (McMahon, 1998). Most studies, however, suggest that a smaller class size has its advantages, for example, students are able to get more attention from instructional staff, are more likely to associate with classmates, are less disruptive in class, are less likely to withdraw from school and so on; all of which can activate positive development of students in different ways (Becker and Powers, 2001; Driscoll et al., 2003).

Educational expenditure and class size are considered to be important factors influencing the quality of education by educators around the world, and most studies concentrate on the function of these two factors within education. As a contribution to the fields of education and psychology, this study will take a different perspective in investigating educational expenditure and class size by looking at how culture influences these two factors for different nations. Hofstede's cultural dimensions, namely Power Distance (PDI) and Individualism (IDV), were selected as the cultural means of investigating the above two factors, and detailed information on the two cultural dimensions is discussed below.

2. Hofstede's cultural dimensions

As defined by Hofstede and Hofstede (2005), value is "a broad tendency to prefer certain states of affairs over others" (p. 18). Both individuals and groups have their own sets of values and values are considered as the essence of culture. Culture is also defined by Hofstede and Hofstede (2005) as "the collective programming of the mind which distinguishes the members of one human group from another" (p. 21). Most people in the same culture hold the same values, in other words, values can be considered as an important component of culture. In order to study how members of a group in a society respond to their environment, an investigation of their culture is significant.

2.1. Power Distance (PDI)

PDI is concerned with human inequality. Every society has its own way of handling human inequality and human inequality can happen in different areas, such as prestige, wealth and power (Hofstede, 1984). Some societies will sustain equality

amongst their people but some still maintain hierarchical beliefs and systems that encourage inequality. A high PDI implies a wide discrepancy in equality between the authorities and the people. A low PDI implies the authorities and the people are being treated equally in the system (Hofstede, 1983).

A high PDI society concentrates on an unequal distribution of power amongst members of the society. People in such societies are afraid of conflicting with their authorities and their decisions authorities make. People of high PDI societies also feel that their lives are controlled by their authorities. In opposition, people in low PDI societies believe they have control over their own lives and have more courage to disagree with the authorities.

2.2. Individualism (IDV)

The IDV dimension essentially describes the relationship between the individual and collectivity (Hofstede, 2001). Significant differences are found between individualistic and non-individualistic (collectivistic) societies. Individualistic societies mainly focus on the self. Everything is seen as revolving around the self because people accentuate their own beliefs, attitudes and values, and give credibility to personal norms and goals. They are calculative because of the advantages this brings to the self. People have all their interests in earnings, career, security and autonomy, and they are all very important to people in individualistic societies. A high IDV ranking implies that indicates individuality and individual rights are emphasized within a society (Hofstede, 1983).

Industrialized, wealthy, urbanized societies seem to become increasingly individualistic, but traditional, poorer, rural societies tend to remain collectivistic (Hofstede, 1991). People in non-individualistic societies believe that personal concerns are unimportant since they have a preference on social norms, roles, situations, structures, agreements, and inter-group conflict (as opposed to intra-group conflict). Thoughts and behaviors that are different from group norms tend to be ignored and discouraged (Triandis, 1996, 1995; Triandis et al., 1998). People from low individualistic cultures have less control over their own direction and thinking.

3. Aims of this study

As mentioned in the Introduction, educators around the world are focusing on how and to what

Table 1
Definitions of the three educational factors from IMD survey

Educational factors	Definitions
Total public expenditure on education	A higher value means that the region has a higher education expenditure as a percentage of its GDP
Primary pupil–teacher ratio	A higher value means that a teacher has to teach a larger number of pupils in a class of primary school
Secondary pupil–teacher ratio	A higher value means that a teacher has to teach a larger number of pupils in a class of secondary school

extent educational expenditure and class size affect the quality of education. If these two factors really have a significant impact on the quality of education as claimed by some studies, then it is very important for educators to investigate why regions around the world invest differently in education and why they decide to have high or low pupil–teacher ratios.

This study aims to understand Total Public Expenditure on Education, Primary Pupil–Teacher Ratio and Secondary Pupil–Teacher Ratio from a cultural perspective. Two cultural dimensions, namely PDI and IDV, have been selected to help understand these three educational factors in different regions more thoroughly. In addition, the relationship between Total Public Expenditure on Education and Primary Pupil–Teacher Ratio and Secondary Pupil–Teacher Ratio will be examined. The definitions of the three individual educational factors are shown in Table 1.

4. Methodology and data

Part of this study applied data from the IMD World Competitiveness Yearbook 2004 (International Institute for Management Development, 2004) from the *International Institute for Management* Development, and this yearbook has been published every year since 1989. The International Institute for Management Development (IMD)[2] is a leading business school in Switzerland. IMD has a World Competitiveness Centre specialized in analyzing the competitiveness of different economies over the world. The IMD World Competitiveness Yearbook is one of the most comprehensive surveys to analyze factors related to competitiveness in 60 national and regional economies over the world.

IMD works with its 57 worldwide partner institutes to carry out the annual Executive Option Survey with over 4000 respondents to collect the data for analysis. They analyzed the survey data through 323 criteria, which are grouped into four major competitiveness aspects, including (i) economic performance, (ii) government efficiency, (iii) business efficiency, and (iv) infrastructure. Within the infrastructure aspect, three educational factors are included in the education aspect, namely Total Public Expenditure on Education, Primary Pupil–Teacher Ratio and Secondary Pupil–Teacher Ratio.

In order to analyze the three educational factors across countries from a cultural perspective, this study applied Hofstede's cultural dimensions (Hofstede, 2001). There were 53 regions included in the analysis of Hofstede's cultural dimensions of PDI and IDV. The combination of data from the IMD Competitiveness Yearbook and Hofstede's cultural dimensions was applied for investigating different issues of this study. After merging the data sets from the IMD World Competitiveness Yearbook and Hofstede's cultural dimensions, 43 regions were included in this empirical study. Table 2 presents the data for our analysis.[3]

5. Results and analysis

Empirical results from the simple regression analysis with a single explanatory variable are presented in Table 3. The signs of slope estimates for PDI were positive for both Primary Pupil–Teacher Ratio and Secondary Pupil–Teacher Ratio, but negative for Total Public Expenditure on Education. The slope estimates for PDI were significantly positive for Primary Pupil–Teacher Ratio ($p < 0.01$) and Secondary Pupil–Teacher Ratio ($p < 0.01$). PDI explained approximately 22% of the total variation of Primary Pupil–Teacher Ratio and 26% of the total variation of Secondary Pupil–Teacher Ratio. The slope estimate for PDI for Total Public Expenditure on Education was significantly negative ($p < 0.01$) and explained approximately 28% of the total variation of Total Public Expenditure on Education.

The signs of slope estimates for IDV were positive for Total Public Expenditure on Education, but negative for both Primary Pupil–Teacher Ratio and Secondary Pupil–Teacher Ratio. The slope estimate

[3]Dataset is analyzed by the statistical software SAS. Data and program for this analysis are available on request.

Table 2
Data

Country	Total public expenditure on education	Primary pupil–teacher ratio	Secondary pupil–teacher ratio	PDI	IDV
Argentina	4.39	20	12	49	46
Australia	5.216	17	12.6	36	90
Austria	5.609	14.3	9.8	11	55
Belgium	5.198	13.4	9.8	65	75
Brazil	1.645	25	22	69	38
Canada	8.127	18.3	17.8	39	80
Chile	4.22	31	27	63	23
China	3.141	21.6	18.3	80	20
Colombia	3.819	26	19	67	13
Czech Republic	4.607	19.4	13.8	57	58
Denmark	8.804	10	12.4	18	74
Finland	6.346	16.1	14	33	63
France	6.287	19.5	12.3	68	71
Germany	4.189	19.4	15.2	35	67
Greece	4.334	12.7	9.7	60	35
Hong Kong	4.349	20.92	18.17	68	25
Hungary	6.207	11.3	11.8	46	80
India	3.996	40	34	77	48
Indonesia	0.915	25.6	18.4	78	14
Ireland	n/a	20.3	14.6	28	70
Israel	8.6	20.1	12.8	13	54
Italy	4.881	10.8	10.2	50	76
Japan	3.604	20.6	15.1	54	46
Malaysia	8.026	18	17	104	26
Mexico	4.427	27	27.3	81	30
Netherlands	4.962	17.2	17.1	38	80
New Zealand	7.041	19.6	15.7	22	79
Norway	6.565	11.6	9.3	31	69
Philippines	2.66	35.2	36.4	94	32
Poland	6.022	12.5	15.4	68	60
Portugal	6.911	11.6	8.9	63	27
Singapore	4.214	25	20	74	20
South Africa	5.935	33	29	49	65
South Korea	3.571	32.1	20.1	60	18
Spain	4.384	14.7	11	57	51
Sweden	7.699	12.4	14.6	31	71
Switzerland	6.734	14	12	34	68
Taiwan	4.494	18.6	17.1	58	17
Thailand	4.215	20.4	25.4	64	20
Turkey	3.927	29.8	17.2	66	37
United Kingdom	4.694	18	18	35	89
United States	7.88	16.3	15.9	40	91
Venezuela	5.164	21	21	81	12

The data of the three educational factors is obtained from "IMD World Competitiveness Yearbook 2004", International Institute for Management Development, Switzerland. The scores of Hofstede's cultural dimensions for our analysis are obtained from Hofstede (2001).

Table 3
Results from regression models

Individual factors	PDI			IDV		
	Intercept	PDI slope	R^2 and n	Intercept	IDV slope	R^2 and n
Total public expenditure on education	7.568*** (11.615) <0.0001	−0.044** (−3.916) 0.000	0.277 42	3.249*** (6.071) <0.0001	0.039** (4.037) 0.000	0.289 42
Primary Pupil–Teacher Ratio	11.711*** (4.487) <0.0001	0.155** (3.431) 0.001	0.223 43	26.815*** (12.054) <0.0001	−0.134** (−3.385) 0.002	0.218 43
Secondary Pupil–Teacher Ratio	8.849** (3.840) 0.0004	0.151** (3.786) 0.001	0.259 43	21.138*** (10.586) <0.0001	−0.102* (−2.750) 0.009	0.156 43

This table presents the estimation results from simple regression model: $Y_i = \alpha + \beta X_i + \varepsilon_i$; where ($Y_i$) is an individual educational factor or overall average; (X_i) is the Hofstede's cultural dimension; (i) is the country index; (n) is the number of observations in the regression analysis. The first value is the parameter estimate. The value inside the bracket is the t-statistic for the parameter estimate. The value below the t-statistic is the p-value of the t-test.
Note: *, **, and *** indicate the significance at the 5%, 1% and 0.01% levels, respectively.

for IDV for Total Public Expenditure on Education was significantly positive ($p < 0.01$). It explained approximately 29% of the total variation of Total Public Expenditure on Education. The slope estimates for IDV were significantly negative for Primary Pupil–Teacher Ratio ($p < 0.01$) and Secondary Pupil–Teacher Ratio ($p < 0.05$). IDV explained approximately 22% of the total variation of Primary Pupil–Teacher Ratio and 16% of the total variation of Secondary Pupil–Teacher Ratio. Fig. 1 shows the scatter plots for the actual and predicted values of the three educational factors.

Table 4 shows an analysis of the relationship between the Total Public Expenditure on Education and pupil–teacher ratios (both Primary Pupil–Teacher Ratio and Secondary Pupil–Teacher Ratio). The slope estimates of Total Public Expenditure on Education were significantly negative for Primary Pupil–Teacher Ratio ($p < 0.01$) and Secondary Pupil–Teacher Ratio ($p < 0.01$). Total Public Expenditure on Education explained approximately 28% of the total variation of Primary Pupil–Teacher Ratio and approximately 16% of the total variation of Secondary Pupil–Teacher Ratio. Furthermore, Table 5 shows that the three educational factors and the two cultural dimensions are significantly correlated with each other. The correlation results show that the relationship amongst the five variables was strong to very strong. It is obvious that more educational expenditure allows schools to hire more teachers to teach students, hence, a low pupil–teacher ratio.

As shown in Fig. 2, based on the above regression results, a path analysis model was developed to understand the relationships amongst PDI, IDV, Total Public Expenditure on Education, Primary Pupil–Teacher Ratio and Secondary Pupil–Teacher Ratio.

6. Discussion

When many people are trying to examine the impact of educational expenditure and class size on the quality of education, it is important to step back and understand why some regions are willing to invest more money in education, which allows a lower pupil–teacher ratio to occur. This study found that culture has an influence on both expenditure on education and class size in primary and secondary schools in different regions. First of all, PDI significantly explained 28% of Total Public Expenditure on Education and the relationship was negative. PDI also significantly explained 22% and 26% of Primary Pupil–Teacher Ratio and Secondary Pupil–Teacher Ratio, respectively, and the relationships were positive. This indicates that a region with high PDI will have a lower percentage of expenditure on education based on its GDP and a high pupil–teacher ratio at both primary and secondary levels.

In every region, expenditure on education is determined by governments and authorities since the education sector is one of the biggest items in a government's budget (Falch and Rattso, 1999). In
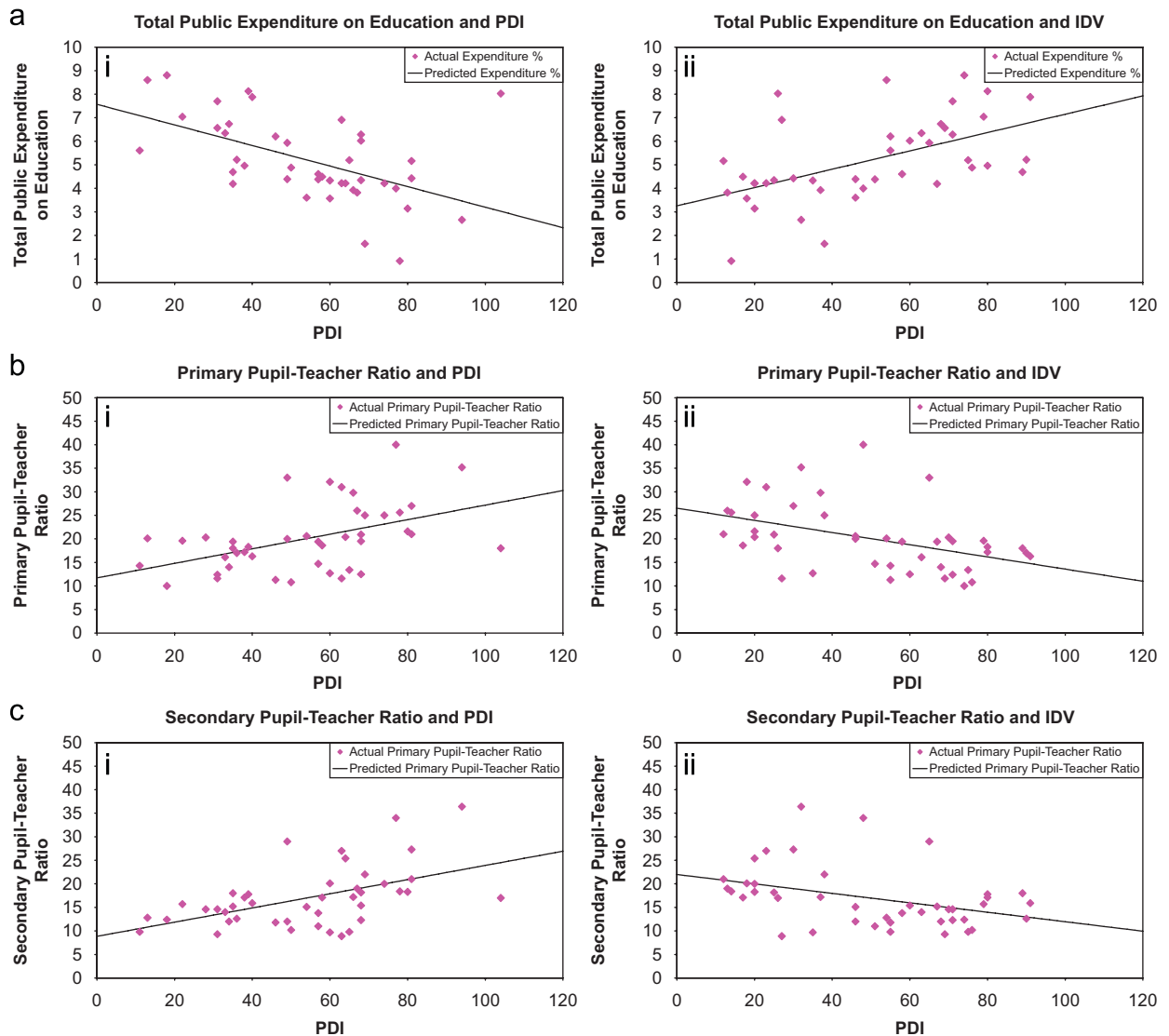
Fig. 1. Simple regression analysis for individual educational factors.

high PDI cultures, the government and the authorities are considered important and powerful and decisions on educational expenditure and class size are made by them. Within this kind of unequal system, those in power may neglect the rights of common people and may decide to invest a higher percentage of the GDP on other areas that are beneficial and profitable to them, rather than benefiting the majority. Children of powerful people in high PDI cultures can always enroll in private schools or be sent abroad to be educated since their parents have higher status and are wealthy. This allows the children of high status and powerful people to participate in activities that common

people cannot afford. This is similar to the results in Hwang's (2005) study that showed there is a relationship between inequality and the size of educational expenditure. Hwang's (2005) study claimed that countries with greater inequality within society spend more money on tertiary education, which only small amounts of wealthy people can afford, instead of on primary and secondary education.

In low PDI cultures, on the other hand, powerful and ordinary people should have the same rights and opportunities since inequality in low PDI cultures should be minimal. Ordinary people in low PDI cultures will fight for their rights and

Table 4
Simple regression analysis for pupil–teacher ratios by the total public expenditure on education

Dependent variables (Y_i)	Independent variable: total public expenditure on education$_i$		
	Intercept	Slope	R^2 and n
Primary pupil–teacher ratio	31.092*** (10.54) <0.0001	−2.132** (−3.96) 0.000	0.282 42
Secondary pupil–teacher ratio	24.655** (8.58) <0.0001	−1.472** (−2.81) 0.008	0.165 42

This table presents the estimation results from simple regression model: $Y_i = \alpha + \beta X$ (expenditure percentage$_i$) $+ \varepsilon_i$; where (Y_i) is (Primary Pupil–Teacher Ratio$_i$) and (Secondary Pupil–Teacher Ratio$_i$); (i) is the country index; (n) is the number of observations in the regression analysis. The first value is the parameter estimate. The value inside the bracket is the t-statistic for the parameter estimate. The value below the t-statistic is the p-value of the t-test.
Note: *, **, and *** indicate the significance at the 5%, 1%, and 0.01% levels, respectively.

Table 5
Correlations amongst two cultural dimensions and three educational factors

	1	2	3	4	5
1. PDI	1.00	−0.68**	−0.53**	0.47**	0.51**
2. IDV		1.00	0.54**	−0.47**	−0.40*
3. Total public expenditure on education			1.00	−0.53**	−0.41**
4. Primary pupil–teacher ratio				1.00	0.86**
5. Secondary pupil–teacher ratio					1.00

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).

opportunities, and interestingly, powerful people tend to prefer to make themselves look less powerful by including ordinary people in decision making. As a result, educators, parents, students and ordinary people in low PDI cultures will demand the government and authorities invest more money in education so as to have low pupil–teacher ratios so that students (future workers in society) from both powerful and ordinary families can receive equal education and later equal job opportunities. It is believed that education is an important barrier in

relation to family origin and an individual's future prospects (Lopez-Valcarcel and Quintana, 1998). In addition, the authorities in low PDI cultures are also willing to accept demands and suggestions from the majority. Overall, based on the pressure and demand from ordinary people and the acceptance characteristic of powerful people, higher expenditure on education and lower class size are more easily achieved in low PDI cultures.

Moreover, this study found that IDV significantly explained 29% of the Total Public Expenditure on Education and the relationship was positive. PDI also significantly explained 22% and 16% of Primary Pupil–Teacher Ratio and Secondary Pupil–Teacher Ratio, respectively, and the relationships were negative. This indicates that a region with high IDV would have higher expenditure on education as a percentage of GDP, and a low pupil–teacher ratio at both primary and secondary levels. People in high IDV cultures believe that individual interests should be respected and that they are responsible for their own thoughts, behaviors and decisions. People are ambitious about their careers and believe that success can be achieved through the increase of ability. In addition, these people will only make a calculative involvement since earning is the most important thing in relation to getting a job.

People in high IDV cultures will try to increase their ability in order to be competitive in school and in society. Having a good education is the best way to increase one's ability to make good individual decisions. Educators and parents in high IDV cultures will urge the government to invest more money in education and have lower pupil–teacher ratios so that their children can learn better and become highly competitive in society later on. Since every individual in a region contributes to GDP, people in high IDV cultures believe that they should have the right to express their views on educational expenditure and pupil–teacher ratio as well. When so many studies describe the advantages of having high educational expenditure and small class size, people in high IDV cultures will pressure their governments to follow the trend.

As the characteristics of people in high IDV cultures are practical and oriented towards competitiveness, the government is also willing to invest more money in education and lower pupil–teacher ratios so that their region's students (future workers) can become more competent and financially stable through the education process (Card and
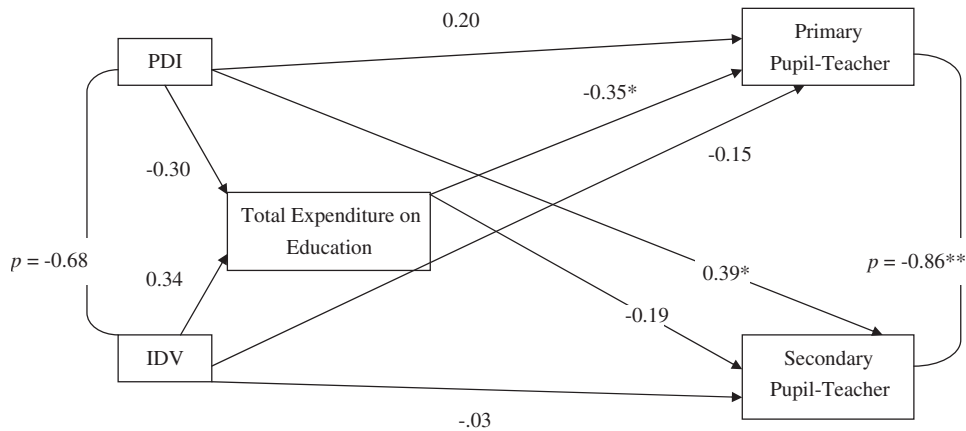
Fig. 2. Path analysis model.
Note: *, **, and *** indicate the significance at the 5%, 1%, and 0.01% levels respectively. The above path analysis is based on the standardized regression estimates from the following three structural equations:

Equation (1) (Total Public Expenditure on Education)
$$= \alpha_1 + \beta_{1,1} \times \text{PDI}_i + \beta_{1,2} \times \text{IDV}_i + \varepsilon_{1,i}$$

Equation (2) (Primary Pupil-Teacher Ratio)$_i$
$$= \alpha_2 + \beta_{2,1} \times \text{PDI}_i + \beta_{2,2} \times \text{IDV}_i + \beta_{2,3} \times (\text{Total Public Expenditure on Education})_i + \varepsilon_{2,i}$$

Equation (3) (Secondary Pupil-Teacher Ratio)$_i$
$$= \alpha_3 + \beta_{3,1} \times \text{PDI}_i + \beta_{3,2} \times \text{IDV}_i + \beta_{3,3} \times (\text{Total Public Expenditure on Education})_i + \varepsilon_{3,i}$$

Kruegar, 1992). As a result of this, their nation can maintain its competitiveness and become stronger economically. The governments of high IDV cultures will not readily invest money in areas which are meaningless and useless. Moreover, as Marlow's (2000) study suggests, policy-makers in specific regions who desire to earn the people's votes, will increase expenditure on education in response to the preferences of parents and educators. Again, both governments and individuals in high IDV cultures must be going in the same direction in order to have high Total Public Expenditure on Education and low Primary and Secondary Pupil–Teacher Ratios.

Generally speaking, Hofstede's cultural dimensions can be a useful way for the exploration of school improvement (Hallinger and Kantamara, 2001). Since every country has its own values and culture, applying Hofstede's cultural dimensions, namely PDI and IDV, is a practical way of understanding Total Public Expenditure on Education and Primary and Secondary Pupil–Teacher Ratios across 43 different regions. In terms of PDI and IDV, in order to improve the quality of education and to initiate any educational reforms, the support of different groups and disciplines in society is essential. A lack of support from one side

will only delay the improvement of education in a region.

Besides understanding that Total Public Expenditure on Education and Primary and Secondary Pupil–Teacher Ratios were influenced by PDI and IDV, this study also showed that Primary and Secondary Pupil–Teacher Ratios were affected by the Total Public Expenditure on Education and that this result echoes the results of many other educational studies which have focused on the relationship between educational expenditure and class size. Based on the regression analysis model and the correlation results of this study, a path analysis model has been developed to help us understand more about the impact of culture on educational expenditure and class size; and so understand the relationships amongst the two cultural dimensions and the three educational factors from IMD.

7. Conclusion

Educators and policy-makers who are interested in promoting the quality of education by persuading governments to increase the expenditure on education based on their GDP should understand the culture, beliefs and values of particular countries

first in order to develop and implement practical strategies for achieving such goal. Strategies may be different from one country to another since each country has its own unique culture and practices. Though all countries are now closely monitored and pressured by international agencies around the world to ensure education quality is provided to all children, there are still many countries (such as Brazil, China, Indonesia and Philippines) that are investing limited amount of money on education. Based on many studies, low education quality as a result of low education expenditure could negatively impact the outputs (achievement) and outcomes (employment and earnings) of education.

It is not easy to change people's culture, beliefs and values, and therefore, there must be very strong reasons, according to those countries, to persuade and motivate them to modify their traditional beliefs and practices. For example, educators and policy-makers must then do more in-depth investigations on why some countries would invest limited amount on educational expenditure (such as their culture and beliefs) and how the low investment could seriously hurt the current and future development and competitiveness of their countries and then present the results to those governments and societies. As mentioned, it takes both the governments and the societies to negotiate and compromise in order to make reforms successful. Thus, both sides must recognize the disadvantages of having low education expenditure and inappropriate education quality. When people are able to see the immediate and future negative consequences of their current behaviors and beliefs, they may be more willing to accept the advices and assistance from others.

Moreover, results of this study are particularly important for developing countries that have an aim of escaping from poverty. Equity of education is also a major concern in many developing countries, and the disadvantaged groups, such as females and the very poor, may not benefit from the education expenditure of their governments. Most of the time, a large part of these countries' spending may be invested on areas such as economical and political aspects since most people believe these investments could bring instant and explicit outcomes to the countries. However, people are the most significant asset that a country has, and it is important for these countries not to overlook the investment on education when they want to escape from poverty and have a solid foundation for future development.

According to this study, it is important for the governments and societies in the developing countries to value individual rights in order to provide sufficient budget for children's education. For educators and policy-makers who are eager to change the education quality and increase the investment on education expenditure to all children in these countries, before finding strategies to persuade the governments to invest more money on education, it may be important for them to modify the way the societies value human rights.

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