Reading Attitudes of South East Asian Countries

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Abstract. South East Asian states as developing countries, except Singapore, are underperform in most studies of Programme for International Student Assessment (PISA), especially in Reading subject. Therefore, this paper aims to examine reading attitude which is assumed has correlation with South East Asian students’ achievement in reading. It refers to PISA 2009 questionnaire results and reading score. In PISA 2009, four South East Asian countries, Singapore, Malaysia, Indonesia and Thailand participated in the study. In comparison, Australian and Korean students’ achievement in PISA 2009 is counted for in order to compare reading attitude and reading achievement score. Reading attitudes are one of important factors determining students’ performance in reading. As PISA 2009 results show, there are positive reading attitudes in South East Asian countries. However, these positive attitudes have insignificant impact on reading achievement as the students have lower OECD average score in PISA 2009 reading test (except for Singapore). Therefore, this paper aims to have another insight about related factors that have contribution to PISA reading score in relation with reading attitudes. In the paper, theory of planned behavior provides a useful framework for examining reading attitudes in South East Asian countries.

Keywords: PISA 2009, Reading Attitudes, South East Asian, Theory of Planned Behavior.

INTRODUCTION

PISA is an international study that was launched by OECD in 1997. It aims to evaluate education systems worldwide every three years by assessing 15-year-olds’ competencies in the key subjects: reading, mathematics and science (OECD, 2013). The latest study was in 2012 which 64 countries participated (OECD, 2013). Every cycle, PISA focuses on one of three domains which are reading, mathematics and science. In PISA 2009, reading is the major assessed domain as clearly stated in the assessment and questionnaire framework.

Reading-related skills, attitudes, interests, habits and behaviors have been shown in past studies to be strongly linked with reading ability. In other studies reading engagement including reading attitudes, interest, habits and behaviors has been shown to account for reading achievement than any other variable besides previous achievement (Wigfield et al., 2008). Therefore, reading attitudes as a key factor in reading engagement have significant contribution to reading achievement.

Related to behavioral performance, Ajzen (1991) offers the theory of planned behavior (TPB) in order to predict behavior by its 3 postulates namely attitude, subjective norms and perceived behavioral control. Here is a general rule of this theory:

The more favorable the attitude and subjective norm with respect to a behavior, and the greater the perceived behavioral control, the stronger should be an individual’s intention to perform the behavior under consideration (Ajzen, 1991, p. 181).

As attitude is closely related to behavior, TPB is appropriate to examine its relationship in reading. In associated with PISA study, attitude and behavior should be counted for examining student performance in reading.

Participating countries are ranked based on their performance in the PISA study. As widely known, OECD countries’ performance are generally better than non-OECD states. South East Asian states as developing countries, except Singapore, are underperform in most PISA studies from 2000-2009. Therefore, this paper aims to examine reading attitude which is assumed has correlation with South East Asian students’ achievement in reading. This paper refers to PISA 2009 questionnaire results. The data shown are officially published in PISA official website.

In PISA 2009, four South East Asian countries, Singapore, Malaysia, Indonesia and Thailand participated in the study. In comparison, Australian and Korean students’ achievement in PISA 2009 is counted for this paper to compare the reading attitude and reading achievement.

THEORY OF PLANNED BEHAVIOR

As popular theory in measuring behavior, TPB is an extension concept of theory of reasoned action (Manstead and Parker, 1995; Conner and Armitage, 1998; Sheeran et al., 2003). Perceived behavioral control is considered as additional factor
that affects intention and behavior (Ajzen, 1991). TPB hypothesizes three conceptually independent factors of intention.

Firstly, the attitude toward the behavior refers to ‘the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question’ (Ajzen, 1991). The following factor is subjective norm which refers to ‘the perceived social pressure to perform or not to perform the behavior’ (Ajzen, 1991). The last predictor of TPB is perceived behavioral control which refers to ‘the perceived ease or difficulty of performing the behavior and it is assumed to reflect past experience as well as anticipated impediments and obstacles’ (Ajzen, 1991). In measuring reading behavior, TPB offers the appropriate concept to define factors related to reading behavior.

![Diagram](https://via.placeholder.com/150)

**Figure 1** Theory of Planned Behavior Model

**Reading Attitudes**

The first factor, attitude, is based on experiences with the attitude object (Manstead and Parker, 1995; Broeder and Stokmans, 2013). According to TPB, it develops from peoples’ beliefs about an object that relate to certain attributes (other objects, characteristics or events). The attributes are closely linked to behavior that is valued positively or negatively. Further, people learn to evaluate the favorably or unfavorably attitudes toward behaviors with the consequences (Doll and Ajzen, 1992).

Reading attitude is conceptualized as a learned predisposition to respond consistently favorably and unfavorably to the reading activity and perception. McKenna et al. (1995) suggests that reading attitudes are mainly produced by three factors: ‘(a) beliefs about the outcomes of reading, judged in the light of how desirable an individual regards those outcomes, (b) beliefs about the expectations of others, judged in the light of the individual’s motivation to conform to those expectations, and (c) specific reading experiences’.

It is acknowledged that positive reading attitude is associated with good reading behavior (Schraw and Bruning, 1996; Martinez et al., 2008). Some scholars point out that attitude and behavior leads to students’ higher academic achievement (Knuver and Brandsma, 1993; Petscher, 2010; McKenna, 2012). Although, attitude and behavior are believed to be important factors in reading achievement, some theorists argue that this premise has to be re-observed (Ghaz, 2003; Kush et al, 2005) due to the involvement of other factors that affected reading achievement such as reading interest and enjoyment, reading perception from school and community environment and supported reading resources. Thus, the subjective norm and perception behavioral control should be counted for examining the value of reading as suggested by Ajzen’s TPB.

Twelve questions from PISA 2009 questionnaire are considered as the indicators of reading attitude in this paper. The questions are:

- Spend reading for enjoyment
- Reading is one of my favorite hobbies
- I like talking about books with other people
- I feel happy if I receive a book as a present
- I enjoy going to a bookstore or a library
- I like to express my opinions about books I have read
- I like to exchange books with my friends
- I read only if I have to
- I find it hard to finish books
- For me, reading is a waste of time
- I read only to get information that I need
- I cannot sit still and read for more than a few minutes

The questions attempt to examine reading attitude in six PISA 2009 participating countries. Students’ responses through these questions reflects their attitudes toward reading which further are counted for analyzing their achievement in PISA 2009 reading test. The italic questions are negatively worded and negative responses are expected for these types of questions.

**Subjective Norms**

In accordance with TPB, subjective norm is highlighted as the perceived social pressure. In relation with subjective norm, TPB’s general rule is ‘the more favorable the attitude and subjective norm with respect to a behavior, and the greater the perceived behavioral control; the stronger should be an individual’s intention to perform the behavior under consideration’ (Ajzen, 1991)

Considering that this paper covers six culturally-difference countries, the social norms in each country is not supposed to be similar. It will be differentiated by individual and collective culture in learning process as suggested by Broeder and Stokmans (2013). As previously stated, Australia,
Korea and Singapore are regarded as higher achiever and the others are low performers. In this paper, Australian, Korean and Singaporean students are categorized in more individualistic character in learning process while Malaysian, Indonesian and Thai students with its higher engagement to community are regarded as students with collective characteristics.

In learning process, students with individual characteristic conceive achievement as personal pride and self-actualization (Hong et al., 2001). As a result, students are accustomed to be high achiever and teachers supply sufficient resources in supporting their potential ability. Their learning process is not merely the process of getting acceptance from their peers or community. From this view, reading as one of learning process is treated as an enjoyable activity for them. Further, students who perceive reading as a pleasure activity are associated with better performance in reading (OECD, 2010).

Past research point out that Korea and Singapore are more likely categorized as collective community (Brochn, 1994; Hong et al., 2001). However as they are developed countries with advanced development in education, the students are more likely to be individual learner because they tend to be active learner with the awareness of independent learning process.

On the other hand, collective community as stands in many developing countries has strong community engagement. Their attitude and behavior is mostly affected by community norms such as conform with their group (Bond and Smith, 1996) and less likely to seek differentiation from others (Heine et al., 1999). Therefore, peers and community’s perception mostly impact on students’ learning process. Reading as the important factor in learning process is regarded as the formal activity in classroom to maintain their relationship with peers not for pleasure in this group (Coburn, 2001).

In contrast, reading socialization as argued by Verbood and Van Rees (2003) has shown the positive effect on reading attitude and behavior that leads to the increase of reading level ability. In the case of reading, it is widely socialized that best students and top performers in school are mostly associated with his/her strong interest in reading. Reading as one way to master the subject is the other perception resulted from reading socialization. Consequently, reading is regarded as an ideal activity that is expected for every student. Reading is positively accepted as a good concept related to learning process not for enjoyment and mastering reading skill.

This paper covers subjective norms in term of individual and collective characteristics of students in the participating countries. These characteristics contribute to reading intention and behavior which further lead to students’ academic achievement in reading. The role of reading socialization is also counted for examining students’ perception in reading.

**Perceived Behavioral Control**

Perceived behavioral control (PBC) has indirect and direct effect on behavior. The indirect effect is that it has motivational consequences for behavioral through intentions (Madden et al., 1992). The direct link to behavior assumes the individual control over performing the behavior. It is significant when ‘(a) the behavior in question is likely to have some aspect not under volitional control and (b) perceptions of control over the behavior are accurate’ (Madden et al., 1992).

PBC concerns on peoples’ personal judgment regardless of their ability to perform the behavior. The perception of the availability of resources and opportunities for performing the behavior are assumed to be included in PBC. In the case of reading, the availability of supported resources that assist people to engage in reading (such as book supply, Broeder and Stokmans, 2013) is likely to be one of PBC factors. In this paper, socio-economic status (SES), home educational resources, cultural possession and home possession are involved in PBC factors. Further, the parental education is also considered as PBC factor due to its direct impact on pupils’ reading intention and behavior.

Based on TPB assumptions, this paper assumes that SES, home educational resources, cultural possession and home possession have indirect relation to reading behavior. They directly link to reading intention which further has linkage to reading behavior. It is caused by the need for students’ active participation in optimizing these factors to change their reading behavior. However, these factors are likely to encourage reading intention.

Parental education is assumed has direct relation to reading behavior. Well-educated parents are likely to be more active in driving their children to read. These parents also act as role model for their children due to their reading activities such as read newspaper or read online news. Therefore, the assumption in this direct relation is the higher the parental education, the more likely their children keen on reading activities which leads to good reading behavior.

**METHOD**

This paper adopts PISA 2009 published data gained from PISA official website. Data for six PISA 2009 participating countries are overviewed in this paper. They are Australia, Korea, Singapore, Malaysia, Indonesia and Thailand. The first 3 countries achieved scores higher than OECD...
average in PISA 2009 reading test. The other states, Malaysia, Indonesia and Thailand, had reading score below the OECD average. In this study, Malaysia did PISA 2009+ means it established PISA in 2010 due to the inability to hold PISA in 2009 as other participating countries did.

Students’ responses to questionnaire are the central analysis of this paper. The responses in reading attitude are shown in graphs in order to illustrate and compare their performance. Further, the correlations of each related-factor in reading are statistically analyzed for capturing the relationship of students’ attitude and achievement in reading.

RESULT

To get an idea of reading attitudes in sample countries, the results of present research broke down into two main parts, reading attitudes in South East Asian Countries and the relationship of reading attitudes and reading performance.

Reading Performance in PISA 2009

The following graph shows reading performance in PISA 2009 for sampled countries. It can be seen that the first three countries (Australia, Korea and Singapore) had score higher than OECD average (more than 500) while the others are low performers that scored below than 500.

![Figure 2 PISA 2009 Reading Score](Image)

| Country       | PISA 2009 Reading Score |
|---------------|-------------------------|
| Australia     | 515                     |
| Korea         | 539                     |
| Singapore     | 526                     |
| Malaysia 500+ | 414                     |
| Indonesia     | 402                     |
| Thailand      | 421                     |

*Malaysia did PISA 2009+

Source: PISA 2009 Official Website

1. Spend reading for enjoyment

![Figure 3 Spend Reading for Enjoyment](Image)

The graph shows students’ responses about spend reading for enjoyment. It is clearly seen from the graph that high achievers (Australian, Korean and Singaporean students) spend less time to read for their leisure time. In contrast, low performer students seem to spend more time in reading for enjoyment that can be inferred from the second criteria, reading for enjoyment for 30 minutes or less a day.

2. Opinion about reading

The following figure illustrates students’ opinion about reading. As shown in the first graph, more than 50 % of Malaysian, Indonesian and Thai students make reading as their favorite hobby. In contrast, students from other three countries have less interest in reading as less than 50 % of them agreed that reading is their favorite hobby. The next chart shows different trend, the top performer students are more agreed in the statement that reading is a waste of time while the percentage of low achiever pupils who agreed with this statement are slightly lower than their counterpart.

Reading Attitudes in South East Asian Countries

Results in this section are based on students’ responses to PISA 2009 questionnaire. As shown in the next figures, the graphs illustrate reading attitudes of each country.
3. Purpose of Reading

The first bar chart infers that high achievers students from Australia, Korea and Singapore do reading because they have to with almost 50% of these students agreed with the statement that I read if I have to. The other graph shows various opinions about reading as an activity to only get information that needed with the most students agreed of this statement is more than 50% Malaysian students. The lowest percentage is Korean pupils with around 30% who agreed with this statement.

4. Opinion about Books

Several questions related to books are asked in the PISA 2009 questionnaire. It is mostly known that reading is closely associated with books. Therefore, the following figures illustrate responses related to students’ opinion about books. It is clearly seen that in figure 6, low performer students from Malaysia, Indonesia and Thailand have more positive attitudes towards books as they dominate higher percentage in every graphs.
Instead of using positive statement, the questionnaire also provides negatively worded questions as shown in figure 7. It can be seen that students in South East Asian countries (except Singaporean students) are more agreed to the statements than Australian, Korean and Singaporean pupils.

5. I enjoy going to a bookstore or a library
Other activity that closely related to reading is going to a bookstore or a library. Students’ responses about this are collected in order to capture their reading attitudes. The following figure highlights the enjoyment of going to bookstore or library. Students with lower performance in reading in PISA 2009 (Malaysian, Indonesian and Thai students) are more enjoy in going to bookstore or library than the high achievers with the portion of more than 50 % of sampled students agreed with this statement.
The Relationship of Reading Attitudes and Reading Performance

TPB postulates the importance of other related factors in reading attitudes in affecting reading behavior. Thus, the relationship of these factors is calculated for further analysis in understanding students’ reading attitudes that leads to their academic achievement in reading.

1. Correlations of Reading Ability and Gender and SES

| Sex                   | Plausible value in reading |
|-----------------------|-----------------------------|
| Index of economic, social and cultural status (SES) | .501**                      |

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

Source: PISA 2009 Official Website

In relation to gender and SES, gender negatively correlates with reading performance means that female students are likely to get higher score in reading than male students. However, the correlation is low and weak (< .30). Further, SES as most common factor related to academic achievement has relatively strong correlation with reading performance with correlation coefficient more than .50. It shows that SES is likely to be the most contributive factor in reading achievement.

2. Correlations of Reading Ability and Enjoyment Time and Joy/Like Reading

|                        | Plausible value in reading |
|------------------------|-----------------------------|
| Reading Enjoyment Time | .163**                      |
| Joy/Like Reading       | .277**                      |

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

Source: PISA 2009 Official Website

From the table, there are weak correlations between reading achievement and reading enjoyment time and joy/like reading (correlation coefficient less than .30). It means that both reading for enjoyment time and joy/like of reading have little contribution to students’ reading performance.

3. Correlations between Reading Attitudes and Reading Performance

| Attitude                          | Plausible value in reading |
|-----------------------------------|----------------------------|
| Read Attitude – Only if I have to# | -.219**                    |
| Read Attitude - Favorite hobbies   | .122**                     |
| Read Attitude - Talk about books   | .134**                     |
| Read Attitude - Hard to finish#    | -.270**                    |
| Read Attitude - Happy as present  | .117**                     |
| Read Attitude - Waste of time#    | -.243**                    |
| Read Attitude - Enjoy library     | .152**                     |
| Read Attitude - Need information# | -.305**                    |
| Read Attitude - Cannot sit still# | -.347**                    |
| Read Attitude - Express opinions  | .105**                     |
| Read Attitude - Exchange          | .040**                     |

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

* The statement is negatively worded. Negative responses are expected.

Source: PISA 2009 Official Website
It can be inferred from the table that most of reading attitude variables have weak correlation with reading performance (correlation coefficient below than .30). There are merely reading attitude-need information (.305) and reading attitude-cannot sit still (.347) that have correlation slightly above .30. It underlines that these variables contribute to reading performance more than other variables. The correlation is in opposite direction due to its negative value. As a result, if these negative attitudes decrease, reading performance improves and vice versa. In general, the negative attitudes have correlation relatively higher than positive attitudes as shown in the table.

4. Correlations of Reading Ability and Household Possessions and Wealth

|                      | Plausible value in reading |
|----------------------|----------------------------|
| Home educational resources | .363**                    |
| Cultural Possessions   | .151"                     |
| Home Possessions       | .422"                     |
| Wealth                | .308"                     |

** Figure 13 Correlations of Reading Ability and Household Possessions and Wealth

Source: PISA 2009 Official Website

In association with students’ means of support, figure 12 highlights the correlations of reading ability and household possessions and wealth. From the table, it can be seen that cultural possession has weak correlation with reading ability. The other variables have moderately strong correlation with reading ability (with correlation more than .30). The most correlated variable is home possession (.422) which is defined as reading supported tools in home such as study room, computer, internet, educational software, classic literature, textbooks and dictionary (PISA 2009 questionnaire, OECD, 2013).

5. Correlations of Reading Ability and Parental Education

|                      | Plausible value in reading |
|----------------------|----------------------------|
| Educational level of father (ISCED) | .427**                   |
| Educational level of mother (ISCED)  | .424**                    |
| Highest educational level of parents | .438**                   |

** Figure 14 Correlations of Reading Ability and Parental Education

Source: PISA 2009 Official Website

The other factor that assumed to be related to students’ achievement in reading is parental education as shown in the table above. Parental education, both father and mother or students’ guardian, are measured to gain its correlation with students’ reading performance. The correlation of these variables are moderately strong (.427 and .424 respectively). The other variable that included in this factor is the highest educational level of parents that shows the strongest correlation to reading performance than other variables (.438).

DISCUSSION

The results of present research suggest that TPB provides a useful framework for examining reading attitudes in South East Asian countries. Three main factors in TPB are defined in this section to find out its contribution on reading behavior that is assumed affect students’ reading achievement in PISA 2009.

Reading Attitude

In general, as shown in the results, low performer students (Malaysian, Indonesian and Thai students) show positive reading attitudes. As offered by TPB, the positive attitudes can encourage reading intentions that further change the behavior. Thus, the positive reading behavior can enhance students’ reading performance (Martinez et al., 2008). In contrast, their performances in reading are underperforming which is contradictory with past research concern on the importance of positive attitudes in enhancing students’ performance in reading (Walberg and Tsai, 1985; Rowe, 1991).

Therefore, it can be inferred that some factors make contributions in reading performance. From the results, the amount of time allocated for reading enjoyment is less likely to contribute on reading achievement because top performer students seem less interested in this activity. It is contrary with the research by experts (Senchal, 2006; Hughes-Hassel and Rodge, 2007) which suggests that leisure reading has close relation to reading achievement. It should be noted that the results are mainly gained from PISA 2009 reading study that the questionnaire was given after student finished the reading test. Students may think that reading for enjoyment is an activity of reading textbook or subject-related book although the idea of this question is to ask students whether it is related or not to their general reading activity not only for school subject reading materials.

The other results show interesting points. Students’ opinions about reading are likely to be positive. More than 50 % of South East Asian students (including Singaporean students) agreed that reading is a favorite hobby. Their counterparts (Australian and Korean pupils) are less likely to
agree with this statement with the percentages only 35 % and 39 % respectively. The intensive reading socialization in South East Asian countries contribute on describing this attitude (Kraaykamp, 2003; Kloosterman et al., 2010). Due to the positive image and perception of reading, students intend to be the ideal student who is illustrated with his/her depth interested in reading such as make it as favorite hobby. However, Australian and Korean students are less interested in making reading as their hobby. Although they achieve higher score in reading, they are not merely to be more engaged in reading activity because there are many activities attract their interest such as sport and music. The awareness of self-concept including the preference of hobby or leisure activity is more visible for this group because their attitudes are not much affected by their peers or community.

This trend is similar with other statement about reading is a waste of time. The proportion of students who agreed with this question is low (the percentage of all of students from all countries are scored far below 50 %). From this result, reading is appreciated as the important process of getting knowledge so that they disagree with this statement. Further, learning process has to include reading and writing in order to gain specific knowledge and understand teacher's explanation. Students acknowledge that learning process has to be supported by reading activity such as reading to assist them in doing assignment or project.

Students’ responses of the purpose of reading as shown on the graphs infer that higher achievers have a tendency to read if they have to. It implies that reading is treated as a learning activity as teachers instruct them to read as part of learning process. However, there are no significant differences in students' perception about reading to get information in all sampled country. It is the expected responses because the main purpose of reading is to get information especially for students who have to be update with recent information to support their learning activity.

In learning activity, attitudes towards books reflect the interest and engagement in reading. From the results, it is clearly seen that low performers are more positive in their attitudes towards reading. They seem to be more interested in reading book although their reading achievement is lower than their counterparts who achieve higher score with less interest in reading. As proposed by Kraaykamp (2003) reading socialization creates intended and expected attitudes about reading that is believed by students as a beneficial activity in learning process. Therefore, the positive attitudes towards reading can be created by well reading socialization that produce students’ beliefs about reading.

Related to reading materials issue, in developing countries, students’ accessibility to qualified books is limited due to the budget constraint. The governments are struggling with the provision of sufficient school infrastructure and teachers. Thus, the provision of qualified books and libraries are not the priority of educational development (Lockheed and Hanushek, 1988). This situation implies that students’ responses towards books should be less positive because of the lack of book supply. However, the attitudes show good sign. Students in South East Asian countries (except Singaporean students) have high interest in reading book although the book supply is limited. It can be caused by the need of reading book for assisting their school life.

In line with attitudes towards books, the response about library shows similar trend. Low achievers response more positively about library. More than 70 % of sampled students in South East Asian countries (including Singapore) enjoy going to a bookstore or library. However, as the number of qualified library is limited in these countries (Malaysia, Indonesia and Thailand) (OECD, 2010), the result is contradictory with this figure. It simply implies that students enjoy their library or bookstore visit although the facilities are insufficient. The other indication is that library or bookstore offers the assistance for students’ learning process for instance helping in doing literature review for their assignment or project. In this case, visiting library or bookstore gives benefits which are interpreted as an enjoyable activity for them.

**Subjective Norms**

This paper covers subjective norms in term of individual and collective characteristics of students in the participating countries. These characteristics contribute to reading intention and behavior which further lead to students’ academic achievement in reading.

As developed countries have higher reading score, the perceived norms in education and learning process are considered to be reviewed because it contributes to their achievement. It is acknowledged that formal learning process as in the school offer students a range of knowledge that is useful for students’ future life. Besides schools, experts point out that society norms affect students’ intention and behavior in their academic life (Gonzales et al., 1996; Chen et al., 1997).

This study emphasizes the subjective norms in reading activity that are assumed affect students’ behavior which lead to their achievement in reading. As previously stated, students from Australia, Korea and Singapore as developed countries are typically more individualistic than students in developing countries regardless their cultural identity (Asian or Non-Asian students).
First world countries, Australia, Korea and Singapore, are more concerned on better and qualified education due to their need of preparing and empowering students for national development and global demand for qualified human resources. Economic constraints are no more problems in developing their human resources. In this society, students have more supported learning materials for improving their skills. However, as they have wider opportunity in developing their potentials, competition is a part of their learning process. According to Johnson and Johnson (1979), competitiveness leads to individualistic behavior because it enforces students to achieve personal achievement against others. Therefore, their performances are mostly affected by their self-perception not merely by their peers and society norms.

On the other side, it is widely known that students in developing countries are more engaged with their society. They live in the collective community that have perceived and respected norms which shape their behavior. In this society, peers and community mostly affect students’ behavior in the learning process (Ryan, 2001; Hanushek et al., 2003).

Related to reading behavior, Australian, Korean and Singaporean students categorize as more individualistic students. Their attitudes towards learning process are shaped by their self-concept about academic achievement. They attempt to learn more in order to compete with others. Therefore, learning process is treated as personal achievement (Johnson, 1981). The other students’ attitudes mostly affect by their peers and community and their performances should be in respect to peers’ perception and social norms (Wentzel and Caldwell, 1997). As the higher achiever seems to be more individualistic, it highlights the key point in the subjective norms which characterize their social behavior towards reading. Although their attitudes towards reading are less positive than their counterparts, they achieve better in reading performance due to their competitive behavior. The other significant factor is the social norm such as the reading culture. In this society, reading is the common activity that can be enjoyed anytime and anywhere (Baker and Wigfield, 1999).

In contrast, their counterparts’ perception towards reading is influenced by their peers and society. In this community, reading is treated as the higher level of learning as a formal activity in learning process (Chen, 1997). Their purpose of reading is to support their learning process such as do the assignment and finish the project. Moreover, reading socialization has important role in shaping their perception towards reading (Verboom and van Rees, 2003). Good students are typically associated with children who like reading. These students perceive that reading is an ideal activity to maintain the relationship with peers and society. It implies that positive attitudes in reading for these students are created by social norms and reading socialization. Therefore, reading performance is not merely as a result of positive attitudes because social norms and reading socialization also make contributions on students’ reading achievement.

**Perceived Behavioral Control**

As previously defined, perceived behavior control contributes both directly and indirectly to reading behavior. SES, home educational resources, cultural possession and home possession are assumed have indirect relation to reading behavior whereas parental education is assumed has direct relation to reading behavior.

SES has the strongest correlation with reading performance (.501) in this study. It is acknowledged that SES contributes to students’ academic achievement (White, 1982; Sirin, 2005; Marks, 2006). Results from this study confirm that SES strongly correlates with students’ performance in reading. As defined in PISA 2009, SES in this study is calculated by ‘taking into consideration the parents’ education and occupations and an array of household possessions’ (OECD, 2010). It can be implied that SES captures wider variables in defining students’ performance so that it has higher correlation than other factors. Other variables are calculated for its correlation with students’ performance in reading. These variables show moderately strong correlation with reading score.

Firstly, the correlations between household possession (home possessions, cultural possessions and home educational resources) and wealth with students’ achievement in reading infer that it contributes to reading score due to its moderately strong correlation rate (more than .30), except for cultural possessions (.151), with the highest correlation is home possessions (.422).

From the results, it implies that household possession and wealth have stronger correlation than reading attitudes in the reading performance. As illustrated in the results, the highest correlation for reading attitudes is .347 (Read Attitudes-Cannot Sit Still) which is not as strong as most variables in household possessions and wealth. Home possessions such as computer and internet access have strongest correlation in this factor in defining reading achievement. It is widely acknowledged that these possessions significantly support learning process as well as reading activity. For example, students are keener on online reading than reading the books because it offers a range of interactive reading activity that attracts their interest. Further, online reading activity provides
update and attractive text that can enhance reading skill such as developing vocabulary.

Students’ performance in reading also related to the provision of home educational resources for instance educational books and software (online dictionary, online journal and educational software and games). Although the correlation is lower than home possessions, it has moderately strong correlation with the reading score. Experts point out the relation between educational resources with students’ achievement because it has positive impact on the students’ habits in learning process (Roscigno and Ainsworth-Darnell, 1999; Parcel and Dufur, 2001). As students are supported by sufficient educational resources, it assists them in learning process such as doing the assignment or finding resources for their school project which leads to their academic improvement.

Next, wealth as one of the variable in perceived behavioral control has fairly strong correlation with the reading performance (.308). Wealth may have different conception in defining its criteria. As PISA 2009 explained in their report, wealth in this study based on the students’ responses on whether they had the following at home: ‘a room of their own, a link to the Internet, a dishwasher (treated as a country-specific item), a dvd player, and three other country-specific items and their responses on the number of cellular phones, televisions, computers, cars and the rooms with a bath or shower’ (OECD, 2010). Wealth has been assumed as important factor in defining students’ performance due to the provision of sufficient learning tools for learning process (Orr, 2003). Besides, wealthy family is able to provide assistances for doing household tasks which benefit for parents and students because it helps them in optimizing their time for learning at home without thinking much about household job.

Cultural possession such as classical literature or works of art has weak correlation with students’ reading performance (.105). These possessions do not relate much in supporting students reading activity because it has no direct relation to students’ learning process as well as reading activity.

Based on results about SES, household possession and wealth, the low performance of South East Asian students (except Singapore) is as a result of the lack of supporting reading materials that mostly related to those variables. Therefore, although they have positive reading attitudes, the higher correlation of these variables to their reading score are more defining their lower score in PISA 2009 reading test.

Furthermore, parental education is considered has direct correlation with reading score. The results point out that the correlations are moderately strong (more than .40) with the highest correlation is father educational level. It highlights father’s role as the head of family who typically decides children’s education. Further, it implies that well-educated parents are more likely to provide better education for their children (Schmid, 2001; Desforges, 2003). Parents’ concern on education offers a range of opportunity and assistance for children in their learning process. Therefore, children with supportive and well-educated parents are likely to get higher academic achievement as well as in reading performance.

As parents in most sample countries are responsible for children’s education, their level of education have strong relation to students’ performance in learning process. Parents with higher educational level are typically more concern on their children’s education. Children who gain better education such as access to qualified teacher, school and learning materials are likely to have better performance in academic achievement as well as in reading performance. From this point, parental education is assumed has direct link to reading behavior because it offers a range of opportunity for children in their reading activity through the support of better education.

It is widely acknowledged that Australian, Korean and Singaporean have higher educational level than Malaysian, Indonesian and Thai. Thus, it impacts on their children’s educational level due to their awareness of the importance of education for future life. It describes the higher academic achievement of their children as well as their reading performance in PISA 2009 which closely related to parental education variable.

The Interrelation of TPB Factors with Reading Performance

Overall, the interrelation of TPB factors, reading attitudes, subjective norms and perceived behavioral control, summarize in the following figure.

![Figure 15. The Interrelation of TPB Factors with Reading Performance](image-url)
CONCLUSION

Reading attitudes are one of important factors determining students’ performance in reading. As PISA 2009 results show, there are positive reading attitudes in South East Asian countries. However, these positive attitudes have insignificant impact on reading achievement as the students have lower OECD average score in PISA 2009 reading test (except for Singapore).

TPB postulates that subjective norms and perceived behavioral control are the other factors instead of attitudes in defining intention and behavior. In reading activity, subjective norms such as whether students’ growth in individual or collective society and the intention of reading contribute to students’ reading intention and behavior. The next factor, perceived behavioral control which are SES, home possessions and wealth are assumed have indirect contribution on reading behavior because of its role as supported learning materials in reading activity. Besides, parental education has direct link to reading behavior due to the support of well-educated parents in motivating their children to achieve more in learning process as well as supporting reading activity as one of learning activities.

In summary, reading achievement is not merely defined by reading attitudes. As proposed by TPB, subjective norms, in this case social norms and reading socialization, and perceived behavioral control which are SES, home possessions and parental education are contributive factors that have significant impact on reading behavior as well as reading attitudes. Therefore, the results imply that although more positive attitudes in reading are shown in South East Asian countries’ students (except Singapore), their reading performance are lower than their counterparts. This phenomena is well-defined the application of TPB in defining students’ reading performance in PISA 2009. Reading attitudes, subjective norms and perceived behavior control should be examined together in order to comprehensively define students’ reading performance.

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