

The Relationship between High School Students' Reading Proficiency and Their Engagement in Reading

Moe Moe Khine¹ and Naing Naing Maw²

Abstract

The purpose of this study is to explore the relationship between high school students' reading proficiency and their engagement in reading. In this study, 580 Grade 11 students from Yangon and Bago Divisions were selected. To gather contextual information, students were asked to respond to background questionnaire including student's engagement in reading, (SER) and student's family backgrounds (SFB). The results show that, on average, female students are more engaged in reading than males with regard to students' attitude toward reading and are more able to communicate with their family member than males. Next, home educational resources are more available and parental education are also better for the students of Yangon than that of Bago. To find out how reading proficiency (RP) of Grade 11 students is affected by their family background and engagement in reading, simultaneous multiple regression analyses were conducted. Both family background and engagement in reading are found to have powerful influence on students reading proficiency. The internal consistency of the SFB is 0.67 and SER is 0.87 respectively. In order to point out specific variables in family background affecting RP, simultaneous multiple regression analyses were used. This combination of variables (parental education, home educational resources, and cultural communication) significantly predicted RP. In order to point out specific variables of engagement in reading affecting RP, simultaneous multiple regression analyses were used. This combination of variables significantly predicted RP with one variable (reading habit and attitudes toward reading) significantly contributing to the prediction. The results indicated that students who are highly engaged in reading, whether they are from high or medium family background, achieve higher mean scores in RP than those who are poorly engaged in reading.

Key words: Reading proficiency, Engagement, Engagement in reading, Family background

Introduction

Motivation and engagement are the "energy base" of learning. Engagement depends upon a complex mix of intrinsic and extrinsic factors. Intrinsic motivation includes curiosity, aesthetic involvement, challenge,

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1. Tutor, Department of Educational Psychology, Yangon Institute of Education
 2. Assistant Lecturer, Dr., Department of Educational Psychology, Yangon Institute of Education

feelings of competence, and enjoyment. Extrinsic motivations include compliance, recognition, and grades (Guthrie, McGough, Bennett, & Rice, 1996, cited in Center for Applied Special Technology: CAST, 1999-2007). Most students are influenced by several of these factors at once, but studies show that an emphasis on extrinsic rewards can actually diminish a student's motivation to engage in learning, and may even reduce the quality of learning outcomes (Condry, 1977; Corno & Kohn, 1993; Lepper & Greene, 1978; Malone, 1981, cited in CAST, 1999-2007). On the other hand, intrinsically motivated students tend to persist longer, work harder, actively apply strategies, and retain key information more consistently (Guthrie, McGough, et al., 1996; Guthrie, Van Meter, et al., 1996; Malone, 1981; Piaget, 1951; Shulman & Keislar, 1996, cited in CAST, 1999-2007).

Engagement in the reading task is key in successfully learning to read. Reading is not merely a skill; it is an engagement of the person in a conceptual and social world (Guthrie, 1997). New research shows engagement as essential to achievement in reading (Allen, Michalove, & Shockly, 1993; Michalove, & Allen, 1995; Baker, Afflerbach, & Reinking, 1996, cited in Braunger & Lewis, 1997). Engaged readers are strategic, knowledgeable, motivated, and social in their approach to learning and using literacy (Morrow, 1996, cited in Braunger & Lewis, 1997). These engagements are vital because they start "a positive spiral of reading, knowing, and sharing" (Guthrie, 1997, cited in Braunger & Lewis, 1997).

In Myanmar, there have been a number of investigations on the nature of Myanmar Language so far: such as the development of Myanmar Literature in terms of decade or century, the study on the novels, selected short stories, etc. As a result, it is found that more priority is given to the branch of literature dealing with knowledge and catering to aesthetic enjoyment rather than the skills that is needed for young adults to know not only how to engage concerning reading but how to apply their knowledge and skills in everyday settings.

Therefore, it shows the necessity to explore how well young adults near the end of secondary schooling of Myanmar are prepared with regard to foundation of reading proficiency and engagement in reading to meet the challenges of today's knowledge world. How good are they at reading different kinds of texts? Based on earlier studies and current situation of education in Myanmar, the purpose of this study is to examine the relationship between reading proficiency and engagement in reading of Myanmar students

of grade 11 students. Today it is the most crucial time for the educators in Myanmar to be aware of the need to conduct such study for the above questions. Hence, it shows the urgent need to conduct a study that measures whether the students have the ability to engage on different kinds of print and apply their knowledge and skills to meet real life challenges in Myanmar Language.

Therefore, this study tries to explore how reading proficiency of Grade 11 students is affected by their engagement in reading and family background. Because of the lack of such assessment and investigative studies in Basic Education of Myanmar schooling, the study is a meaningful pioneering effort.

Purpose of the Study

The purpose of this study is to investigate the relationship between student reading proficiency and their engagement in reading and respective family background.

Procedure

This study aims to find out how reading proficiency of Grade 11 students is affected by their engagement in reading and family background by the use of student questionnaire. A total of 580 students from 12 schools of Yangon Division and 4 schools of Bago Division participated in this study.

Definition of Key Terms

Reading Proficiency is defined as reading concerning Myanmar prose based on two text formats: continuous and non-continuous, or ones' ability to retrieve, interpret, and reflect the written texts.

Engagement is a merger of multiple qualities that entails holding a purpose, seeking to understand, believing in one's own capability, and taking responsibility for learning (Combourn, 1995, cited in Guthrie, 2001).

Engagement in reading refers to levels of interest in and attitudes toward reading, the amount of time and the diversity of materials they read.

Family Background refers to the economic, social and cultural capital of students and their families.

Review of Related Literature

Combourne (1995) argues that engagement is a merger of multiple qualities that entails holding a purpose, seeking to understand, believing in one's own capability, and taking responsibility for learning (Guthrie, 2001). An engaged reader comprehends a text not only because she can do it, but because she is motivated to do it. Engaged readers exchange ideas and interpretations of text with peers. They are devoted to reading. In contrast, disengaged readers are inactive and inert. There are four forms of engagement that influence students' achievement, knowledge, and practices. They are social interactions, conceptual knowledge, motivations, and use of strategies (Guthrie & Wigfield, 2000).

And then, Guthrie, McGough, Bennett, & Rice (1996) found engaged readers be motivated, strategic, knowledgeable, and socially interactive. Engaged readers are motivated to read for a variety of personal goals. They are strategic in using multiple approaches to comprehend. They use knowledge actively to construct new understanding from text. And they interact socially in their approach to literacy. Engaged readers are decision makers whose affects as well as their language and cognition play a role in their reading practices (Guthrie, 2001).

Students will need to be able to read different kinds of print in their adult lives. In the literature, the concept of engagement covers two different areas: reading practices and reading attitudes. On the one hand, "engaged readers" regularly read different kinds of print; on the other hand, they have developed positive attitudes towards reading, and their interest in reading and motivation to read are strong. They think that reading is a valuable activity, one that provides them with a source of pleasure and knowledge (OECD, 2002a).

Engagement in reading refers to levels of interest in and attitudes toward reading, the amount of time and the diversity of materials they read. Engagement in reading are closely associated with performance in reading proficiency. Engagement in the reading task is key in successfully learning to read. Children must be motivated to want to read for authentic purposes, connected to their own lives in meaningful ways. Cambourne (1988) describes four essential elements of engagement:

- (a) Learners must be seen as potential doers both personally and by those around them;

- (b) Learners must see learning as personally meaningful;
- (c) Learning must be perceived as low risk by the learner; and
- (d) Learners must have the opportunity to bond with other doers.

Motivation is essential to engagement during a literacy event. A motivated individual initiates and continues a particular activity, returning to a task with sustained engagement, even as it becomes difficult (Maehr, 1976, cited in Braunger & Lewis, 1997). Factors that lead to motivation and engagement include:

- ❖ Challenge, choice, and collaboration tend to motivate children to read.
- ❖ The learning environment must enable a student to perceive the challenge in the activity as one that he or she can accomplish. When the task is completed, the student must perceive success (Ford, 1992; McCombs, 1989; Spaulding, 1992).
- ❖ Self-selection of tasks instills intrinsic motivation (Morrow, 1992).
- ❖ Collaboration with a teacher or with peers in learning tasks finds children intrinsically motivated and likely to get more done than if they work alone (Brandt, 1990; Oldfather, 1993, cited in Braunger & Lewis, 1997, p.35).

To be engaged readers, students must recognize the value of reading and their own potential readers and learners. The role of engagement is becoming clear: If children are not engaged in reading, their ability to read will not develop. In general, the centrality of engagement appears in the following principles (Guthrie, 1997, p. 3, cited in Braunger & Lewis, 1997, p.35):

- ❖ Children learn to be literate through engagement.
- ❖ Engaged learners want to understand.
- ❖ Children possess intrinsic motivations for interacting with text.
- ❖ Readers use cognitive skills to understand and share knowledge by talking with teachers and peers.
- ❖ Engagements are valuable in themselves, but they also lead to achievement.

- ❖ Unfortunately, some students disengage: If students struggle with learning to read and write, they lose the desire to read.
- ❖ If reading is not personally meaningful, children lose their interest and a decrease in achievement ensues.

Engagement is strongly related to reading achievement. In the United States, a national sample of students at three ages (9, 13, and 17 years) revealed that the more highly engaged readers showed higher achievement than the less engaged readers (Campble, Voelkl, & Donahue, 1997, cited in Guthrie, 2001). In cross-age comparisons, 13-year-old students with higher reading engagement achieved at a higher level than did less engaged 17-year-old students. Engagement in reading can also compensate for low achievement attributed to low family income and educational backgrounds. Engaged readers can overcome obstacles to achievement and become agents of their own reading growth (Guthrie, Schafer, & Hung, 2001, cited in Guthrie, 2001).

Among OECD countries, the results of PISA 2000 suggest that much more needs to be done to foster the positive engagement of students in reading. In addition to subject motivation, reading activities and engagement in reading are decisive factors in the maintenance and further development of reading skills. Therefore, positive reading activities and engagement in reading are important outcomes of initial education as well as predictors of learning success throughout life (OECD, 2001a).

Method and Procedures

Subjects for Survey Study

By using multi stage equal number of random sampling technique, townships, schools and subjects were selected from Yangon City Development Area (YCDA) and Bago Division (BD). Firstly, 3 townships were randomly selected on the basis of 2007 Matriculation pass rate (high, medium, low groups) in each stratum and 4 townships from Bago Division were also selected, using the same technique mentioned above. Altogether 16 townships were selected both from Yangon and Bago Divisions. Secondly, 3 schools from each stratum were randomly selected on the basis of 2007 Matriculation pass rate and 4 schools from Bago Division were also selected and therefore totally 16 schools were finally selected. In total, 580 students, 300 from Yangon and 280 from Bago, participated in this study.

Instrument

To assess students' reading proficiency, all the items in the instrument (Texts and Tasks) were prepared in Myanmar Language on the basis of "the OECD/PISA reading literacy assessment Instrument (Texts and Tasks)" (OECD, 2002a). Students' engagement in reading, including time spent on reading, diversity and content of reading habit and attitudes toward reading and frequency of borrowing books and their respective family background, including the economic, social and cultural capital of students and their families that are thought to be associated with student reading proficiency performance were examined by using Student Questionnaire which was modified and constructed in Myanmar Language.

After preparing the draft instrument, experts' reviews were conducted for face validity and content validity by 8 experts who have special knowledge and close relationship with this study area, in the field of Myanmar Language. Then based on the experts' suggestions, certain items were left out from the instruments since they were not in accordance with the aims of this study. Next, revisions in item length, and the wording of items were done and checked and pilot study was done with a sample of 75 students from Yangon Division in terms of pass rate to test whether the wording of items, statements and instructions had their clarity in Myanmar language. After that, some items were modified to adapt with the students' understanding level. Then, the modified instruments for reading proficiency test and student questionnaire were finally developed. The instrument-1 (Texts and Tasks) includes six-texts, 4 continuous texts and 2 non-continuous texts. 17 items used in this questionnaire.

Next each student was assessed for about one and half hours on paper and pencil items (Instrument-1). In addition to this, students had to answer a background questionnaire (Instrument-2). Students informed about themselves and their family background, which takes 30 minutes to complete, with assessments lasting a total of two hours for each student.

The internal consistency (Cronbush's alpha) of the students' family background is 0.67 and students' engagement in reading is 0.78 respectively. Thus, computation of Cronbush's alpha showed that background questionnaire has high reliability as a reading proficiency scale to measure the student reading proficiency.

Results

Mean Comparisons for Students' Engagement in Reading (SER) and Students' Family Background (SFB) by Gender

Descriptive data analyses reveal that there is a difference between males and females in overall and SER and SFB with regard to gender (see Table 1).

Table 1. Mean Comparisons for SER and SFB by Gender

	gender	N	Mean	SD
Overall	male	290	75.37	7.70
	female	290	77.44	7.72
Engagement	male	290	79.92	8.13
	female	290	81.90	8.41
Background	male	290	62.67	12.77
	female	290	64.80	12.11

Next, so as to observe clearly the SER and SFB between genders, the independent sample of t-test was conducted. The results show that there is a significant difference in overall and SER at 0.01 level and SFB at 0.05 level with regard to gender (see Table 2)

Table 2. Results of t-test for SER and SFB by Gender

	t	Df	Sig. (2-tailed)
Overall	3.23	578	.001
Engagement	-2.87	578	.004
Background	-2.05	578	.040

And then, as already discussed above, since reading engagement is measured on the basis of students' responses to questions covering frequency of borrowing books, time spent on reading, diversity and content of reading habit and attitudes toward reading and homework, further analysis and computation were undertaken. Descriptive data analyses reveal the differences in means and standard deviations of engagement in reading variables between male and female (see Table 3).

Table 3. Mean Comparisons for Students' Engagement in Reading by Gender

	gender	N	Mean	SD
Engagement	male	290	79.92	8.13
	female	290	81.90	8.41
Borrow	male	290	59.48	28.00
	female	290	61.47	24.96
Spent	male	290	93.17	17.42
	female	290	94.69	14.72
Attitude	male	290	79.89	9.21
	female	290	82.03	9.97
Homework	male	290	81.08	11.65
	female	290	82.41	10.32

To obtain more detailed information of particular aspect, the independent sample t test was used again (see Table 4). The results of t test by gender also reveal that there are significant differences in attitude toward reading at 0.01 level. But, for the other three variables such as in frequency of borrowing books, time spent on reading, and homework, significant differences are not found. In other words, female students are more engaged in

reading than males with regard to attitude toward reading. Thus, fostering engagement in reading implies actions targeted at males.

Table 4. Results of t-test for Students' Engagement in Reading by Gender

	t	df	Sig. (2-tailed)
Engagement	-1.60	578	.004
Borrow	-.900	578	.368
Spent	-1.133	578	.258
Attitude	-2.681	578	.008
Homework	-1.462	578	.144

Next, as already discussed above, since SFB is also investigated on the basis of students' responses to questions covering home educational resources, cultural communication, language spoken at home, parental education, and parental job, further analysis and computation were undertaken. Descriptive data analyses reveal the differences in means and standard deviations of SFB variables concerning gender (see Table 5).

Table 5. Mean Comparisons for Students' Family Background by Gender

	gender	N	Mean	SD
Background	male	290	62.67	12.77
	female	290	64.80	12.11
Parents' Job	male	290	46.03	22.46
	female	290	44.48	22.3
Parents' Education	male	290	23.50	8.65
	female	290	22.88	8.51

	gender	N	Mean	SD
Language	male	290	98.91	9.07
	female	290	97.50	11.96
Communication	male	290	70.57	17.80
	female	290	76.34	16.77
Resources	male	290	60.40	31.83
	female	290	58.53	29.53

To obtain more detailed information of particular aspect, the independent sample t-test was used again (see Table 6). The results of t-test by gender also reveal that there are significant differences in cultural communication at 0.001 level. But, for the other four variables such as home educational resources, language spoken at home, parental education, and parental job, significant differences are not found. The girls in this study are likely to have more opportunities to communicate with their respective parents. Therefore, it can be said that females are more able to communicate with their family member than males.

Table 6. Results of t-test for Students' Family Background by Gender

	t	df	Sig. (2-tailed)
Background	-2.057	578	.040
Parents' Job	.834	578	.405
Parents' Education	.875	578	.302
Language	1.368	578	.172
Communication	-3.995	578	.000
Resources	.744	578	.457

Mean Comparisons for SER and SFB by Divisions

Descriptive data analyses reveal that there are no differences in means and standard deviations of overall, SER, and SFB between Yangon and Bago Divisions (see Table 7).

Table 7. Mean Comparisons for SER and SFB by Divisions

	Division	N	Mean	SD
Overall	Yangon	300	76.76	7.56
	Bago	280	76.03	7.99
Engagement	Yangon	300	80.81	7.68
	Bago	280	81.03	8.98
Background	Yangon	300	64.36	13.24
	Bago	280	63.06	11.60

To be specific, the independent sample t-test was used again. The results also show that there is no significantly a difference in overall, SER, and SFB between Yangon and Bago Divisions (see Table 8).

Table 8. Results of t-test Students' Engagement in Reading and Background by Divisions

	t	N	Sig. (2-tailed)
Overall	1.106	578	.256
Engagement	-.318	578	.750
Background	1.250	578	.212

Since SFB is measured on the basis of students' responses to questions covering home educational resources, cultural communication, language

spoken at home, parental education, and parental job, analyses were again conducted to be specific. Descriptive data analyses reveal the differences in means and standard deviations of SFB variables between Yangon and Bago Divisions (see Table 9).

Table 9. Mean Comparisons for Students' Family Background by Divisions

	Division	N	Mean	S D
Background	Yangon	300	64.36	13.24
	Bago	280	63.07	11.60
Resources	Yangon	300	65.67	30.88
	Bago	280	52.86	29.11
Communication	Yangon	300	73.92	18.64
	Bago	280	72.96	16.47
Language	Yangon	300	96.75	13.71
	Bago	280	99.55	5.38
Parents' Education	Yangon	300	25.00	9.51
	Bago	280	21.25	6.96
Parents' Job	Yangon	300	44.31	22.40
	Bago	280	46.27	22.42

And then, the independent sample t-test was used again to be specific. As expected, significantly differences are found concerning home educational resources and parental education at 0.001 level and also language spoken at home, at 0.01 level in according with the results shown in Table 10. It can easily be seen that students from Yangon are more available to home educational resources than that of Bago while the students of Bago are found to be more accessible to the language spoken at home than those of Yangon.

Table 10. Results of t-test for Students' Family Background by Divisions

	t	N	Sig. (2-tailed)
Background	1.25	578	.212
Resources	5.132	578	.000
Communication	.654	578	.513
Language	-3.199	578	.001
Parents' Education	5.381	578	.000
Parents' Job	-1.053	578	.293

As we have already noted, parents play an important role in their children's overall success not only in terms of the support and encouragement that they give to their children but also in terms of the physical environment and possessions that they provide. According to the results of t-test (see Table 10), students from Yangon Division can be more available to home educational resources than that of Bago because Yangon is a commercial city and socio-economic status is seen to provide an advantage to students in terms of the value placed on education and the number of possessions in the home related to education.

The Relationship between Reading Proficiency and Predictor Variables (SER and SFB)

The means, standard deviations, and intercorrelations for reading proficiency and predictor variables (SER and SFB) can be found in Table 11a. Table 11a shows that all of the three pairs of variables are significantly correlated. The medium positive correlation, which would be considered a medium effect size, was found between SFB and RP test scores $r(580) = .34$, $P < .01$. The intercorrelation coefficients are in the range of 0.20 to 0.34.

Table 11a. Mean, Standard Deviations, and Intercorrelations for RP and Predictor Variables (SER, and SFB) (N=580)

Variable	Mean	S D	1	2
Total	37.32	7.43	.20**	.34**
1.Engagement	81.71	8.41	-	.25**
2.Background	38.24	7.49		-

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

Simultaneous multiple regression analyses were conducted for predicting RP test scores. This combination of variables significantly predicted RP, $F(2,577) = 42.09, P < .001$, with all two variables significantly contributing to the prediction. The beta weights, present in Table 11b, suggest that good family background contribute more to predicting RP. The adjusted R squared value is .12. This indicates that 12% of the variance in reading proficiency was explained by the model. According to Cohen (1988), this is a medium effect.

Table 11b. Simultaneous Multiple Regression Analysis Summary for SER and SFB Variables Predicting RP

Variable	B	Std. Error	Beta
1.Engagement	.111	.036	.126*
2.Background	.301	.040	.303**
3.Constant	16.702	2.931	

Note: $R^2 = .13; F(2,577) = 42.09, P < .001; *P < .01, **P < .001$

The Relationship between RP and Predictor Variables (SFB)

The means, standard deviations, and intercorrelations for RP and predictor variables (SFB) are shown in Table 12a. Table 12a shows that 11 of the 16 pairs of variables are significantly correlated. The medium positive correlation, which would be considered a medium effect size, was found between parental education and RP test scores $r(580) = .38, P < .001$. Nearly

the same result was found for the parental job and parental education. The intercorrelation coefficients are in the range of 0.00 to 0.42.

Table 12a. Mean, Standard Deviations, and Intercorrelations for RP and Predictor Variables (SFB) (N=580)

	Mean	SD	1	2	3	4	5
Total	37.32	7.43	.18***	.38***	.05	.20***	.36***
1.Parents' Job	7.24	3.59	-	.42***	.08*	.07*	.21***
2.Parents' Education	2.66	.91		-	.01	.19***	.38***
3.Language	3.92	.43			-	.00	.03
4.Communication	22.04	5.29				-	.20***
5.Resources	2.38	1.23					-

Note: * $P < .05$; *** $P < .001$

Simultaneous multiple regression analyses were conducted to find out the effect of parental job, parental education, language spoken at home, cultural communication, home educational resources, (family background variables) for predicting RP test scores. This combination of variables significantly predicted RP. $F(5,574) = 30.62$, $P < .001$, with three variables (parental education, home educational resources, and cultural communication) significantly contributing to the prediction. The beta weights, present in Table 12b, suggest that good parental education, home educational resources, and cultural communication contribute more to predicting RP. The adjusted R squared value is .20. This indicates that 20% of the variance in RP was explained by the model. According to Cohen (1988), this is a medium effect.

Table 12b. Simultaneous Multiple Regression Analysis Summary for Family Background Variables Predicting RP

Variable	B	Std. Error	Beta
1. Parents' Job	.002	.085	.001
2. Parents' Education	2.236	.355	.275**
3. Language	.692	.651	.040
4. Communication	.150	.054	.107*
5. Resources	1.387	.246	.229**
6. Constant	22.641	2.861	

Note: $R^2 = .21$; $F(5,574) = 30.62$, $P < .001$; * $P < .01$; ** $P < .001$.

Families are a vital source of social capital for students. Together with that of the community and school, it is the material and social support offered by families that affects students' attitude towards education and expectations of achievement.

The Relationship between RP and Predictor Variables (SER)

The means, standard deviations, and intercorrelations for RP and predictor variables (SER) can be found in Table 13a. Table 13a shows that seven of the ten pairs of variables were significantly correlated. The medium positive correlation, which would be considered a medium effect size, was found between reading habit and attitudes toward reading and frequency of borrowing books $r(580) = .29$, $P < .001$. This means that students who borrow relatively many books were likely to have good reading habit and attitudes toward reading. The intercorrelation coefficients are in the range of -.004 to .29.

Table 13a. Mean, Standard Deviations, and Intercorrelations for RP and Predictor Variables (SER) (N=580)

Variable	Mean	S D	1	2	3	4
total	37.32	7.43	-.004	.218***	.105**	.032
1. Homework	13.08	1.76	-	.136**	.063	.097*
2. Attitude	61.53	7.33		-	.265**	.288***
3. Spent	4.70	.81			-	.189***
4. Borrow	2.42	1.06				-

Note: * $P < .05$; ** $P < .01$; *** $P < .001$

Simultaneous multiple regression analyses were conducted to determine the best combination of homework, diversity and content of reading habit and attitudes toward reading and time spent on reading, and frequency of borrowing books for predicting RP test scores. This combination of variables significantly predicted RP, $F(4,575) = 7.931$, $P < .001$, with one variable (reading habit and attitudes toward reading) significantly contributing to the prediction. The beta weights, presented in Table 13b, suggest that good reading habit and attitudes toward reading contribute more to predicting RP. The adjusted R squared value is .05. This indicates that 5% of the variance in RP was explained by the model. According to Cohen (1988), this is a small effect.

Table 13b. Simultaneous Multiple Regression Analysis Summary for SER Predicting RP

Variable	B	Std. Error	Beta
1. Homework	-.230	.284	-.033
2. Attitude	.362	.073	.218**
3. Spent	.849	.641	.056
4. Borrow	-.436	.491	-.038
5. Constant	38.94	5.53	

Note: $R^2 = .05$; $F(4,575) = 7.931$, $P < .001$, ** $P < .001$.

Can engagement in reading compensate for the socio-economic background?: In order to address this question, students were split into nine groups, based on two variables: level of engagement in reading, and family background. For each of these two indices, three groups were created: the low groups (one standard deviation lower than the sample mean), the medium groups (equal to the sample mean) and the high groups (one standard deviation above the sample mean). Using this classification, nine categories or groups of students were identified. Table 14a shows the number of subjects, the means and standard deviations for RP separately for the three levels of engagement and family background.

Table 14a. Mean, Standard Deviations, and Number of Subjects for RP as a function of Engagement in Reading and Family Background Levels

	High Background			Medium Background			Low Background			Total		
	M	SD	N	M	SD	N	M	SD	N	M	SD	N
High Engaged	67.83	10.09	16	61.78	12.77	38	59.02	9.56	4	63.26	12.08	58
Medium Engaged	67.17	11.99	78	61.48	10.78	311	56.44	12.35	65	61.74	11.60	454
Low Engaged	59.63	16.81	8	56.90	15.45	38	51.94	11.47	22	55.62	14.49	68
Total	66.68	12.18	102	61.00	11.57	387	55.47	12.10	91	61.17	12.18	580

Table 14b shows that there was no significant interaction between engagement and background levels on RP ($P=.969$). However, there was a significant main effect of students' background and engagement on RP, $F(2,571) = 5.59$ and 4.76 , $P<.01$ and $P<.05$. Eta for students' background and engagement were about .14, and .13 which, according to Cohen (1988), is a small effect.

Table 14b. Analysis of Variance for RP as a Function of SER and SFB Levels

Variable and Source	df	Mean Square	F	Sig.	Partial Eta Squared
Reading proficiency					
Engagement	2	651.946	4.756	.009	.016
Background	2	765.938	5.588	.004	.019
Engage * Background	4	18.761	.137	.969	.001
Error	571	137.065			

Note: R Squared = .089 (Adjusted R Squared = .076): *P<.01

Figure 1 shows that students of high family background and high engagement in reading obtain the best mean scores on the combined RP scale (67.83). And students whose parents have the middle family background but who are highly engaged in reading achieve better mean scores than students whose parents have high or medium family background but who are poorly engaged in reading. In other words, the results highlighted that students who are highly engaged in reading, whether they are from high or medium family background, achieve better mean scores in reading proficiency than those who are poorly engaged in reading.

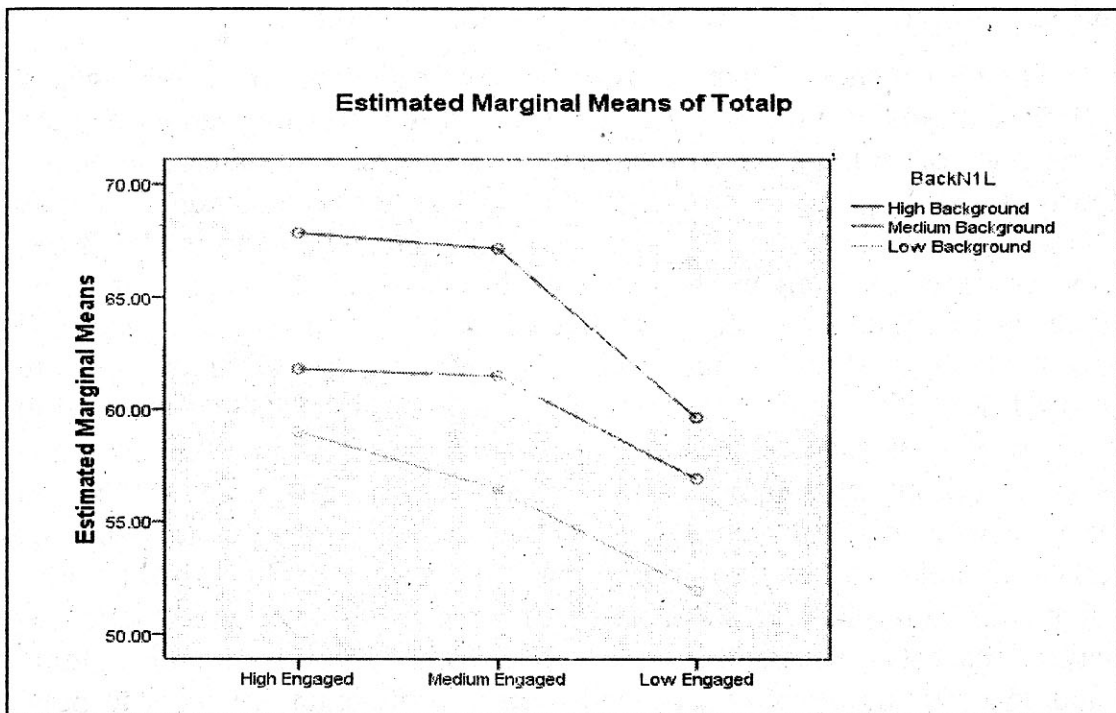


Figure 1. Relationship of RP Performances with Level of SFB and SER

Regarding this point, in the United States, the National Assessment of Educational Progress has reported on interesting study which demonstrates the connection between achievement and engagement in reading (Campbell, Voclk & Donahue, 1997, cited in OECD, 2001a). Not surprisingly, the more highly engaged readers showed higher achievement than the less engaged at each of the three ages studied (9, 13 and 17-year-olds). In addition, the 13-year-old students with higher reading engagement demonstrated higher average scores in reading achievement than the 17-year-olds who were less engaged in reading.

Conclusion

Knowledge of these results will assist the educators to better understand factors that can impact on learning and to target learning strategies. In other words, these results seem to be aware to the school

administrators, educators and parents in our society to prepare our children to enable to meet the challenges of today's knowledge world.

The results showed that, on average, female students are more engaged in reading than males with regard to students' attitude toward reading and are more able to communicate with their family members than males. Moreover, different regions pointed out different performance in reading. Home educational resources are more available and parental education is also better for the students of Yangon than that of Bago. To find out how reading proficiency of Grade 11 students is affected by their family background and engagement in reading, simultaneous multiple regression analyses were conducted. Both family background and engagement in reading are found to have powerful influence on students reading proficiency. The internal consistency (Cronbach's alpha) of the students' family background is 0.67 and students' engagement in reading is 0.87 respectively. In order to point out specific variables in family background affecting reading proficiency, simultaneous multiple regression analyses were used. This combination of variables (parental education, home educational resources, and cultural communication) significantly predicted reading proficiency. In order to point out specific variables of engagement in reading affecting reading proficiency, simultaneous multiple regression analyses were used. This combination of variables significantly predicted reading proficiency with one variable (reading habit and attitudes toward reading) significantly contributing to the prediction. Students of high family background and those who are highly engaged in reading obtain the highest mean score (67.83) on the combined reading proficiency scale. The results indicated that students who are highly engaged in reading, whether they are from high or medium family background, achieve higher mean scores in reading proficiency than those who are poorly engaged in reading.

Children should be cultivated to be interested in reading and accustomed with reading habits. Each and every class in schools should have reading corner which is relevant for the students' level. Beyond that, they should be encouraged or motivated to explore more skills and knowledge in depth and width. Both intrinsic and extrinsic motivation should be employed to let them gain good reading habits. By wise guidance and constant facilitating of the teacher, the students should be trained to become engaged reader so that they can be self-directed learner or self-generated reader. To sum up teachers should help students become self-motivators by encouraging them to develop a positive attitude towards learning, to accept responsibility,

to know their goals, to keep abreast of their progress, to become involved in learning, to read regularly, and to develop a sense of trust with their parents and teachers.

In order to do so, students must be able to manage their own learning, rather than solely relying on teachers. This means that students must, on the one hand, be interested and engaged in reading much more than before and have strategies for learning effectively.

So far, as it has become clear that reading proficiency is the royal road to knowledge, it is essential to achieve success in all academic subjects and in children's later academic performance. Beyond that, schools and parents need to consider how to help students to adopt techniques that allow them to regulate their own learning effectively.

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