

Reading Motivation in Chinese and English in Hong Kong Secondary Schools Students:

Influence of Schools and Demographic Factors

by

LEE, Kwok Wai

A Thesis Submitted to

The Education University of Hong Kong

in Partial Fulfillment of the Requirement for

the Degree of Doctor of Education

February 2018



The Education University
of Hong Kong Library

For private study or research only.
Not for publication or further reproduction.

Statement of Originality

I, LEE, Kwok Wai, hereby declare that I am the sole author of this thesis and that the material presented in it is my original work except as indicated in the acknowledgements. I further declare that I have followed the University's policies and regulations on Academic Honesty, Copyright and Plagiarism in writing the thesis and that no material in this thesis has been submitted for a degree in this or other universities.

Lee Kwok Wai

LEE, Kwok Wai

February 2018



Thesis Examination Panel Approval

Members of the Thesis Examination Panel approved the thesis of LEE, Kwok Wai defended on 07 June 2018.

Principal Supervisor

Dr YEUNG Siu Sze, Susanna
Assistant Professor
Department of Psychology

The Education University of Hong Kong

External Examiner

Dr YEUNG Pui Sze, Patcy
Associate Professor
Division of Learning, Development and
Diversity

The University of Hong Kong

Associate Supervisor

Dr YIP Chi Wing Michael
Associate Professor
Department of Psychology
The Education University of Hong Kong

Internal Examiner

Dr LIN Dan
Associate Professor
Department of Psychology
The Education University of Hong Kong

Associate Supervisor

Dr KING Ronnel Bornasal
Assistant Professor
Department of Curriculum and Instruction
The Education University of Hong Kong

Approved on behalf on the Thesis Examination Panel:

Chair, Thesis Examination Panel
Dr. STAPLETON, Paul
Associate Professor
Graduate School
The Education University of Hong Kong

Abstract

This study examined reading motivation in Hong Kong secondary school students, taking account of school-related factors of medium of instruction, teacher support and peer support and demographic factors of gender, grade and socio-economic status. Specifically, the research questions were: (1) How are the school factors of medium of instruction, teacher support and peer support related to reading motivation in Chinese (first language; L1) and reading motivation in English (second language; L2)? (2) How are the demographic factors of socio-economic status, gender and grade related to reading motivation in Chinese and English? and (3) Are there differential patterns of prediction of school factors and demographic factors for Chinese and English reading motivation? The SRQ-Reading Motivation Questionnaire, designed to measure reading motivation as conceptualized by Self-Determination Theory (SDT), was adopted. Nine hundred and forty-one secondary school students participated in this study, from the grade levels of secondary one, four and six in seven secondary schools in Hong Kong. Confirmatory factor analysis indicated that their reading motivation was comprised of two factors, Autonomous Chinese Reading Motivation (ACRM), Autonomous English Reading Motivation (AERM), Controlled Chinese Reading Motivation (CCRM) and Controlled English Reading Motivation (CERM). To address the three research questions, structural equation modeling was used to investigate the relationships among the variables examined in the present study. The findings showed that Teacher Support significantly predicted all reading motivation outcomes. A higher level of teacher support was associated with higher levels of autonomous and controlled reading motivation in the two languages. Peer Support was also a significant predictor of all reading motivation outcomes. Surprisingly, peer support had a negative relationship with controlled reading motivation in Chinese and in English but a positive relationship with autonomous reading motivation in both languages. Medium of Instruction was significantly associated with Autonomous Reading Motivation in

English, with students from schools with English as the Medium of Instruction (EMI) having higher Autonomous English Reading Motivation than those from schools with Chinese as the Medium of Instruction (CMI). There was a positive relationship between gender and Autonomous Chinese Reading Motivation, with the correlation being higher for girls than for boys. Grade level was not associated with Autonomous Chinese Reading Motivation or Autonomous English Reading Motivation. For socio-economic status, there was a significant relationship with autonomous reading motivation in English and no significant relationship in controlled reading motivation in either language. To conclude, teacher support and peer support were found to be more important factors influencing Hong Kong secondary school students' reading motivation in Chinese and English than other factors examined in the present study. Reading motivation in the two languages was predicted by similar factors.

Keywords: Reading Motivation, Dual languages, Self-Determination Theory, Teacher Support, Peer Support, MOI, Gender, Grade, SES,



Acknowledgments

I would like to express my deepest gratitude to all who have supported me in the completion of my doctoral thesis.

My deepest thanks go to Dr Susanna Yeung, my principal supervisor, who guided me from the beginning of my research journey to the completion of my thesis. She is the best professor I have encountered during my study life, due to her professionalism, expertise, patience and valuable feedback. I would also like to thank Dr Michael Yip and Dr Ronnel King, my associate supervisors, who have given me guidance and valuable advice for completing this thesis.

Many thanks are also extended to the principals, teachers and students who participated in and contributed to this project; although their names should not be revealed, the thesis would not have been possible without their input.

Finally, I would like to thank my parents, my sister's family, Professor Stella Cho, Dr Lui, Sr Susanna Yu, Sr Agnes Law, Miss Leung, Miss Spring Law, Dr Tony Lee, Mrs Mary Cheung, Miss Teresa Chong, Mr Lau and Mrs Annie Lee for their continuing support and care.



Table of Contents

Statement of Originality	i
Thesis Examination Panel Approval	ii
Abstract	iii - iv
Acknowledgements	v
Table of Contents	vi
List of Abbreviations	vii
List of Figures	viii
List of Tables	ix
Chapter 1: Introduction	10-17
Chapter 2: Literature Review	18-53
Chapter 3: Methodology	54-62
Chapter 4: Data Analysis and Results	63-85
Chapter 5: Discussion and Conclusions	86-102
References	103-116
Appendix A: Original Questionnaire	117-131
Appendix B: Revised Questionnaire	132-141
Appendix C: Instruction for School Use	142-148
Appendix D: Instruction for Parents Use	149-154
Appendix E: Information for Participants' Use	155-160

List of Abbreviations

EdB	Education Bureau
GS	Graduate School
EdUHK	The Education University of Hong Kong



List of Figures

Figure 1	School Factors and Demographic Factors in Reading Motivation in L1 and L2 among Hong Kong Secondary Students	51
Figure 2	Model 1, 4 Factors CCRM, CERM, ACRM, AERM	67
Figure 3	Model 2, 2 Factors, CRM, ERM	68
Figure 4	Model 3, 2 factors, CRM & CERM, ACRM & AERM	69
Figure 5	Model 4, 1 factor, RM-1 & RM-2	70
Figure 6	CFA model of Teacher Support and Peer Support	75
Figure 7	Conceptual Model of School Factors and Demographic Factors and Reading Motivation in Chinese and English	82



List of Tables

Table 1	Gender, Banding and Grade Level of Students	64
Table 2	Goodness-of-Fit Summary of Measurement Models	71
Table 3	Four Factors of Reading Motivation and item factor loadings	73
Table 4	Teacher Support Scale (TSS)	76
Table 5	Peer Support Scale (PSS)	76
Table 6	Descriptive Statistics of Reading Motivation Measures	77
Table 7	Descriptive Statistics of Teacher Support and Peer Support Measures	78
Table 8	Descriptive Statistics of Teacher Support and Peer Support Measures by Gender, MOI and Banding	78
Table 9	Correlations Between the School Factors and Demographic Factors in Reading Motivation	80
Table 10	Standard parameter estimates in the conceptual theoretical model	83

Chapter 1: Introduction

1.1 Statement of Problems

Nowadays, some students avoid reading and reading-related activities at school and at home, while others go as far as to conceal that they read books very often. For educators, it is important to recognize that reading motivation varies from student to student; hence care must be taken to foster it in all students. Research study has shown that there is a decreasing trend in reading motivation between primary and secondary school students (Lau, 2009). This draw our attention to prevent further decrease or to uphold reading motivation in all Hong Kong students. If a teacher desires students to enjoy reading, it is important to consider what factors, including both school and demographic factors, motivate them to read. Since reading is an effortful activity, whether students choose to do it willingly or not, it requires motivation.

Students who choose to read are better readers than those who are unmotivated (Eccles & Wigfield, 1995). Highly motivated students are higher achieving readers than those who have little reading motivation (Wigfield & Guthrie, 1997). Thus it appears that ambition to read and excitement about it are two of the determining factors in becoming a successful reader.

Learning to read is a very important learning process for school children, since it is a basic requirement in society (Netten, Droop & Verhoeven, 2011; Van Keer, 2004). Empirical studies have demonstrated that reading motivation has an impact on reading skills, reading amounts, reading frequency and reading habits. When students engage in more reading related activities, they have excellent literacy skills (Anderson, Wilson & Fielding, 1988; Cunningham & Stanovich, 1991, 1997; Guthrie et al., 1999; Leppanen, Aunola & Nurmi, 2005; McBride-Chang, Manis, Seidenberg, Custodio & Doi, 1993; Mol & Bus, 2011). Moreover, different reading activities have correlated with different domains of reading skills. Such as, Anderson et al. (1988) showed that the time spent on reading books was correlated more highly with reading speed and reading comprehension than time spent on other types of text such as

magazines, newspapers and comics. Other researchers (Spear-Swerling, Brucker and Alfano, 2010) also suggested fiction book reading is correlated with different reading-related skills (i.e., oral comprehension, word reading, vocabulary and reading comprehension) compared to other reading habits. Previous studies have also found correlations between reading engagement and reading frequency (De Naeghel, Van Keer, Vansteenkiste & Rosseel, 2012; Wigfield & Guthrie, 1997) and positive effects of engaged reading on reading skills (Becker, McElvany & Kortenbruck, 2010; De Naeghel et al., 2012; Silva, Verhoeven & van Leeuwe, 2011; Wang & Guthrie, 2004) in primary school students in different educational contexts.

Given the established relationship between reading motivation and reading outcomes, it is crucial for educators to find out what motivates students to read and how to engage them in it frequently, not only at school but also at home. If teachers, as well as caregivers, are more aware of the factors that have significant contributions to reading motivation, they will be more efficient and effective in promoting motivation to read in children and adolescents.

Moreover, in western studies of reading motivation, we can see a trend of declining motivation in early adolescents (Anderman & Midgley, 1997; Bozack, 2011; Eccles & Midgley, 1989; Eccles et al., 1993; Guthrie & Wigfield, 2000; Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Pitcher et al., 2010; Wentzel, 1996; Wigfield & Guthrie, 1997; Wigfield et al., 1997). To prevent a drop in adolescents' reading motivation, it is very important to realise which factors will influence it. Therefore, this present study aimed to consider how school factors and demographic factors influence reading motivation in secondary school students in the Hong Kong context. To our best knowledge, limited studies have examined the reading motivation of L1 and L2 in Hong Kong students and thus the present research attempted to address this issue.

1.2 Hong Kong Situation

Under Hong Kong's education system, there are two possible languages that can use for the medium of instruction (MOI) in Hong Kong secondary schools, Chinese (L1) and English (L2). Due to Hong Kong's complex historical background as a former British colony, English competence traditionally reflected a higher socio-economic status (SES) and became a prerequisite for better career prospects and good academic (Tsui, 2004). However, while the colonial government allowed schools to determine their own MOI (Poon, 2010), after returning of sovereignty to China, the government of the Hong Kong Special Administrative Region (HKSAR) adopted a compulsory mother-tongue policy in 1998 which stated that all secondary schools, except for 114 selected ones, must adopt Chinese (L1) as the MOI in junior forms (grade 7 to grade 9) but could choose which to use in upper forms (Grade 10 onwards). The 114 selected schools adopted English as the MOI across both lower and upper forms. Later, since the academic year of 2009/2010, schools have been allowed to choose to adopt English (L2) as the MOI if they meet specified requirements, for example if they have meet the language proficiency requirements. In general, students with higher achievement tend to go to schools with English as the MOI. English competence traditionally reflected a higher socio-economic status (SES) and became a prerequisite for better career prospects and good academic performance (Tsui, 2004). In Hong Kong, many parents placed more value on L2 as the MOI, believing that to do so would offer greater promise than using L1 in terms of academic achievements and career prospects.

Since the implementation of the compulsory Chinese as MOI policy in 1998, reports have shown that English (L2) ability is decreasing (Education First EPI Report, 2011, 2012). For example, in the English Proficiency Index (EPI) released by Education First 5, Hong Kong's ranking dropped from 12th (EPI: 54.44) in 2011 to 25th (EPI:53.65) in 2012 (Education First EPI Report, 2011, 2012). Some employers have reported decreases in English

performance in the workplace after the implementation of Chinese as the MOI in 1998, due to a lack of exposure to the English language (Ming Pao Daily News 2001, February 2001). Due to globalization and Hong Kong's position as an International Financial Centre (IFC), many stakeholders including parents, employers and teachers tend to value English as a L2 as an important ability for students to acquire. In Hong Kong, under the policy of trilingualism and biliteracy, students are expected to achieve high proficiency in both languages. Therefore, it is important to understand reading motivation in the two languages.

1.3 The Research Gap

In general, school practices affect students' motivation. Specifically, for reading motivation, we argue that MOI would be a significant school factor. In the present study, MOI is assumed to be related to the amount of exposure to the instructional language and it may, in turn, affect reading motivation in that language. Therefore, students in schools with English as the MOI may have higher reading motivation in English than those in schools with Chinese as the MOI.

Apart from MOI, teacher support and peer support are well-known variables that affect students' learning (Hamre & Pianta, 2001; Kiuru et al., 2014; O'Connor & McCartney, 2007; Pianta, La Paro, Payne, Cox, & Bradley, 2002; Pianta & Stuhlman, 2004; Valiente, Lemery-Chalfant, Swanson, & Reiser, 2008). In different phases of the learning process, students may need support from teachers and peers. However, the existing literature has not addressed how teacher support and peer support influence reading motivation. We argue that teacher support and peer support may enhance reading motivation as it does the motivation in other domains (Alexander, Entwisle, & Horsey, 1997; Roeser, Eccles, & Freedman-Doan, 1999).

As for demographic factors, in the present study we examined gender, grade level and socio-economic status (SES). In previous reading studies, it has been shown that girls and boys

have variety choice of reading (Coles & Hall, 2002; Merisuo-Storm, 2006), the approaches towards reading (Coles & Hall, 2002; Kush & Wakins, 1996; Logan & Johnson, 2009; McKenna, Kear & Ellsworth, 1995; Sainsbury & Schagen 2004) and the motivation to read (Baker & Wigfield, 1999; Marinak & Gambrell, 2010; Wigfield & Guthrie, 1997), and that they value reading differently (Durik, Vida & Eccles, 2006; Eccles, Wigfield, Harold & Blumenfeld, 1993; Marinak & Gambrell, 2006; Wigfield et al. 1997). Therefore, in the present study, we considered it important to investigate the gender differences in reading motivation in the Hong Kong context.

Research have shown the decreasing motivation among primary school students when they progress to secondary school, and a substantial change when they progress to upper grade levels (Anderman & Midgley, 1997; Eccles & Midgley, 1989; Eccles et al., 1993; Guthrie & Wigfield, 2000; Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Wigfield et al., 1997), and some have also revealed that student's intrinsic motivation decreased with increasing grade and age (Anderman & Maehr, 1994; Anderman & Midgley, 1997; Gottfried, 1990; Gottfried, Fleming, & Gottfried, 2001; Lepper, Corpus, & Iyengar, 2005; Lepper, Sethi, Diadin, & Drake, 1997; Meece & Miller, 1999). Consistent with findings in western cultures, grade differences have been found in Chinese reading motivation of Hong Kong secondary school students (Lau, 2009). However, research on grade differences in reading motivation in the mother tongue is still limited in the Hong Kong context, and this relationship has not been explored in English reading motivation in the local context.

SES has also been revealed to be correlated with academic achievement (Strand, 2014). Some studies have found that it is associated with reading motivation as well (Yang-Hansen, 2008). However, the task in the reading motivation of Chinese and English in Hong Kong students has not been explored.

There is a much research on first language (L1) learning motivation. However, motivation for second language (L2) reading is a relatively underexplored area. Only a few studies have examined this (e.g., Kim, 2012; Mori, 2009; Lin, Wong and McBride-Chang, 2012). In these studies, reading motivation in L1 and L2 are conceptualized as distinct constructs. Moreover, reading motivation in L1 and reading motivation in L2 are associated with different reading outcomes (Lin et al., 2012). In this study, assuming that reading motivation in L1 (Chinese) and in L2 (English) are distinct constructs, school and demographic factors influencing reading motivation in each language were explored.

1.4 Independent and Dependent Variables of the Present Study

In this present study, there were six independent variables clustering into two domains: MOI, teacher support, and peer support as school factors, and gender, grade and SES as demographic factors.

The dependent variable was reading motivation. The framework of Self-Determination Theory was used to conceptualize reading motivation. Reading motivation, as an independent construct, was examined as well in both in L1 and L2.

1.5 Grounding Framework of Reading Motivation

In this study, the Self-Determination Theory (Deci, & Ryan, 2000; Ryan & Deci, 2000) was used as the theoretical framework since it helps to provide significant insights into motivation and why some students are motivated intrinsically while others are not particularly so in learning contexts (Noels, Pelletier, Clement, & Vallerand, 2000). SDT was applied in understanding reading motivation in previous studies (e.g., Guay et al., 2000). Two types of motivation, autonomous and controlled, under this framework. Autonomous motivation includes the intrinsic motivation to engage in an activity for its own sake or enjoyment and try

to find challenges and novel things (Ryan & Deci, 2000). Autonomous reading motivation defined as students participating in reading activities because they enjoy it. On the other hand, controlled motivation combines of introjected regulation and external. In the case of reading, controlled motivation means children read to meet external demands, obtain reward or avoid punishment. In this study, we conceptualized the construct of reading motivation as comprising two independent dimensions: autonomous reading motivation and controlled motivation.

1.6 Aims and Research Questions

The aim of this study was to use quantitative research methods to investigate the relationships between school factors, MOI, teacher support, peer support, and demographic factors, gender, grade and socio-economic status, in relation to the reading motivation in Chinese (L1) and English (L2) of secondary one, four and six students in the Hong Kong context. This project employed a cross-sectional design. This present study addressed the following questions.

- (1) How are the school factors, namely medium of instruction, teacher support and peer support, related to L1 and L2 reading motivation?
- (2) How are the demographic factors, namely socio-economic status, gender and grade, related to L1 and L2 reading motivation?
- (3) Are there differential patterns of prediction of school factors and demographic factors for L1 and L2 reading motivation?

1.7 Significance of this Present Study

Before the handover from China to Hong Kong, all schools were being used English as the Medium of Instruction (MOI) used it to teach all subjects except for Chinese language. This was based on the assumption that exposure in L2 is more important than in L1. However, after

the handover to China, only 114 secondary schools in Hong Kong were able to continue to use English as the MOI and the remainder shifted to Chinese. Up to now, as we do not know any difference in L1 and L2 of this significant change of MOI and motivation to read in Chinese and English. Therefore, L1 and L2 are distinct constructs because all subjects learning through L1 and L2 will depend on the learning hours and the exposure time (Komiya, 2013; Takase, 2007).

In western research, the impact of the school factors of MOI, teacher support and peer support on reading motivation is still underexplored. While previous studies have investigated the relationship between grade, gender and reading motivation in monolingual students, there has not been any work to examine the links between gender, grade and socio-economic status in reading motivation in the Chinese context. In order to fill the research gap, this study examined the school factors as well as demographic factors.

1.8 Organization of the thesis

This thesis is organized into five chapters: Introduction, Literature Review, Method, Results and Discussions and Conclusion. Chapter 1 presents the background, study objectives, research questions and significance of this present study. Chapter 2 reviews the literature relevant to the independent variables and dependent variables. Chapter 3 describes the research methodology, specifically the research design, participants, instrumentation, procedures and data analysis approach. Chapter 4 presents the results relating to the three research questions. Chapter 5 presents the discussion of findings and conclusion. In addition, the educational implications, limitations and future directions are discussed in the last chapter.

Chapter 2: Literature Review

In this Chapter, the theoretical perspective underpinning the study will be discussed. The chapter begins by establishing the educational context in L1 and L2 and the theoretical perspective of the Self-Determination Theory (SDT), followed by an explanation of the relationship between independent variables and reading motivation. Next, a review of the literature on reading motivation, including the relationship between reading motivation and the school and demographic factors, is presented. Finally, related studies in the Chinese context are introduced.

2.1 Educational context of first language and second language

2.1.1 Biliteracy and Trilingualism

Due to the “one country, two systems” principles established by China and Britain in 1984, Hong Kong has a high level of autonomy in managing affairs including education matters. Under the Basic Law, there is no intention to replace the colonial education system or to introduce Putonghua as a medium of instruction. The government of HKSAR can formulate its own education policies, including the educational systems, administration and the language of instruction (HKSAR Government, 2012, p. 71). The Basic Law prescribes Chinese as the official language of HKSAR, with English relegated to the second official language. The policy of trilingualism and biliteracy for all school students was first formulated by the first Chief Executive.

2.1.2 Medium-of-Instruction Policy

The choice of language medium used in Hong Kong was not just simply a matter of choosing the mode that would produce the highest level of academic achievement. Before the handover to China in 1997, Hong Kong had been a British colony since 1842, and the education system was based on that of England, with English as the instructional medium in all subjects, including mathematics, science and geography. Consequently, there was a belief that those fluent English could enjoy high social status in society, and parents saw English as a language of success, power and superiority. However, the use of Chinese as the medium of instruction was regarded as a language of stigma and enslavement (Pennington, 1998b) and appeared to be unpopular among parents in Hong Kong.

In Hong Kong, Chinese and English are very important subjects and valued highly by all parents. Chinese is the language of daily use; English is used for the purposes for education, business and government but not for social discourse. In 1990, The Education Commission, the highest government advisory committee on all major educational policy, undertook to review the language of instruction. The Education Commission described the existing pressure for children to learn English; while parents believed it would provide better opportunities and best prospects for their children's lives, many students had difficulty learning in the English medium. Chinese seemed to be undervalued as a medium of instruction (The Education Commission, 1990). A range of needs was identified. The government needed to provide many schools using English as the medium of instruction in order to maintain Hong Kong's status as a world financial centre . Research showed that students can study more effectively in English when students passed the requirements of language competency in English and Chinese and only EMI schools can achieve this requirements (Education Commission, 1990). The report from Education Commission also demonstrated the majority of students will learn more effectively through a medium likely to achieve the cognitive and maximum academic

achievement and this report also demonstrated only English as medium of instruction should be used can benefit (Education Commission, 1990).

Moreover, due to the aforementioned general opinion of parents in Hong Kong that English is the best medium for their children to learn and that learning in Chinese as the medium instruction is potentially disadvantageous (Gibbons, 1989), most of the reputable schools chose to use English as the medium of instruction at that time and were unwilling to lose their competitive advantage by changing to Chinese.

After the handover of Hong Kong to China in 1997, only 114 traditional Band 1 secondary schools continued to use English as the medium of instruction, except for Chinese language subjects, and the remainder were required to use Chinese for all subjects, other than for English language classes (Education Department, 1997). After the announcement of new language policies and practices in September 1997, many parents chose to send their children to English MOI secondary schools because they thought they provided opportunities for their children to gain higher proficiency in English, the language of success and socio-economic advancement in Hong Kong. There was a general feeling that studying in Chinese as the MOI could lead to social divisiveness in the future (Siu, 1979; Ho, 1986; Siu & Mak, 1992).

Currently, there is a fine-tuned language policy which came into effect in 2009. There continues to be 114 EMI secondary schools (Lo & Lo, 2014). Now, schools can choose Chinese or English as the MOI. If a school adopts English it is necessary to meet some specific requirements; for example, all the teachers should have received high scores in their public examinations in English for the Hong Kong Certificate of Education Examination, Grade C (HKCEE).

2.1.3 Banding in Hong Kong

In Hong Kong, there were five bandings or levels, of secondary schools before 1997, band one representing the best schools and band five the lowest in terms of academic achievement and academic abilities. After 1997, the bandings were reduced to three. As was explained in Chapter 1, before the return of Hong Kong to China in 1997, the majority of band 1 schools had adopted English as the medium of instruction (MOI) while the band 3 schools used Chinese. The band 1 schools represented the highest academic achievement and their students were motivated in learning and proficient in English, whereas the band 3 schools represented the lowest academic achievement and students lacked motivation.

Due to the complicated political, social, economic and educational considerations, the issue of Chinese versus English as MOI has been controversial for many years. To date, there is no final conclusive research evidence to support the effectiveness of using Chinese (L1) or English (L2) in Hong Kong.

There are many reasons behind using English (L2) as the MOI in secondary schools, particularly in the eyes of parents. First, when the MOI is L2 (Lyster & Ballinger, 2011; Stroller, 2008), students can learn to be more communicative in meaningful contexts (Genesee, 2006; Snow, Met, & Genesee, 1989). Second, when subject content is learnt through L2, which then trigger innate language acquisition so that students can interact more with their teachers and peers (Chomsky, 1959), students can obtain more interactionally input that better suits their needs and receive feedback on their language. Third, in the psychological strand, the use of L2 as the MOI may motivate students to enhance their L2 proficiency, which significantly affects students' academic achievement. Students may be more interested in learning L2 through the content of various subjects, which may have more positive effects on their motivation (Gardner, 1985; Genesee, 1991; Snow et al., 1989).

2.2 Conceptualization of reading motivation

Reading motivation refers to individual's personal goals, beliefs and values in relation to topics, process and outcomes of reading (Guthrie & Wigfield, 2000). It has been shown that children can be motivated to read for different reasons.

Some researchers in the field have proposed that individuals' efficacy beliefs and competence, purposes for achievement, and intrinsic and extrinsic motivation play a crucial role in their decisions about what kinds of activities to do, how long to spend on activities and how much effort to put in (Bandura, 1997; Eccles, Wigfield, & Schiedele, 1998; Pintrich & Schunk, 1996; Wigfield, Eccles, & Rodriguez, 1998). The motivated readers will engage more in reading activities (Guthrie, Van Meter, et al., 1996; Oldfather & Wigfield, 1996) and will have positive attitudes towards reading (Athey, 1982; Greaney & Hegarty, 1987; Mathewson, 1994; McKenna et al., 1995).

Previous reading motivation studies have revealed that it is a multi-faceted construct (Guthrie, Van Meter, McCann, & Wigfield, 1996; Nolen, 2007; Watkins & Coffey, 2004; Wigfield & Guthrie, 1997). Since reading motivation refers to an individual's subjective reason for reading (cf. Schiefele et al., 2012), these reasons can be classified as intrinsic and extrinsic (Unrau & Schlackman, 2006; Wigfield & Guthrie, 1997). Intrinsic reading motivation is defined as the innate motivation that appears spontaneously from psychological needs, for example, engaging in reading activities for enjoyment, and associated with more positive reading related outcomes such as more engagement, better comprehension and greater frequency (Becker et al., 2010; De Naeghel et al., 2012). Extrinsic reading motivation is defined as the motive to read in order to meet internal feelings of pressure or comply with an external demand. It has been shown to be related to negative reading outcomes, such as lower comprehension scores and less frequent reading (De Naeghel et al., 2012).

Apart from the distinction between intrinsic and extrinsic reading motivation (cf Schiedele et al., 2012) different dimensions of reading motivation have been suggested by various researchers (Baker & Wigfield, 1999; Guthrie & Wigfield, 2000; Wigfield, 1997; Wigfield & Guthrie, 1997). The general method in this line of research in measuring the construct has been to adopt the approach of combining individual or unitary measures into composite scores to index intrinsic reading motivation, extrinsic reading motivation or other dimensions; however, most previous studies have not defined it explicitly (Conradi et al., 2014).

In the past two decades, when conceptualizing reading motivation, the constructs developed by researchers in the field of achievement motivation have been frequently adopted (Baker & Wigfield, 1999; Guthrie & Wigfield, 2000; Wigfield, 1997; Wigfield & Guthrie, 1997). Guthrie and Wigfield (2000) drew on major motivation theories to develop a “Motivation for Reading Questionnaire” (MRQ) to measure different dimensions of reading motivation (Baker & Wigfield, 1999; Guthrie & Wigfield, 2000; Wigfield, 1997; Wigfield & Guthrie, 1997). In their conceptualization, reading motivation is comprised of three components, the goals of individuals performing variety reading related tasks (competition, importance, involvement, curiosity, recognition, and grades), individuals’ beliefs about their efficacy to achieve (work avoidance, challenge and self-efficacy) and social reasons for reading (compliance and social purposes). As measured by the Motivation for Reading Questionnaire (MRQ), the motivational construct discussed by Guthrie and colleagues can be divided into eleven factors: self-efficacy, challenge, curiosity, involvement, importance, work avoidance, competition, recognition, grade, social reason and compliance.

These constructs were developed from different concepts and theories related to human motivation, such as self-efficacy theory (e.g., Bandura, 1986; Shunk & Pajares, 2004, expectancy-value theory (e.g., Wigfield & Eccles, 2000), the concept of socially oriented goals (e.g., Wentzel, 1991, 1996), the concepts of extrinsic motivation and intrinsic motivation (e.g.,

Deci & Ryan, 1985; Ryan & Deci, 2000), and goal orientation theory (e.g., Dweck & Leggett, 1988; Nicholls, Cheung, Lauer, & Patashnick, 1989).

The following section will describe each of eleven constructs: curiosity, importance of reading, reading efficacy, challenge, enjoyment, reading for grades, compliance, competition, avoidance, social reasons and recognition. Reading challenge and reading efficacy refer to a sense of a student's competence based on self-efficacy (Bandura, 1997; Wigfield, 1994). Reading curiosity and enjoyment are connected closely to intrinsic motivation (Deci & Ryan, 1985). Curiosity means to learn more regarding the topics of one's interest. Competition, recognition and grades are based on extrinsic motivation. Competition means to achieve the highest levels of academic performance and achievement, especially in reading domains. Recognition means to get praise from parents and teachers for good reading performance. Compliance means reading to fulfill external pressures. Grade refers to improving one's grades in school. For the rest of other subscales of extrinsic motivation are compliance and social reasons. The importance of reading is based on reading work avoidance and the reading work on subjective task values (Eccles et al., 1983; Wigfield & Eccles, 1992), which is concerned with what students dislike about reading. These subscales which are based on social goals originated from motivation literature (Ames, 1992; Wentzel, 1989, 1996).

These eleven constructs have been adopted widely in research on reading motivation in students' first languages (L1), for example in the U.S. (Guthrie, Wigfield, & VonSecker, 2000; Mucherah & Yoder, 2008), in Hong Kong (Lau, 2004), and in Slovenia (Pecjak & Peklaj, 2006). The major findings have suggested that intrinsic motivation is associated positively with reading performance and extrinsic motivation is associated negatively with this ability (Lepper, Henderlong, Corpus & Iyengar, 2005; Wang & Guthrie, 2004). Intrinsic motivation has also been found to correlate with the amount of reading (Wang & Guthrie, 2004) and is a better predictor of reading engagement than extrinsic motivation (Wigfield & Guthrie, 1997).

The majority of these studies shown that the students were motivated to read mostly for intrinsic reasons, enjoyment and curiosity (Guthrie et al., 1999, 2007; Guthrie, Wigfield, & VonSecker, 2000). They read because they perceived reading to be a valued activity.

MRQ has also been used for assessing reading motivation in L2 (Mori, 1999, 2002). Mori modified the original version of the L1 reading motivation questionnaire in order to explore this, with a focus on the areas of motivation to read and study English in general and task-specific motivation. She showed there was a variety of characteristics and motivational patterns common to Chinese and English. For example, there were significant correlations between intrinsic motivation for L1 reading and L2 reading motivation scales, except for the utility value of L2 reading. Utility value of L1 reading and avoidance scales were also significantly correlated to learning goal orientated motivation towards L2 reading.

However, some researchers (e.g., Watkins and Coffey, 2004) have noticed that Motivation for Reading Questionnaire (MRQ) lacks support for their structure and this instrument was based of accumulation of different motivational theories and constructs and suggested that there are no fundamental bases of theoretical framework for the Motivation for Reading Questionnaire (MRQ).

In view of these criticisms of the MRQ, for the present study we adopted the Self-Determination Theory (SDT) as our grounding framework because it is an explicit theory of motivation and used to study the motivation of adolescents (Soenens & Vansteenkiste, 2005) with demonstrated value in educational fields (Reeve, 2002; Vansteenkiste, Lens, & Deci, 2006) and learning (Noels, Pelletier, Clement, & Vallerand, 2000).

SDT is a macrotheory of motivation that provides a method to understand and enhance student motivation. The theory presumes all students how impoverished and how unskilled that possess inherent a motivational foundation for autonomous motivation and healthy

psychological development (Deci & Ryan, 1985b, 1991, 2000; Ryan, 1995; Ryan & Deci, 2000b, 2002). There are three psychological needs are autonomy, competence and relatedness. As an educator, we need to find out the method to support students' active nature to facilitate students' optimal functioning academic engagement, personal well-being and constructive social development (Deci et al., 1991; Ryan & Deci, 2000b). This theory acknowledges whereas students reject opportunities for growth and lack self motivation.

SDT represents a broad theory of motivated behavior which relied on experimentally tested principles and constructed in both marco levels and mirco levels (Deci & Ryan, 2008). A substantial volume of research on SDT examines experimentally how the processes and structure of rewards, feedback, directives, praises, positive regards and other changed related diminish or enhance self-motivation and outcomes.

SDT has already used as a guiding framework in theorizing reading motivation among adolescents in western contexts (Soenens & Vansteenkiste, 2005), thus it was considered suitable as a theoretical framework to conceptualize the construct of adolescents' reading motivation in the present study. SDT has been widely adopted in different educational contexts. Many studies have already been tested the important SDT constructs in both classroom environment and laboratory based settings, helping to establish it and the most powerful empirically validated educational motivation theories (Reeve, Deci, & Ryan, 2004) that is relevant cross-culturally (Chirkov, 2009). Previous research on SDT has produced positive results (Guay et al., 2010) and it has been used effectively to measure the motivation dynamics of adolescents (Soenens & Vansteenkiste, 2005).

SDT provides for a clear picture of autonomous and controlled reasons for acting; the difference among controlled and autonomous has seldom been addressed in previous reading

motivation studies, but recent research has suggested promising results from adopting the SDT (Guay et al., 2010).

According to SDT, there are two categories of regulation, autonomous and controlled. In accordance with SDT, (Vallerand et al., 1992) envisage the seven dimensions of motivation of motivation as arranged in a continuum of increasing self-determination. The continuum is organized by different types of motivation ranging from amotivation through four types of extrinsic motivation to three types of intrinsic motivation.

Autonomous motivation refers to engaging in activities for enjoyment. It is combined with well internalized regulation and intrinsic motivation. Controlled motivation refers to reading to meet internal feelings of pressure or comply with external demands. There are two types of controlled motivation, introjected and external.

Based on the SDT, the Self-Regulation Reading Questionnaire (SRQ) was developed by previous researchers in order to measure two types of autonomous reading motivation, the intrinsic regulation, for example “I read because I enjoy reading”, and the identified regulation, for example “I read because I think reading is meaningful”, as well as two controlled types, introjected, for example “I read because I will feel guilty if I don’t do it”, and external regulation, for example “I read because others oblige me to do so”. The SRQ was used as the reading motivation scale because it was validated scale by using the Exploratory Factor Analysis (EFA) of first split-half data set and Confirmatory Factor Analysis (CFA) of second split half data set. Since the factor loadings are very clear to explicit the two factors structure. The two factors can be differentiated in terms of Autonomous reading motivation including intrinsic motivation and identified regulation and Controlled reading motivation, including introjected and external regulation. These factors have been found to predict reading

performance, reading frequency, reading engagement, reading comprehension and reading self-concept (Soenens & Vansteenkiste, 2005).

Besides conceptualizing autonomous and controlled reading motivation as two distinct factors in the construct of reading motivation, in the present study, we also propose that reading motivation in L1 and L2 are conceptually distinct. As Hong Kong students learn English as a subject and have limited exposure to it in daily life, we believe that their motivation to read in Chinese should be differentiated from their motivation to read in English. Indeed, previous studies have conceptualized L1 and L2 motivation as distinct constructs (Komiya, 2013; Takase, 2007). These findings have shown that students had high score on learning goal-oriented motivation and utility value of reading but low score on avoidance of reading in L2. The student had high scores on information-related motivation and utility value but low scores on avoidance of reading of L1. Also, intrinsic motivation was low for L2 but high for L1. Lin (2012) reported that intrinsic motivation and social motivation were significantly higher for L1 than for L2 in Hong Kong Chinese elementary grade students.

2.3 Autonomous Motivation

Autonomous motivation is defined as behaviors performed out of enjoyment or interest or for their innate value. In accordance with SDT, autonomous motivation includes intrinsic and identified regulation. The most autonomous type of reading motivation is called intrinsic motivation, characterised by students engaging in reading it was because they think it enjoyable and exciting. People become involved in an activity for its own interest, for the satisfaction and pleasure attained from performance and based on personal interest and enjoyment (Ryan and Deci, 2000a, b). This type of autonomous reading motivation represents the inherent tendency try to find challenges and novelty (Ryan & Deci, 2000).

This type of intrinsic motivation is a model of fully autonomous or self-determined behavior and seems to be the optimal form of motivation. It defines children's willingness to participate in an activity for its own sake and for their own enjoyment in order to satisfy their inherent satisfaction (Ryan & Deci, 2000). It can predict good reading performance and positive academic achievement (Ryan & Deci, 2000).

Intrinsic motivation, in general, leads to positive cognition, high performance, psychological well-being and social development (Ryan and Deci, 2000). This type of intrinsic motivation is the same as mastery goal orientation, in which students will focus on learning, understanding and developing competence, those with mastery goal orientation are more likely to be found to have higher academic achievement and performance, learning and intrinsic interest in strategy use, when compared with the performance goal orientation (Ames, 1992; Ames & Archer, 1988; Meece & Miller, 2001; Pintrich, Conley, & Kempler, 2003). Intrinsic motivation can be categorised into three dimensions, one is intrinsic motivation to know (IM-To Know), second is to experience stimulation (IM-Stimulation) and the last one is to accomplish things (IM-To Accomplish) (Vallerand and Associates, 1992). Intrinsic Motivation to Know is regarded as the performance of activities derived from the trying to understand new things, exploring and satisfaction and pleasure of learning (Vallerand et al., 1992, p.1005). Intrinsic Motivation to Experience Stimulation refers to doing something to experience fun, positive sensations and excitement (Vallerand et al., 1992, p.1006) and Intrinsic Motivation to Accomplish Things is concerned with engagement in an activity, since satisfaction and pleasure will come when creating something new or attempting something (Vallerand et al., 1992, p.1006).

Some studies have revealed that intrinsic motivation has been associated with positive academic performance and outcomes (Froiland, Oros, Smith, & Hirschert, 2012), for example low drop out rates (Hardre & Reeve, 2003), increased persistence (Vallerand & Bissonnette,

1992), stronger memory learning and better memory material (Gottfried, 1990). It is also associated with social-emotional advantages such as positive feelings with regard to homework (Froiland, 2011), enhanced psychological wellbeing (Deci & Ryan, 2008), increased happiness (Froiland et al., 2012) and more prosocial behavior (Grant, 2008). In light of various academic and social benefits of intrinsic motivation, there is still the question of whether it will decrease when students progress to upper grade levels (Gottfried, Marcoulides, Gottfried, Oliver, & Wright-Guerin, 2007).

Intrinsic reading motivation define motivation to read because it is inherently enjoyable or interesting (De Naeghel et al., 2012; Ryan & Deci, 2000); it can also refer to the desire to read for interest, enjoyment and excitement. Reading is carried out for no reason other than its own reward, and the reading activity thus motivated is followed by positive emotions and a sense of high satisfaction (Pintrich & Schunk, 2002; Ryan & Deci, 2000; Taboada et al., 2009).

This type of intrinsic interest in reading will lead to students devoting more effort and time to it; some studies have shown that it is related positively to the amount and breadth of students' reading, as well as comprehension performance and strategy use (Guthrie & Alao, 1997; Guthrie & Wigfield, 2000; Guthrie, Wigfield, Metsala, & Cox, 1999; Guthrie et al., 2007; McGeown et al., 2012; Wigfield, 1997). Intrinsic motivation predicts many different outcomes, for example reading comprehension (cf. Schiefele et al., 2012) and reading instruction (Lau, 2016).

Intrinsic reading motivation has been shown to contribute to reading performance (OECD, 2010a; Taboada et al., 2009; Van Elsacker, 2002; Wang & Guthrie, 2004) and reading frequency (Wigfield & Guthrie, 1997) as well as having positive correlations with reading skills (Wang and Guthrie, 2004). These research have suggested that intrinsic motivation is correlated positively with reading attainment (McElvany and Kortenbruck, 2010) and general academic performance (Lepper, Henderlong Corpus, and Iyengar, 2005).

Students lacking spontaneous interest in reading activities can also be considered to be motivated autonomously for reading. Even if the reading has personal significance to them, it is perceived as the reader fully and instrumentally justifies its importance; this is called identified regulation (Ryan & Deci, 2008) and this type of identified regulation is a self-determined type of extrinsic motivation in which students observe value in the external regulation and willing to transform it into a personally endorsed internalized regulation. Students determine with the value of the regulation and believe it as their own. For example, a student who likes to read and understands the value of it shows both identified regulation and intrinsic motivation.

Autonomous motivation may be more important than controlled motivation in predicting reading outcomes (Pelletier, Fortier, Vallerand, & Briere, 2001). Studies have revealed that the most preferable motivation is autonomous because it provides more positive academic outcomes than controlled motivation (Guay, Ratelle, & Chantal, 2008). Given its importance, this study aimed to investigate what school factors and demographic factors are associated with intrinsic reading motivation.

2.4 Controlled Motivation

Controlled reading motivation combines reading with a sense of coercion and pressure. Controlled reading motivation has two subtypes. Students are willing to read in order to meet external demands, for example to obtain rewards or to meet the expectations of teachers, parents or peers or to avoid punishment; this type of regulation is called external regulation (Ryan & Connell, 1989; Ryan & Deci, 2000).

On the other hand, if pressures come from internal forces such as shame, guilt or contingent self-worth, this type of controlled reading motivation is called introjected regulation. For example, if students who to read to meet internal feelings of pressure this will constitute introjected regulation (Ryan & Connell, 1989; Ryan & Deci, 2000). Since the controlled

motivation consists of two subtypes including external regulation and introjected regulation. So, external regulation is the most controlled type of extrinsic motivation and be least autonomous whereas external regulated, students to read in order to meet the external demands, avoid punishment and obtains rewards.

SDT is concerned with the degree to which the regulation is integrated into the self from lower to higher level of self-determination; these are including external regulation, introjected regulation, identified regulation and integrated regulation (Ryan & Deci, 2000). The extent to which each type of motivation emit from one's sense of self. Under SDT, this will not differentiate between extrinsic and intrinsic motivation but focusing on more controlled and more autonomous forms of motivation.

2.5 Distinguishing Autonomous Reading Motivation and Controlled Reading Motivation

Autonomous motivation and controlled motivation in reading are conceptualized as distinct (Baker & Wigfield, 1999; De Naeghel et al., 2012; Watkins & Coffery, 2004). It has been suggested that autonomous reading motivation tends to more desirable consequences than does controlled motivation; for example, more teacher-related reading engagement, higher frequency reading in leisure time and higher marks on a standardized reading comprehension test (De Naeghel et al., 2012).

Recent studies have focused on the distinction between controlled and autonomous reading motivation in late elementary school students (DeNaeghel, Van Keer, Vansteenkiste, & Rosseel, 2012). First, they found that the difference between controlled and autonomous reading motivation was related to reading activities both in the academic context of the school and the recreational context of leisure time (De Naeghel et al., 2012). The girls were revealed to perform higher levels of autonomous reading motivation in both academic and recreational contexts, while controlled reading motivation was the same for both genders (De Naeghel et

al., 2012; Guay et al., 2010). According to the past studies in the field of reading motivation and the theoretical framework of SDT, it is argued that autonomous reading motivation and controlled reading motivation are conceptually distinct and influenced by different factors.

2.6 School factors influencing reading motivation

School factors are important since most learning activities are conducted at school. Specifically, in this study, we examined the influence of school factors of MOI, teacher support and peer support in reading motivation. The rationale for choosing these factors was that they are underexplored areas but, nevertheless, important.

As outlined earlier, Hong Kong is unique in its educational policy with regard to the MOI. Therefore, this study examined if students from different MOI schools would have different levels of reading motivation in the two languages.

Previous studies involving teachers have shown how they convey their expectations to students continuously through their instructional goals and teaching styles (Hargreaves, Hester, & Mellor, 1975). Teachers who are skilled at conveying age-appropriate expectations for self-control and self-reliance and at soliciting student's comments and perceptions have students who are motivated to participate in positive social interactions and learning activities (Grolnick & Ryan, 1987; Skinner & Belmont, 1993). Moreover, teachers also deliver a sense of the value of academic activities to students by displaying high interest for the subject matter and enthusiasm (Wentzel, 1997; Wentzel, 2002). Thus, teacher support may play a vital role in students' reading motivation.

Peer support and peer expectations are the prosocial forms of behavior, although less frequently reported, have also been related to students' motivation (Wentzel, Filisettu, & Looney, 2007). Peer support thus may also influence reading motivation. The following section will describe each of these three variables, MOI, teacher support and peer support.

2.6.1 Medium of Instruction (MOI)

MOI is defined as the language used when teaching non-language academic subjects such as mathematics, history and science (Ho & Ho, 2004). Generally, the first language (L1) of students' is the default MOI in schools, however the second language (L2) has been adopted by some schools in Hong Kong (Ho & Ho, 2004).

Different countries have used different combinations of languages as MOI, for example Content and Language Integrated Learning in Europe, bilingual programs in the United States and immersion programmes in Canada (Ho & Ho, 2004). There has been a great deal of debate about adopting L2 as the MOI. In western countries, there has been no conclusive evidence of advantages or disadvantages of using L1 or L2.

In response to the needs of society, in 2009 the Hong Kong government decided to implement a “fine-tuned” language policy (Education Bureau, 2009) which allows diversified teaching modes such as Chinese as Medium of Instruction (CMI), or English (EMI) or a combination of both (EMI/CMI) in different subjects. However, there are three criteria specified to guide this choice: students must have the ability to learn in English, teachers are required to meet certain standards for teaching English, and schools must have sufficient support.

It has been suggested that exposure to L2 will put more emphasis on meaningful, communicative contexts and thus more incidental learning of the L2 (Genesee, 2006; Snow, Met, & Genesee, 1989). In the psycholinguistic strand, the effectiveness of L2 learning is supported by different L2 learning hypotheses. In accordance with comprehensible input hypothesis (Krashen, 1982), when learning content subjects through L2, students are inevitably exposed to more comprehensible L2 input, which then triggers the innate language acquisition device (Chomsky, 1959). Therefore students will inevitably learn more L2 through interacting

with teachers, peers and classmates, which spark the inborn language acquisition device (Chomsky, 1959). It has been suggested that the use of L2 as the MOI will enhance students' motivation to acquire L2 proficiency, which will have positive effects on their academic achievement (Bergroth, 2006; Turnbull, Hart, & Lapkin, 2001). It has also been suggested that learning through the L2 as the medium can lead to understanding of the subject content and knowledge (Gardner, 1985; Genesee, 1991; Snow et al., 1989).

In the Hong Kong situation, some students perceive that if their subjects are taught in L1, their academic achievement in L1 and related subjects will increase while, if their subjects are taught in L2, the academic achievement in L2 and related subjects will increase. If the school uses L1 as the MOI, then students may be motivated more in the Chinese language and achieve better in academic subjects taught using L1, whereas using L2 as the MOI, achievement would be higher in the English language and academic subjects taught using L2. This, perhaps, has implications for students' motivation to read in L1 or L2.

In this connection, lacking research on the impact of MOI on reading motivation in L1 and L2, we needed to explore if the exposure in L1 and L2 would be associated with the reading motivation under the current “fine-tune” language policy of secondary school education in Hong Kong.

2.6.2 Teacher Support

Teachers play a very important role in improving students' academic performances. What teachers do will shape the opportunities for students to learn. For example, the emphasis the teacher places on different goals, the kinds of questions asked, the time allocated to different topics, the tasks posed for students, and the types of discussion will influence what students learn and how they learn, which in turn will affect their academic achievement (Hiebert & Grouws, 2007; National Research Council, 2001).

Undoubtedly, the teacher-student relationship is key to student motivation (Crosnoe, Johnson, & Elder, 2004; Wentzel, 1998). Being given positive support can enhance students' motivation in the areas of low-level conflicts, increase their academic engagement and stimulate them to like their schools (Ladd & Burgess, 2001). These positive outcomes can help students transition smoothly from primary to secondary school, when academic challenges and socio-emotional behavior changes occur (Wentzel, 1998). Some studies have revealed that when students have more teacher support, they have more interest in class and school and that this plays a significant role in their achievement of social and academic goals (Wentzel, 1998). Social support from teachers is recognized as particularly important for disadvantaged students (McNeely & Falci, 2004; Rosenfield, Richman, & Bowen, 2000).

Teachers play an important role in inspiring their students' intrinsic reading motivation, which is an important component of autonomous motivation (e.g., Gambrell, 1996; Guthrie, 2008; Guthrie, McRae, & Klauda, 2007; Santa et al., 2000). This is particularly important when it comes to providing students from different socio-economic backgrounds with the literacy competencies needed to be successful in today's society (OECD, 2004).

According to SDT (Deci & Ryan, 2000; Ryan & Deci, 2000), intrinsic motivation can be influenced by the teacher's motivating style (Deci Ryan, 2000; Ryan & Deci, 2000; Skinner & Belmont, 1993). The need for autonomy means the psychological freedom and experience of a sense of volition when participating in an activity, and to be the initiator of one's own behavior. In order to support students' needs for autonomy within reading activities, teachers can allow them to carry out activities that capture the significance and value of reading and to choose relevant reading materials they find interesting. Students who enjoy the effective in reading activities and the experience of being confident should be able to identify the value of these activities and develop an interest in reading. When teachers adopt teaching styles that support the students' needs for relatedness, competence and autonomy in relevant reading

activities, a higher willingness and autonomous motivation to engage in these activities is expected (Stroet, Opdenakker, & Minnaert, 2013). There are many aspects of teacher support; for example, teachers may provide choices which allow their students choose the tasks they feel as interesting, which will cultivate engagement (Assor & Kaplan, 2001; Reeve, Jang, Carrell, Jeon, & Barch, 2004). In addition, teachers can stimulate respect in the classroom by using constructive criticism and non-controlling language (Assor & Kaplan, 2001; Belmont, Skinner, Wellborn, & Connell, 1992). They can encourage relevance in learning by communicating the meaning and value of the lessons (Assor & Kaplan, 2001; Reeve et al., 2004). The learning is perceived to be relevant when the students feel control over their learning and a sense of autonomy (Eccles & Roeser, 2011). Teachers may create structure by providing instruction, communication and guidelines about learning activities by giving positive feedback, by providing step-by-step directions and by responding consistently (Jang et al., 2010; Mouratidis, Vansteenkiste, Lens, & Sideridis, 2008; Skinner & Belmont, 1993; Vansteenkiste, Sierens, Soenens, & Lens, 2007).

The autonomy teacher support enables the self-determined motivation in students that facilitates the benefits such as higher academic achievement (Flink, Boggiano, Main, Barrett, & Katz, 1992), better academic performance (Boggiano, Flink, Shields, Seelbach, & Barrett, 1993) and higher academic intrinsic motivation (Deci, Nezlek, & Sheinman, 1981). according to Self-Determination Theory (SDT) (Deci & Ryan, 1985b, 1987, 1991; Rigby et al., 1992).

In general, the research on teacher support has focused on its role in reading comprehension and reading instruction and has targeted mainly junior forms in the Hong Kong context. There is a lack of research about the relationship of teacher support and reading motivation in L1 or L2, hence this was chosen as one of the key factors to be investigated in this study. In the present study, various factors influencing reading motivation were examined,

and thus we chose to investigate the influence of general teacher support on reading motivation. Teacher support was measured using the Teacher Support Scale in the Facilitating Conditions Questionnaire (McInerney, Dowson, & Yeung, 2005). This instrument had previously been validated and used in elementary and secondary school students in the United States. It was also used to predict student motivation in bilingual Filipino learners (Ganotice, Bernardo & King, 2013) and to examine the students' motivational profiles and the salience of motivational and other background variables in predicting school achievement (Suliman & McInerney, 2006). The teacher may be the main source of feedback about students' academic proficiency (Stipek, Givven, Salmon, & Maccgyvers, 1998) and may have the most powerful influence on the formation of academic perceptions and development of academic behaviors (Goodenow, 1993; Wentzel, 1998a, 1998b). This scale has been used in the past to predict school achievement through motivational processes (Reeve, Deci, & Ryan, 2004), so we used it as a measure of generic teacher support in this present study.

2.6.3 Peer Support

The young adolescents support their peers in order to meeting the basic and developmental needs (Deci & Ryan, 2000; Eccles et al., 1993). The perception of peer support are associated with academic success in school (Anderman, 2003; Bishop & Pflam, 2005; Goodenow, 1993). The peer support for example to clarify the teacher instructions, provide more information and compare school work (Hamm & Faircloth, 2005; Wentzel et al., 2010). More peer support is associated with positive academic achievement whereas less peer support may be at risk for poor academic performance (Goodenow, 1993; Wentzel et al., 2010).

Peers are important in children's lives, both in terms of time spent together and the impact on their development (Hartup, 1996; Newcomb & Bagwell, 1995; Rubin, Bukowski, & Parker, 2006). Peer support can affect young children in a number of ways, such as their

academic adjustment (Altermatt & Pomerantz, 2005; Berndt & Keefe, 1995; Guay, Boivin, & Hodges, 1999; Kindermann, 2007; Ryan, 2001). The influence of peer support may reach its peak during early adolescence, which is a time when young people interact more with peers, place more value on peer advice and approval and search for peers as a source of identity (Brown, 1990; Bukowski, Sippola, & Newcomb, 2000); as well, they make more use of social comparisons to assess their own competence levels (Dweck, 2002).

Peer support can provide some assistance in developing academic competencies and social competencies. For example, peers can interpret and clarify their teacher's instructions for each other, which is a form of mutual help or assistance (Cooper, Ayers-Lopez, & Marquis, 1982). The classmates are also provide vital message about themselves by social competence and modelling academic (Schunk, 1987) and by contrasting grades and work (Guay, Boivin, & Hodges, 1999). In western studies, adolescents have reported that their peer groups offer a sense of emotional safety (Brown, Eicher, & Petrie, 1986). Adolescents do perceive their relationships with peers as offering support and care when behavioral and academic problems occur (Goodenow, 1993; Wentzel, 1994; Wentzel & Caldwell, 1997). As with teachers, perceived emotional and social support from peers have been correlated with social motivation and academic motivation (DuBois, Felner, Brand, Adan & Evans, 1992; Harter, 1996; Wentzel, 1994; Wentzel, 1997; Wentzel, 1998).

The young adolescents support their peers by meeting each other's foundation developmental needs (Deci & Ryan, 2000; Eccles et al., 1993), in particular the needs for acceptance and relatedness (Brown, 2004). Students' feeling of peer support have been correlated positively with school success (Anderman, 2003; Bishop & Pflaum, 2005; Goodenow, 1993). Academic peer support, including clarifying the teacher's directions, promoting engagement and motivation and providing information (Hamm & Faircloth, 2005; Wentzel et al., 2000) can help to bring about a sense of belonging. If students do not receive

any support from their peers, they can be at risk of social adjustment and poorer academic results (Goodenow, 1993; Wentzel et al., 2010).

Peer support has been found to have some positive advantages for academic achievement and non-academic (Ford & Smith, 2007; Junvonen, 2006, 2007; Martin & Dowson, 2009; Patrick, 1997; Ryan, 2000; Wentzel, 1999). It has been shown to influence positive interactions, higher academic achievement (Berndt, Laychak, & Park, 1990; Furrer & Skinner, 2003) and higher academic engagement (Keefe & Bernt, 1996; Ladd, 1990; Ladd & Price, 1987).

Some research has suggested that students with friends who enjoy reading, discussing and recommending books will develop and maintain positive attitudes toward reading (Bintz, 1993; Partin & Gillespie, 2002). It has also been suggested that friends have big influences on reading choices (Hopper, 2005; Howard & Jin, 2007; Mansor, Rasul, Rauf, & Koh, 2012). Reading is important to adolescents' social interaction and academic competence and has been found to be integral to their enjoyment of books (Nieuwenhuizen, 2001). So, peer support may influence academic achievement, students who are academic successfully tend to affiliate with their peers and hold a high expectation in academic and valued good grade in the peer group (Kiuru, Aunola, Vuori, & Nurmi, 2007; Ryan, 2001). Peers also influence other behaviours, such as academic expectations and time spent on homework (Kiuru et al., 2007; Steinberg, Dornbusch, & Brown, 1992). Up to now, there has been no empirical study of peer support in reading motivation; this is a research gap that needed to be addressed in this present study.

Given the scope of this study, we focused on the role of generic peer support in influencing reading motivation. Peer support was measured using the Peer Support Scale in the Facilitating Conditions Questionnaire (McInerney, Dowson, & Yeung, 2005). This instrument had already been validated and used in elementary and secondary school students in the United States. As well, it was validated and used in the Asian context, with bilingual Filipino

adolescents in schools (Ganotice, Bernardo & King, 2013). The quality of peer interactions may have substantial implications for academic performance and school behavior and support from peers has been shown to be correlated with the development of positive academic performance (Connor, 1994; Jordan & Nettles, 1999; Walters & Bowen, 1997; Wentzel & Caldwell, 1997; Wigfield, Eccles, & Rodriguez, 1998), so we adopted this inventory as a measure of generic peer support for this study.

2.7 Demographic Factors

Demographic factors, including gender, grade and socio-economic status (SES), are also important factors that warrant further exploration in reading motivation. Previous studies have examined the relationship between grade and gender and reading motivation among monolinguals. However, gender, grade and socio-economic status have not been explored together in reading motivation in the Chinese context.

2.7.1 Gender

Gender means biological differences between males and females. Gender differences in academic achievement have been subject to fierce scrutiny for many years, suggesting that girls outshine boys in many areas (Ashby, 2005; Chee, Pino and Smith, 2005; Dayioglu and Turut-Asik, 2007; Ellis 1994; Nowell and Hedges, 1998; Oxford, 1993; Van de Gaer et al., 2006; Yasar & Balkis, 2004; Zusman, Knox & Lieberman, 2005). In foreign languages, girls have been reported as outperforming boys (Behcetogullari 1993; Oxford 1993; Dursun 2007) as well.

Gender differences found in reading research may be a result of differences in children's gender identities. Boys and girls have been shown to have some differences in their motivation to read (Baker & Wigfield, 1999; Marinak & Gambrell, 2010; Wigfield & Guthrie,

1997), reading choices (Coles & Hall, 2002; Merisuo-Strom, 2006), attitudes towards reading (Coles & Hall, 2002; Kush & Watkins, 1996; Logan & Johnson, 2009; McKenna, Kear & Ellsworth, 1995; Sainsbury, Sainsbury & Schagen, 2004), the frequency of reading (Coles & Hall, 2002), beliefs about reading competency (Wigfield et al., 1997), valuing of reading (Durik, Vida & Eccles, 2006; Eccles, Wigfield, Harold & Blumenfeld, 1993; Marinak & Gambrell, 2010; Wigfield et al., 1997) and reading skills (Ming Chui & McBride Chang, 2006; Mullis, Martin, Kennedy & Foy, 2007). These studies have also revealed that girls, in general, having more positive attitudes to reading than do boys.

From early childhood, reading is realised in the home environment as an activity related more to females than males (Millard, 1997). According to Millard, children shown that their mothers read more than their fathers and played an important role in teaching their children for reading (Millard, 1997), which can convey the message that it is a more feminine activity (Dwyer, 1974) as opposed to other subjects, for example mathematics, science and sport, which are correlated with boys (Meece, Bower Glienke & Brug, 2006). Meece et al. (2006) suggested that boys have interest and place a higher value in sports, science and mathematics, and while girls have interest and place a greater value on reading activity.

There is worldwide evidence of a gender gap in intrinsic reading motivation of girls among all ages (Applegate & Applegate, 2010; Eccles, Wigfield, Harold, & Blumenfeld, 1993; Kelley & Decker, 2009; Marinak & Gambrell, 2010; McGeown, Goodwin, Henderson, & Wright, 2012; McKenna et al., 1995; Mucherah & Yolder, 2008; Shumow, Schmidt, & Kackar, 2008; Smith & Wilhelm, 2002; Wentzel, 1989; Wigfield & Guthrie, 1997). Similarly, on an international scale, in the Progress in International Reading Study (National Literacy Trust, 2001) fourth-grade girls were much motivated to read than boys in all G8 countries (United States, United Kingdom, Japan, France, Italy, Russia, Canada and Germany). In 2004, a Canadian government study revealed boys' low motivation in reading in later primary school

grades (Human Resources and Social Development Canada, 2004). In the United States, an analysis of results findings from the 1992 to 2003 National Assessment of Educational Progress (NAEP) showed that girls in grades 4, 8 and 12 were consistently better motivated than boys (Kleinfeld, 2006).

Furthermore, research has reported that motivation to read decreases in adolescent boys (McKenna, Kear, & Ellsworth, 1995; Wigfield & Guthrie, 1997) and that young girl readers are more motivated and have better attitudes than boys towards reading (Durik et al., 2006; Mohr, 2006; Pecjak & Peklaj, 2006; Smith & Wilhelm, 2002).

Gender is related to reading motivation and is a powerful variable in predicting it. McGeown (2015) reported that, in primary school, there were no significant gender differences in reading skills but that girls reported significantly higher levels of reading motivation, involvement and curiosity and had higher intrinsic reading motivation. Consistent with previous study (McGeown, Goodwin et al., 2012), feminine traits were correlated more closely than masculine traits in terms of reading motivation. McGeown, Goodwin, Henderson and Wright (2012) found that, in primary school students aged 8 to 11, there were no gender differences in extrinsic reading motivation or reading skill, but that girls reported significantly higher intrinsic reading motivation, particularly for involvement and reading efficacy.

However, in the Asian context of Chinese society, research on gender differences in motivation to read in L1 and L2 is still limited. In contrast to Western societies, Hong Kong parents in general will place more value on education (Chung and Walkey (1989)). Students are expected to achieve success in academic performance and parents in Hong Kong are more authoritative figure, they may arrange more tutorial lessons for their children. (Chan & Chan, 2007).

The culture values may be mediated by academic motivation or may be associated with academic achievement. Different types of culture values may be linked to academic

achievement or higher academic motivation for example students with extrinsic motivation demonstrated low academic motivation in the United States than other students (US, Deci & Ryan, 2002; Ginsburg & Bronstein, 1993) but not in other culture for example in Chinese Societies (Taiwan, d'Ailly, 2003; Hong Kong, Moneta & Siu, 2002). Cultural values may also be linked to student's learning and behaviors. Collectivism can cultivate academic performance and, in Chinese societies, students in collectivist societies may enhance their academic achievement by placing high value on group interest and learn from one another (Markus & Kitayama, 1994). Previous studies conducted in collectivist cultures of Asian societies found that parents and teachers believed that learning cannot be separated from achievement, that learning and achievement are social obligations (Ng, 2003) and that students need to meet their parents' expectation (Walker & Debus, 2002). In contrast, students in western societies, tended to have self-benefiting motivation (Walker & Debus, 2002), that is more intrinsically rather than extrinsically motivated. While western students tend to regard extrinsic motivation as harmful for themselves, Asian students will combine intrinsic and extrinsic motivation (Leung, 2001). This may be an explanation for reports that Asian students reports consistently perform better academically than western students

2.7.2 Grade

Researchers have suggested a linear decrease in children's beliefs in their own abilities as they progress through to upper grades, and this pattern continues into the junior and higher forms, mainly due to developmental changes (Lau, 2009). The greatest changes have occurred after the transition from primary to lower secondary school, when there is a general motivational decline (Anderman & Midgley, 1997; Eccles & Midgley, 1989; Eccles et al., 1993; Guthrie & Wigfield, 2000; Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Wigfield et al., 1997).

Several studies have also found that students' intrinsic motivation and goal orientation decreased with grade and age (Anderman & Meahr, 1994; Anderman & Midgley, 1997; Gottfried, 1990; Gottfried, Fleming, & Gottfried, 2001; Lepper, Corpus, & Iyengar, 2005; Lepper, Sethi, Diadin, & Frake, 1997; Meece & Miller, 1999). There has been evidence of a significant and progressive shift from intrinsic to extrinsic motivation with an increase in grade level and age (Harter, 1981; Harter, Whitesell, & Kowalski, 1992; Newman, 1990; Tzuriel, 1989). According to the SDT, as students progress from grade 8 to grade 10, their introjection, identification, integration and external regulation decline along with their performance goals and mastery goals (Meece & Miller, 1999).

As they become older, students tend to rely on external evaluate feedback for understanding and evaluating their competence (Bouffard, Marcoux, Vezeau, & Bordeleau, 2003; Nicholls & Miller, 1984; Wigfield & Eccles, 2000; Wigfield et al., 1997). Having their psychological needs met is essential to motivation (Eccles and Midgley, 1993). With the development of early adolescence there are increases in the need for self-consciousness and autonomy ; as the school environment becomes better formal, better evaluative, better impersonal and better competitive, the increasing use of extrinsic incentives and constraints in schools may have adverse effects on students' intrinsic interest in their school subjects (Eccles et al., 1993; Wigfield, Eccles, & Pintrich, 1996).

In reading motivation, the studies of grade differences in western contexts have shown a significant decline across grade levels in student's reading self-concepts, intrinsic interest in reading, positive reading attitudes and importance of reading (Chapman & Tunmer, 2002; Eccles et al., 1993; Gottfried et al., 2001; Guthrie, Van Meter, McCann, & Wigfield, 1996; Jocab et al., 2002; Marsh, 1989; Marsh, Craven, & Debus, 1998; Meece & Miller, 1999; Wigñield et al., 1997).

In a Chinese study (Lau, 2009), a Chinese version of the Motivation for Reading Questionnaire was used to assess reading motivation in a large sample of Chinese students from grades 9 to 11. There were significant grade level differences found in reading motivation in all types of reading constructs in terms of self-efficacy, intrinsic motivation, extrinsic motivation and social motivation. These findings, that students in lower grades had more positive reading motivation than upper grade students did, are consistent with the findings of some western studies (Anderman & Maehr, 1994; Gottfried, 1990; Gottfried et al., 2001; Lepper et al., 1997, 2005), but this has been the only study of reading motivation in Chinese students in Hong Kong.

Overall, the previous research has suggested that there is a grade difference among junior form students and senior form students in western studies, and it has been shown consistently that achievement motivation and reading motivation decline gradually in students as they progress to higher grade levels. In both western studies and the Chinese context, the question of reading motivation in L2 is still unanswered. In addition, it is worthwhile to explore the relationship between reading motivation and related measures such as the MOI, teacher support and peer support at different grade levels.

2.7.3 Socio-Economic Status (SES)

SES is a vital factor which affects students' motivation in academic studies (Bradley & Corwyn, 2002; McCulloch & Joshi, 2001; Shonkoff & Phillips, 2000; Sirin, 2005) directly or indirectly through the effectiveness of parenting practices (e.g., Bornstein & Bradley, 2003), level of parental expectations (Battin-Pearson et al., 2000; DeGarmo, Forgatch, & Martinez, 1999; Parcel & Menaghan, 1990) and the nature and extent of educational resources provided (Benabou, 1996).

Studies have shown that nations or countries with the highest real gross domestic products (GDP) tend to have higher academic achievement of students (Baker, Goesling, & Letendre, 2002; Heyneman & Loxley, 1983). Student whose families have higher capital (SES) have been reported to have higher academic achievement (Bradley & Corwryn, 2002; Brooks-Gunn et al., 1999; Coleman, 1988). Family capital combines human capital (for example education), social capital (resources acquired from social connections, for example job occupation) and financial capital (material resources or wealth), and

The characteristics of SES usually include parents' educational backgrounds, incomes and occupations (White, 1982). Research has shown that the parent's educational background has a significant impact on the child's academic performance, with higher parental educational backgrounds influencing better academic achievement of their children (Hanushek, 1986).

According to the Programme for International Student Assessment (PISA; Organization for Economic Cooperation and Development, 2004), social class has an impact on educational output; the higher the family's social status, the better the child's academic performance. This link was also reported by Mistry et al. (2008), who pointed out that low SES children tend to obtain low academic outcomes due to disadvantages in home resources and poor parental investment.

Family SES is also an important factor to explain parental involvement; it has more influence on the parental involvement than other variables such as gender, age or marital status (Fehrmann, Keith & Reimers, 1987; Epstein, 1986; Heystek, 2003; Georgiou, 2007; Lareau, 2011; Mmotlane et al., 2009; Schmitt & Kleine, 2010). Generally lower income parents are involved less in schools than those with higher incomes (Machen, Wilson & Notar, 2005; Hoover-Dempsey, Walker & Sandler, 2005; Van Velsor & Orozco, 2007; Ratcliff & Hunt, 2009; Turney & Kao, 2009; Lareau, 2011).

Low SES, in contrast, can have a negative effect on child and adolescent development, including internal behavior, external behavior, cognitive and language development (Keating & Hertzman, 1999; Mendelson, Kubzansky, Datta, & Buka, 2008; Willms, 2002b).

High SES families have been found not only to have more financial resources, but also to spend more time planning for their children's learning (Conger & Dogan, 2007; Guo & Harris, 2000), using their resources to invest in goods and services, such as books and tutorial services, which will enhance the student's learning (Yeung, Linver, & Brook-Gunn, 2002).

SES (Geske & Ozola, 2008; Yalcin, Aslan & Usta, 2012) or SES indices, that is a combination of parents' income, educational level and occupation (Kirby, Parilla, & Pfeiffer, 2003; Rajchert, Zultak & Smulczyk, 2014; Park, 2008), has been established in previous studies as a factor that contributes to reading performance. Studies have also been conducted using PIRLS data to compare grade five students in the 25 countries in terms of home literacy environment and its influence on grade four students. Parental attitudes towards reading, home literacy environment and the numbers of books at home correlated significantly with reading performance (Park, 2008). If more resources were being contributed to children and also provide better living environments to them, , the more they have the reading performance (Gelbal, 2008).

The higher SES level and education level of the parents, the higher their participation and their children's reading skills. Parental support was found to make a significant contribution to their children's reading skills (Celenk, 2003). Studies examining fifth to seventh grade students' reading habits reported that, in the families with high SES, parents became the role models and purchases more books for their children (Gonen, Oncu and Isitan, 2004). In addition, research has revealed that there is a positive relationship between family income and adolescents' reading habits (Can, Turkyilmaz and Karadeniz, 2010). Other studies have also shown an association between students' demographics (SES, gender, parental issues

and home environment) and their reading performances. Guvendir (2014) reported an association between the father's educational level, the number of books at home and reading performance. Celenk (2003) conducted a study with 3,032 fifth grade students and found that SES and family education level both contributed to reading skills. Parental involvement was found to make a contribution to children's reading skills.

Despite the evidence, presented above, to support the relationship between SES and reading performance and habits, there is little research on its effect on motivation. Past research has found that family SES has a direct positive relationship to motivational beliefs (Koutsoulis & Campbell, 2001). However, to our knowledge, there is no research on the relationship between SES and reading motivation in either western or Hong Kong contexts.

To sum up, many studies have supported that the higher the SES, the better the academic and reading achievement. One of the aims of this study was to find out whether SES would have any significant impact on students' reading motivation in L1 and L2 in the Hong Kong context. We expected that with higher SES, the reading motivation would be higher, whereas the reverse would be the case with lower SES.

2.8 Theoretical Framework

Self-Determination Theory has been demonstrated as particularly valuable in the area of education (Reeve, 2002; Vansteenkiste, Lens, & Deci, 2006), including language learning (e.g., Noels, Pelletier, Clement, & Vallerand, 2000). It has been used effectively to measure the motivation dynamics of adolescents (Soenens & Vansteenkiste, 2005). It is a method for explaining people's inner motivational resources in relation to personal development.

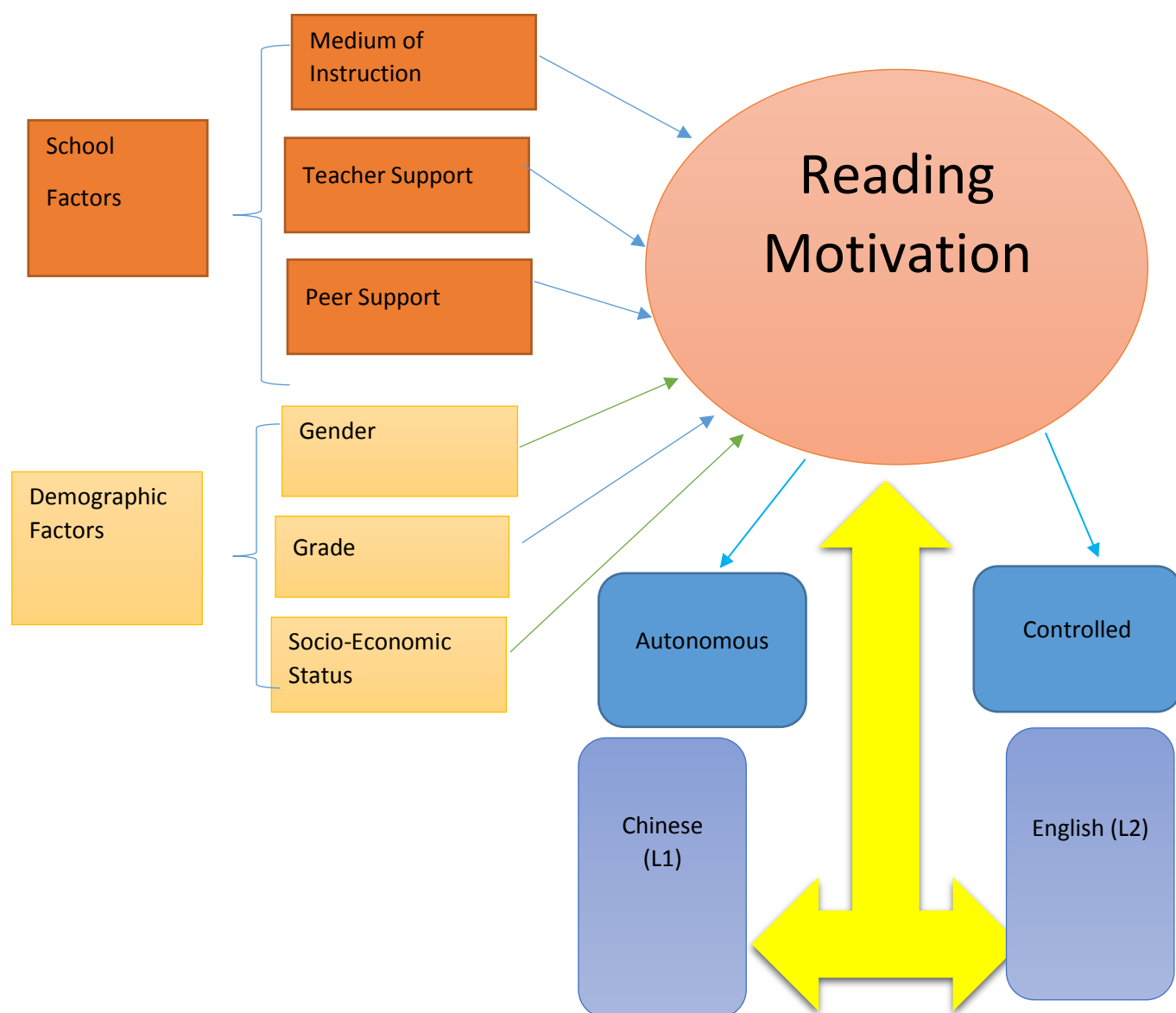
In this study, SDT (Ryan and Deci, 2000a) was adopted as the framework for conceptualizing reading motivation, which was the dependent variable of the present study. Specifically, factors influencing the two independent dimensions of reading motivation,

autonomous reading motivation and controlled reading motivation, were examined. Later, we also investigated whether reading motivation in L1 and reading motivation in L2 are independent constructs.

There were six independent variables in this study, namely MOI, teacher support, peer support, gender, grade and SES. The theoretical framework is presented graphically in Figure 1.

We hypothesized that there would be significant associations between the six independent variables with autonomous and controlled reading motivation in Chinese (L1) and English (L2).

Figure 1 School Factors and Demographic Factors in Reading Motivation in L1 and L2 among Hong Kong Secondary Students.



2.9 Research Questions and Expected Results

There were three research questions in the present study:

- (1) How are the school factors, namely MOI, teacher support and peer support, related to L1 and L2 reading motivation?
- (2) How are the demographic factors, namely SES, gender and grade, related to L1 and L2 reading motivation?
- (3) Are there differential patterns of prediction of school factors and demographic factors for L1 and L2 reading motivation?

It was expected that MOI, teacher support and peer support would be related significantly to autonomous and controlled reading motivation in Chinese (L1) and English (L2). We expected that students in Chinese MOI schools would have higher reading motivation in Chinese than those in English MOI schools, whereas students in English MOI schools would have higher English reading motivation than those in Chinese MOI schools due to the exposure time of L1 and L2 as their medium of instruction.

It was also expected that both teacher support and peer support would be related positively to reading motivation in both Chinese and English languages, given the previous findings showing the importance of teacher and peer support as reviewed earlier.

It was expected that girls would have higher reading motivation in both languages than boys, based on findings from western studies of gender differences in reading motivation. It was also expected that junior secondary students would have higher reading motivation than senior secondary students in both the first language (L1) and the second (L2) given the grade differences in reading motivation, as shown in previous studies.

Finally, it was expected that SES would be related significantly to reading motivation, and that students from higher SES families would have higher reading motivation in both languages than those from lower SES families.

2.9.1 Summary of this Chapter

This chapter has reviewed the theories and previous studies related to reading motivation, and the factors influencing it. Reading motivation is complicated because it can be conceptualized from different constructs and overlap with other motivational factors. The theoretical perspective of SDT provides a promising perspective on reading motivation. In this study, reading motivation is conceptualized as comprising two independent factors: autonomous reading motivation and controlled reading motivation.

In this chapter, the six independent variables, namely MOI, teacher support, peer support, grade, gender and SES, have been defined and related studies of these factors in influencing reading motivation have been reviewed.

Overall, there is a lack of research on reading motivation in the Hong Kong context. To have a better understanding of Chinese students' reading motivation in their first language (L1) and second language (L2) and related factors, more studies are required.

Chapter 3: Methodology

3.1 Introduction

There were six major independent variables in the present research: Medium of Instruction (MOI), Teacher Support, Peer Support, Gender, Grade and Socio-Economic Status (SES). Reading Motivation was the dependent variable. In this chapter, the instruments for measuring these variables are presented in the respective sections. In each section, the major assessment techniques and measures of the variables used in previous studies are reviewed first. Then, the measures used in this research are discussed. Some instruments have been developed by the author, hence the development and validation of these instruments will also be discussed. The following sections of this chapter deal with the implementation of the study according to the following sub-headings:

- Rationale for the research methodology
- Research design and justifications
- Instrumentation
- Data collection and management

3.2 Rationale for the research methodology

A quantitative research design was used since this allows for counting and constructing a statistical model. The researcher can know more clearly in advance what he/she is looking for, since all aspects of the study are designed carefully before the data are collected. This allows the researcher to use tools like questionnaires to collect the numerical data in order to test the hypotheses and allow the researcher to interpret the subject matter objectively. Moreover, quantitative research methods also allow for the extraction of data in a large volume, so standardized methods and a generalized sample can be used (McCusker and Gunaydin,

2009). Statistical analysis allows a deductive approach which enables the hypothesis testing (McCusker and Gunaydin, 2009).

3.2.1 Research design and justifications

This research was a cross-sectional study. The data were collected at the same time, from seven secondary schools in Hong Kong. There was a total of 941 responses from thirty-seven classes at the grade levels of Form 1 (F1), Form 4 (F4) and Form 6 (F6). The data were collected in the academic year of 2015/2016.

3.3 Instrumentation

Five inventories were used in the present study. We adopted the English version of the Self-Regulation Reading Questionnaire (SRQ) to measure English reading motivation (Ryan & Connell, 1989; Soenens & Vansteenkiste, 2005). The SRQ was translated into Chinese to serve as a measure of Chinese reading motivation. Teacher support and peer support scales in the Facilitating Conditions Questionnaire (McInerney, Dowson, & Yeung, 2005) were adopted. A scale of socio-economic status scale was developed by the author to measure SES.

3.3.1 Translation procedures

Translation procedures were needed for three scales used in the present study, namely Chinese Reading Motivation (CRM), Peer Support Scale (PRS), and Teacher Support Scale (TSS). Forward translation and back translation were performed to establish Chinese versions of these instruments. A translation team was involved in this translation. The members were all teachers in tertiary institutions in Hong Kong. One teacher had experience in instrument translation and had worked as an English teacher of foreign students and Chinese. Two people in the team perform the translation procedures from the original English version to Chinese

version. The group was then asked to compromise a consensus on each of the items after listening from all members. Back-translation was then used; this is a technique recommended for cross-cultural research (Champman and Carter 1979; Maneesriwongul and Dixon 2004), in which the target language version is translated back into the source language version to verify the translation. For the back-translation, each team member was given the opportunity to give his/her translation and other team members added their comments or opinions about the items until the group reached a consensus.

3.4. Measure of English Reading Motivation (ERM)

The Self-Regulation Questionnaire of Self-Determination Theory (Ryan & Connell, 1989; Soenens & Vansteenkiste, 2005) was adopted as a measure of English Reading Motivation (ERM). This questionnaire has been validated by previous authors (De Naeghel, Van Keer, Vansteenkiste, & Rosseel, 2012). There are two subscales in this inventory, autonomous reading motivation and controlled reading motivation. There are twelve items measuring autonomous reading motivation and also twelve items measuring controlled reading motivation. For controlled reading motivation, I deleted the question “I like reading because teachers and parents oblige me to do so” - when translated into the Chinese version, the meaning of this question was the same as that of another item. Examples of items used to measure autonomous reading motivation are: “I like reading English books because I really like reading”, “I like reading English books because it’s fun to read”, “I like reading English books because I think reading is fascinating”, “I like reading English books because I think reading is challenging”, “I like reading English books because I think reading is interesting”. Examples of the items for controlled reading motivation are: “I like reading English books because I will feel ashamed of myself if I don’t read”, “I like reading English books because I don’t want to disappoint teachers and parents”, “I like reading English books because I will

feel guilty if I don't do it", "I like reading English books because I have to prove to myself that I can get good reading grades", "I like reading English books because I want others to think I'm a good reader", "I like reading English books because I can be proud of myself if I get good reading grades". The items were rated on a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). Higher scores indicated a greater endorsement of the construct.

3.5 Measure of Chinese Reading Motivation (CRM)

To measure CRM, the SRQ was translated into Chinese following the procedures described above for the purpose of asking about the students' reading motivation in Chinese (L1). This instrument consisted of two scales, autonomous reading motivation and controlled reading motivation. Sample items for autonomous reading motivation are “我喜歡閱讀中文書，因為閱讀是有意義的”，“我喜歡閱讀中文書，因為它是非常有用的”，“我喜歡閱讀中文書，因為閱讀對於我來說是很重要的”，“我喜歡閱讀中文書，因為閱讀對我具有重大的價值”，“我喜歡閱讀中文書，因為我想學到新的事物”，“我喜歡閱讀中文書，因為通過閱讀可以發揮我的才能”. Sample items for controlled reading motivation are “我喜歡閱讀中文書，如果我不閱讀，我會感覺不好”，“我喜歡閱讀中文書，因為我的老師和父母都期望我這麼做”，“我喜歡閱讀中文書，因為老師和父母認為我要這樣做”，“我喜歡閱讀中文書，如果我閱讀，老師和父母會獎勵我”，“我喜歡閱讀中文書，如果我不閱讀。老師和父母將會對我很失望”. A 5-point Likert scale was adopted, with the scale from 1 (strongly disagree) to 5 (strongly agree).

3.6 Measure of Teacher Support (TSS)

Teacher support was measured using the Teacher Support Scale of the Facilitating Conditions Questionnaire (McInerney, Dowson, & Yeung, 2005). This questionnaire was

originally developed for bilingual Filipino adolescents (Ganotice, Bernardo & King, 2012). The English version of this instrument had been validated in previous studies that examined how perceptions of inhibiting and facilitating conditions may differ between secondary students and elementary (McInerney et al., 2005) and also compared the facilitating condition profiles within cultures (McInerney, 2008). As there was no such instrument for bilingual Chinese students, this instrument was adopted because it catered for another group of bilingual students. This questionnaire has six items: “Teachers are positive about my reading at school”, “I get encouragement from some of my teachers if I read well at school”, “If I go school my teachers encourage me to read”, “My teachers help me with my reading”, “It’s important to me to have my teacher’s help in reading”, and “My teachers help me to work hard at school in reading”. Again a 5-point Likert scale was used, with the scale from 1 (strongly disagree) to 5 (strongly agree). Examples of Chinese versions of the items are “在學校閱讀，老師給我正面的支援”。“如果我在學校閱讀良好，老師會給我一些鼓勵”。“如果我去上學，老師會鼓勵我閱讀”。

3.7 Measure of Peer Support (PSS)

Peer support was measured using the Peer Support Scale in the Facilitating Conditions Questionnaire (McInerney, Dowson, & Yeung, 2005). This instrument had already been validated by these authors. The scale was used in elementary and secondary school students in the United States. In past studies, it has demonstrated good psychometric properties (McInerney, Dowson, & Yeung, 2005). Therefore, after considering the psychometric properties of the Facilitating Conditions Questionnaire construct, these items were selected to be used in this study. To adjust the items to be related more specifically to reading, some wording was changed in this scale. For example, “Most of my friends want to leave school as soon as possible” was reworded to “Most of my friends want to avoid reading as much as

possible”. A 5-point Likert scale was again used. The instrument has two subscales, peer positive and peer negative. There are four items in measuring peer positive and three items in measuring peer negative. Sample items for peer positive is “Most of my friends like reading in school”. “Most of my friends want to be good readers”. Sample items for peer negative are “My friends say I should not read so much”. “My friends tell me not to read”. Examples of Chinese versions of the items are “我的朋友說我不應該閱讀太多”, “我的朋友告訴我不要閱讀”, “我的朋友告訴我將時間投放於其他的東西多於閱讀”。

3.8 Measure of Socio-Economic Status (SES)

The scale used to measure participants’ SES was being developed by the researcher for the purpose of this study. Standard questions used in the Census and Statistics Department of Hong Kong (Census and Statistics Department, 2015) were adopted, such as type of housing, educational level and occupation from the published questionnaire. Students were asked to indicate their personal information, including living location, type of housing, educational level and parents’ occupations. They had to choose one from the best option in each question. For example, parents’ education level was represented by one of the three options: 1 = Bachelor degree or above, 2 = Secondary level, 3 = Primary school or below. Mean scores were calculated for types of housing, and fathers’ and mothers’ educational levels and occupations. After collection of the data, we assigned a weighting to each question; for example, participants indicating they lived in private permanent housing scored 4, those living in subsidized home ownership housing scored 3, those in public rental housing scored 2 and those in temporary housing score the lowest 1. Similarly, for education level, those whose parents had attained Bachelor Degrees or above scored 3, with 2 for secondary level and 1 for primary school or below. For parental occupation the point allocation was: Manager or administrator 7,

Professional 6, Associate professional 5, Clerical support worker 4, Service and sales worker 3, Craft and related worker 2 and Other 1.

A composite score of SES was calculated by adding up all the scores from all items in this scale. The higher composite score reflected a higher level of SES.

3.9 Data collection and management

3.9.1 Participants

Due to substantial changes in the ages of transition from junior to senior forms, the three different levels of secondary school students were included in the sample. The purpose was to compare junior and upper form students in order to provide a more comprehensive view of different age groups, which was the reason for including F1, F4 and F6 in this present study.

The participants were drawn from seven secondary schools in Hong Kong, Kowloon and the New Territories, which covered bands one, two and three of the selective secondary school system. All seven schools were government-aided.

The original participants in this study were 948 students (428 boys and 520 girls) from the seven schools. There were thirty-seven classes, including 12 classes of F1 students, 12 classes of F4 students and 13 classes of F6 students. Before the students were approached the purpose of the study was explained to their teachers and they were assured that participation was voluntary and the students could withdraw from this study at any time and without any consequences. Before the study began, we needed to collect consent forms from the principals, parents and participants (see Appendix C).

In summary, the final questionnaire consisted of the following parts:

Part One: Demographic information, including grade, gender, class, age and medium of instruction

Part Two: Chinese Reading Motivation

Part Three: English Reading Motivation

Part Four: Teacher Support

Part Five: Peer Support

Part Six: Socio-Economic Status

3.9.2 Procedures

Formal consent was obtained from each participant. A formal letter was sent to each of the seven schools to explain the research purpose. Approval was obtained from parents and school principals before the arrangements were made for the data collection process.

After collecting the informed consent from the participants and school principals, the class teachers invited the students to complete the questionnaire in class. All the questionnaires were completed anonymously and the completion took around 20 minutes.

3.9.3 Statistical Analysis

All the data were entered into the Statistical Package for Social Sciences (SPSS), Version 23. SPSS is a powerful statistical package that is used widely in education and psychology research. It allows the researcher to perform different analyses, including descriptive statistics, correlation, confirmatory factor analysis (CFA), multiple regression and structural equation modelling (SEM). Statistical tables were generated using SPSS.

First, we checked the psychometric properties of the two reading motivation scales by performing Confirmatory Factor Analysis (CFA). This was to ensure the validity of the translated scales of reading motivation in Chinese and English. To validate the use of Teacher Support Scale and Peer Support Scale in Chinese settings, we also performed CFAs.

In the second stage of the analysis, descriptive statistics were calculated for all the measures.

To address the research questions, Structural Equation Modeling (SEM) was used to see which factors significantly predicted Chinese Reading Motivation (CRM) and English Reading Motivation (ERM) if they were found to be independent in the first stage of data analysis.

To address research question three, the beta coefficients predicting CRM were compared to those predicting ERM. These beta coefficients were derived from the SEM that were designed to answer research questions 1 and 2.



Chapter 4: Data Analysis and Results

4.1 Introduction

The purpose of this chapter is to present the findings of the present study. The results will be presented in relation to each research question listed below:

- (1) How are the school factors, namely medium of instruction, teacher support and peer support, related to L1 and L2 reading motivation?
- (2) How are the demographic factors, namely socio-economic status, gender and grade, related to L1 and L2 reading motivation?
- (3) Are there differential patterns of prediction of school factors and demographic factors for L1 and L2 reading motivation?

4.2 Handling of Missing Data

There were seven participants (5 boys and 2 girls) who had missing data in items measuring CRM, ERM, teacher support, peer support and SES. They only filled in the background information of Part I, grade, gender and class attended. Of the 948 questionnaires collected, these seven represented only 0.74%. We made a decision to delete the students with missing data, leaving a sample size of 941 (426 boys and 515 girls). The composition of the sample is presented in Table 1.

Table 1

Gender, Banding and Grade Level of Students (N = 941)

Demographic Information		n
Gender	Male	426
	Female	515
Banding	Band 1	587
	Band 2	213
	Band 3	141
Grade Level	F1	268
	F4	310
	F6	363

4.3 Self-Regulated Reading Questionnaire (SRQ) Validation

In order to test the factor structure of the construct of reading motivation carefully in this study, the random split-half method was used to derive two subsamples. Confirmatory Factor Analysis (CFA) was then carried out.

4.3.1 Confirmatory Factor Analysis (CFA)

CFA is the most powerful statistical strategy for testing the relationships among a set of variables, hence is called the measurement model. This measurement model was designed to include the relationships between the measurements of the constructs, the indicators and the constructs they were designed to measure.

CFA permits the researchers to test the theoretical derived models for the structure of the relationships in a set of latent variables. In this present study, four measurement models were tested separately. Under CFA, the maximum likelihood procedures will be performed which rely on covariances matrices in order to generate the parameter estimates.

In each model, the items were identified to load on the factor they were intended to measure, and all the factor loadings were estimated. Related latent variables and measurement variance were also estimated for each item.

The fit of the model was used to measure the overall fit for the models and assess the values of parameters. The researcher substantively adopted the chi-square statistics. Since adopted CFA method which be able to affect by sample size, therefore the number of estimated parameters and number of indices were used in this study to assess the good fit of the models (Bentler, 1990; Joreskog & Sorbom, 1993; Steiger, 1990). Very common indices were adopted to assess the overall fit of the model including the Tucker-Lewis index (TLI); normed-fit index (NFI); comparative fit index (CFI); goodness-of-fit statistic (GFI); and root mean square error of approximation (RMSEA). An adequate good fit is suggested by TLI, NFI, CFI, GFI and RMSEA.

In this study, the split half of the data ($n = 472$) was performed to find out of the four models tested. The four measurement models were tested and presented in Figures 2, Figure 3, Figure 4 and Figure 5. After finding out the best model, the other split half of the data ($n = 469$) was used to test again for the common indices such as the Tucker-Lewis index (TLI); normed-fit index (NFI); comparative fit index (CFI); goodness-of-fit statistic (GFI); and root mean square error of approximation (RMSEA).

Model 1 consists of four factors, Controlled Chinese Reading Motivation (CCRM), Controlled English Reading Motivation (CERM), Autonomous Chinese Reading Motivation (ACRM) and Autonomous English Reading Motivation (AERM). These are shown in Figure 2. Model 2 consists of two factors, Chinese Reading Motivation (RM-1) and English Reading Motivation (RM-2), which shown in figure 3. Model 3 consists of two factors, Controlled Reading Motivation (CCRM and CERM) and Autonomous Reading Motivation (ACRM and AERM), as shown in Figure 4. Model 4 is the only factor of Reading Motivation which included all 46 items, as shown in Figure 5.

Model 1 was selected from the four models, according to the common fit indices for measuring the model fit. An adequate good fit suggested by CFI, GFI, NNFI and TLI exceeded .9 and the RMSEA was less than .08. The above indices have been used often by researchers. Model 1 was the only one of the four models to provide goodness of fit. The TLI, NFI, CFI, GFI, RMSEA were .93, .94, .96, .91 and .07 respectively.

Figure 2, Model 1 4 Factors, ACRM, CCRM, AERM, ACRM

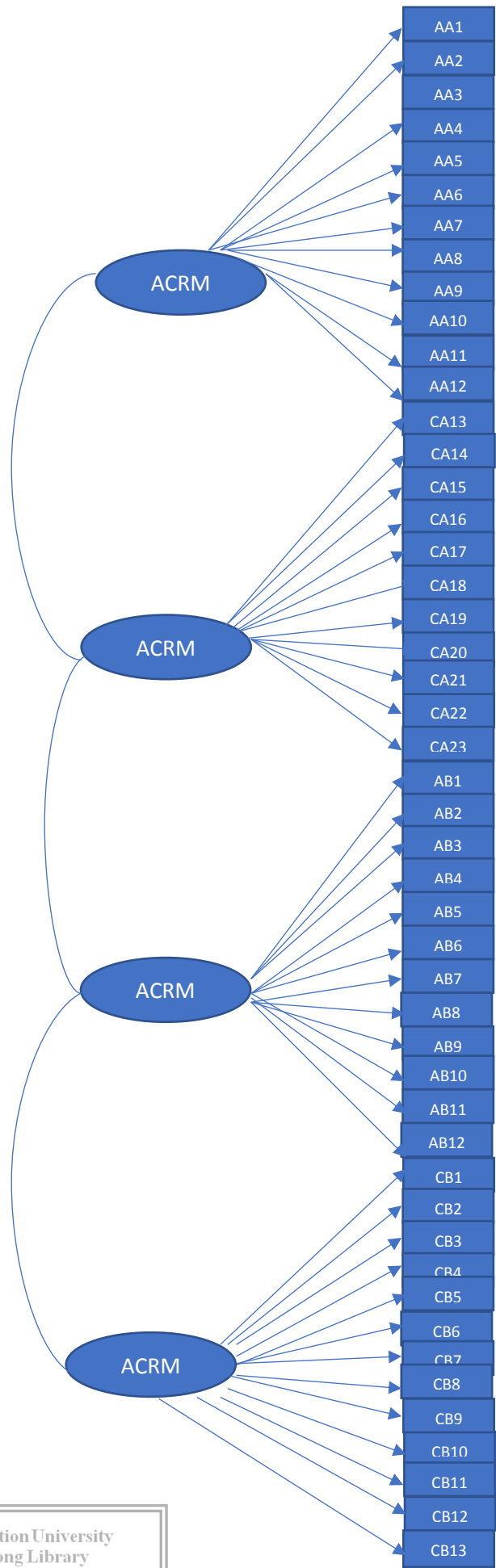


Figure 3 Model 2, 2 factors, CRM, ERM

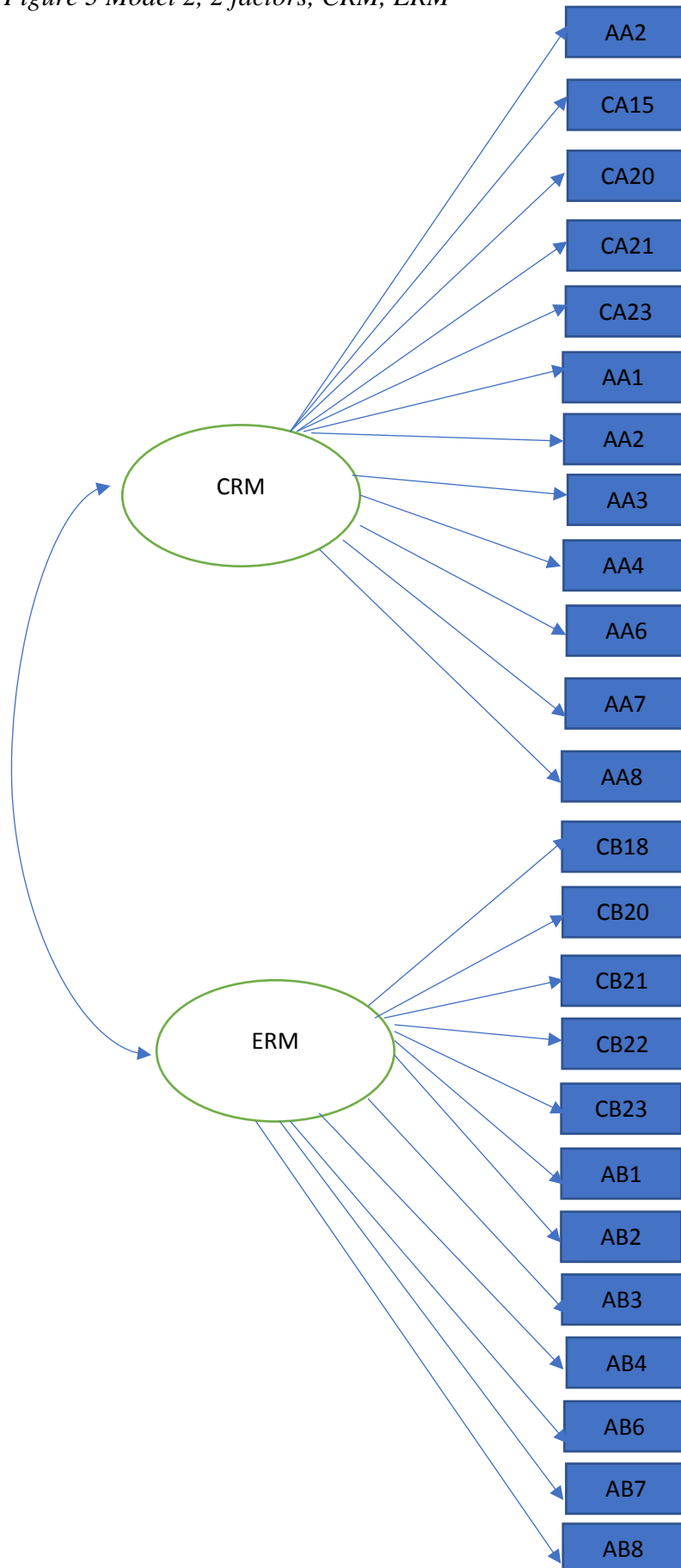


Figure 4 Model 3, 2 factors, CRM & CERM, ACRM & AERM

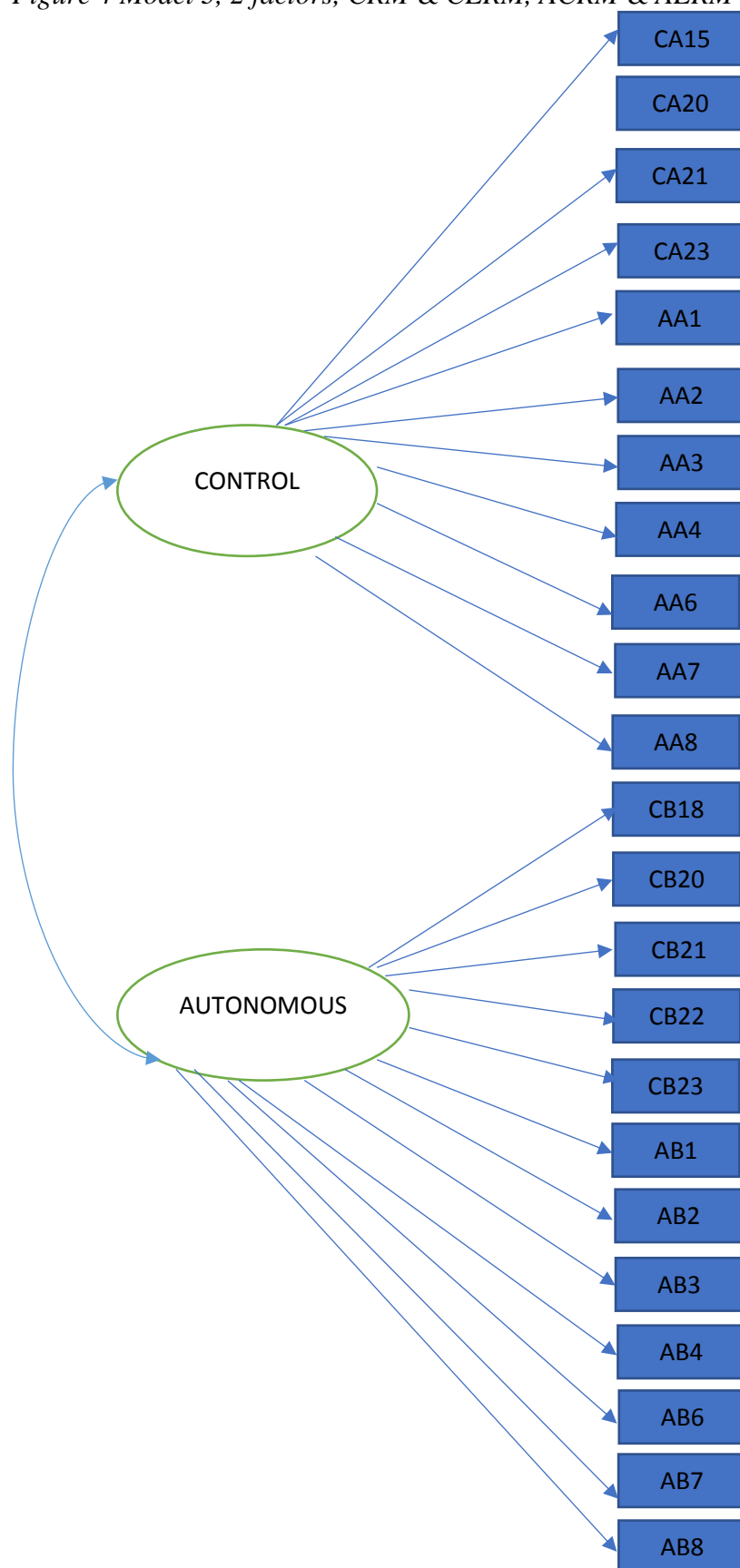


Figure 5 Model 4, 1 factor, RM-1 & RM-2

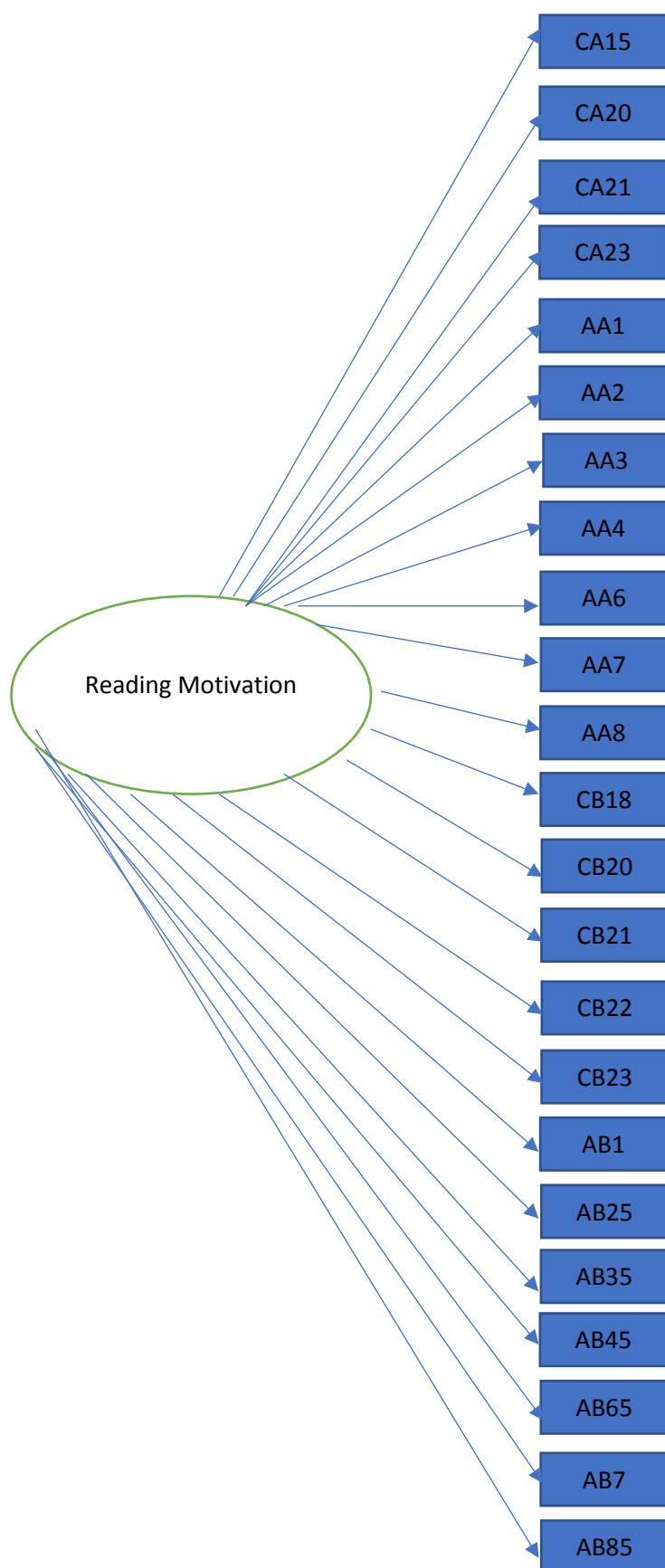


Table 2

Goodness-of-Fit Summary of Measurement Models

Model	χ^2	df	TLI	NFI	CFI	GFI	RMSEA
Model 1, 4 Factors, ACRM, CCRM, AERM, CERM	569.73	163	.93	.94	.96	.93	.06
Model 2, 2 Factors, CRM ERM	1,278.67	168	.82	.86	.88	.81	.12
Model 3, 2 factors, CCRM & CERM, ACRM & AERM	2,119.50	169	.68	.77	.79	.74	.16
Model 4, 1 Factor RM-1 & RM-2	2,908.76	170	.55	.69	.70	.65	.18

Note: TLI = Tucker-Lewis index; NFI=Normed-fit index; CFI= Comparative fit index; GFI = Goodness-of-fit statistic; RMSEA = root mean square error of approximation;

4.4 Confirmatory Factor Analysis (CFA) of Four Factors Model

Confirmatory Factor Analysis (CFA) of the four-factor model was performed again on the second split half data set (n=469) to test the measurement model further.

The measurement model provided a good fit [$p < .0001$; CFI = .91; GFI = .96 NFI = .94 TLI = .93 and RMSEA = .07]. Therefore, Model 1 met the requirements of the common indices and as the measurement model in this study.

4.4.1 Deletion of Items

After carrying out the CFA, the bad and non-significant items were removed based on the report of modification indexes. For Controlled Chinese Reading Motivation, these items

were “I like reading Chinese books because I will feel ashamed of myself if I don’t read”, “I like reading Chinese books because I don’t want to disappoint teachers and parents”, “I like reading Chinese books because I have to prove myself that I can get good reading grades”, “I like reading Chinese books because I want others to think I’ m a good reader”, “I like reading Chinese books because I can be proud of myself if I get good reading grades”, “I like reading Chinese books because I will feel bad about myself if I don’t do it”, “I like reading Chinese books because teachers and parents will only reward me if I read”.

For the Controlled English Reading Motivation, these deleted items were “I like reading English books because I will feel ashamed of myself if I don’t read”, “I like reading English books because I don’t want to disappoint teachers and parents”, “I like reading English books because I will feel guilty if I don’t do it”, “I like reading English books because I have to prove myself that I can get good reading grades”, “I like reading English books because I want others to think I’ m a good reader”, “I like reading English books because I will feel bad about myself if I don’t do it”. Autonomous Chinese Reading Motivation, these items were “I like reading Chinese books because I think reading is challenging”, “I like reading Chinese books because it is important for me to read”, “I like reading Chinese books because reading is of great value to me”, “I like reading Chinese books because I want to learn new things”, “I like reading Chinese books because I can develop my talents through reading”. Autonomous English Reading Motivation, these items were “I like reading English books because I think reading is challenging”, “I like reading English books because it is important for me to read”, “I like reading English books because reading is of great value to me”, “I like reading English books because I want to learn new things”, “I like reading English books because I can develop my talents through reading”.

Table 3 Four Factors of Reading Motivation and item factor loadings

Autonomous Chinese Reading Motivation (ACRM) Scale

Item	Questionnaire	Factor loadings
AA1	I like reading Chinese books because I really like reading.	.84
AA2	I like reading Chinese books because it's fun to read.	.86
AA3	I like reading Chinese books because I enjoy reading.	.86
AA4	I like reading Chinese books because I think reading is fascinating.	.83
AA6	I like reading Chinese books because I think reading is interesting.	.89
AA7	I like reading Chinese books because I think reading is meaningful.	.71
AA8	I like reading Chinese books because I think it is very useful for me to read.	.68

Controlled Chinese Reading Motivation (CCRM) Scale

Item	Questionnaire	Factor loadings
CA15	I like reading Chinese books because I will feel guilty if I don't do it.	.53
CA20	I like reading Chinese books because my teachers and parents expect me to do so.	.78
CA21	I like reading Chinese books because teachers and parents think that I have to.	.78
CA23	I like reading Chinese books because teachers and parents will be disappointed me if I don't read.	.64

Autonomous English Reading Motivation (AERM) Scale

Item	Questionnaire	Factor loadings
AB1	I like reading English books because I really like reading.	.87
AB2	I like reading English books because it's fun to read.	.90
AB3	I like reading English books because I enjoy reading.	.90
AB4	I like reading English books because I think reading is fascinating.	.91
AB6	I like reading English books because I think reading is interesting.	.91
AB7	I like reading English books because I think reading is meaningful.	.79
AB8	I like reading English books because I think it is very useful for me to read.	.68

Control English Reading Motivation (CERM) Scale

Item	Questionnaire	Factor loadings
CB18	I like reading English books because I can be proud of myself if I get good reading grades.	.79
CB20	I like reading English books because my teachers and parents expect me to do so.	.85
CB21	I like reading English books because teachers and parents think that I have to.	.88
CB22	I like reading English books because teachers and parents will only reward me if I read.	.76
CB23	I like reading English books because teachers and parents will be disappointed me if I don't read.	.80

4.5 Validation of Teacher Support Scale and Peer Support Scale

CFAs were also conducted on the two previously validated scales: Teacher Support Scale (six items) and Peer Support Scale (seven items) to check for the appropriateness of this scale in the present context. After performed the CFA, the bad items were removed based on the report of modification indexes. Due to low modification indexes of first and second items, at the end, two items were removed. These were “Most of my friends like reading in school” and “Most of my friends want to be a good reader”. The CFA provided a good fit [$p < .0001$; CFI = .96; GFI = .96; NFI = .96; TLI = .95 and RMSEA = .07]. The reliabilities of teacher support and peer support were .86 and .85 respectively.

Figure 6 CFA model of Teacher Support and Peer Support

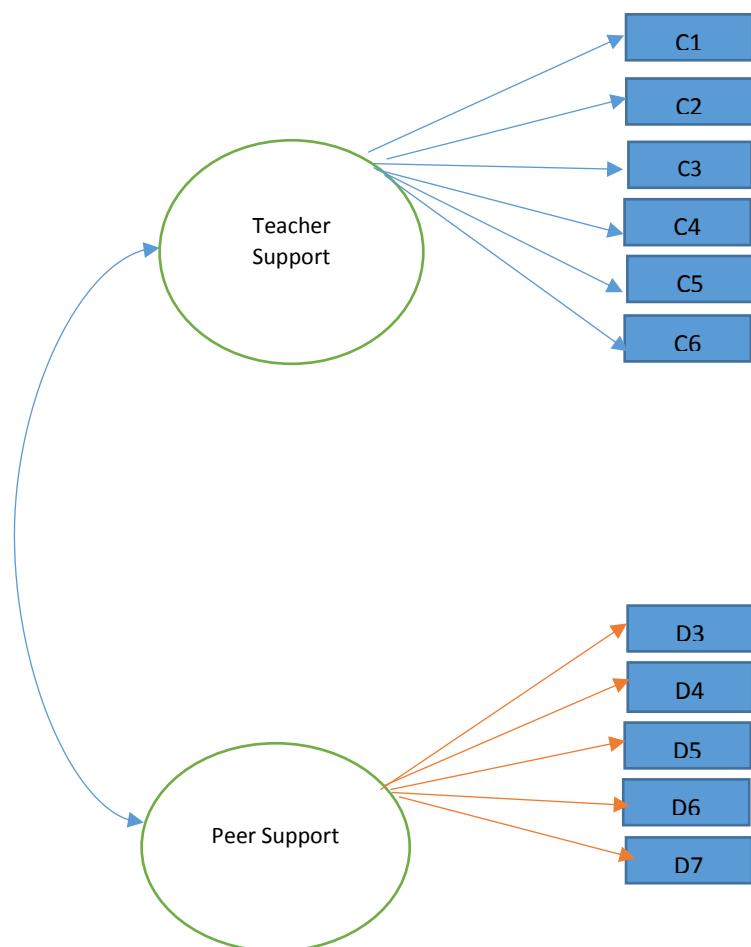


Table 4

Teacher Support Scale (TSS)

Item	Questionnaire
C1	Teachers are positive to my reading at school.
C2	I get encouragement from some of my teachers if I read well at school.
C3	If I go to school my teachers encourage me to read.
C4	My teachers help me with my reading.
C5	It's important to me to have my teacher's help in reading.
C6	My teachers help me to work hard at school in reading.

Table 5

Peer Support Scale (PSS)

Item	Questionnaire
D3	Most of my friends think reading is a waste of time.
D4	Most of my friends want to avoid reading as much as possible.
D5	My friends say I should not read so much.
D6	My friends tell me not to read.
D7	My friends tell me not to read and do other stuff.

4.6 Descriptive Statistics: Means, Standard Deviation and Reliability

The means, standard deviations and reliabilities of all measures in this study are shown in Table 6. The reliability of a questionnaire focuses mainly on the stability, consistency and dependability of the scores (McMillan, 2007). In this connection, the internal consistency was tested using the Cronbach's alpha for each scale in SPSS before moving on to the next steps. If the Cronbach's alpha value is higher than .80 the internal consistency is excellent, whereas if it is lower than .70, the internal consistency is acceptable (Blunch, 2008). Excellent internal consistency suggests that a participant's response to a positive item is more likely to be positive (Blunch, 2008). All measures employed in the present study showed a satisfactory level of internal consistency. So, this study met the reliability and validity requirements.

The four factors model is shown in Table 6, the four factors being Autonomous Chinese Reading Motivation of Chinese (ACRM), Controlled Reading Motivation of Chinese (CCRM), Autonomous Reading Motivation of English (AERM), and Controlled Reading Motivation of English (CERM).

Table 6

Descriptive Statistics of Reading Motivation Measures

	Mean	SD	Cronbach α
ACRM	3.52	.78	.94
CCRM	2.31	.82	.83
AERM	3.04	.87	.95
CERM	2.50	.88	.89

Note: ACRM (Autonomous Chinese Reading Motivation), CCRM (Controlled Chinese Reading Motivation), AERM (Autonomous English Reading Motivation) and CERM (Controlled English Reading Motivation)

Table 7

Descriptive Statistics of Teacher Support and Peer Support Measures

	Mean	SD
Teacher Support	3.22	.74
Peer Support	3.49	.78

Table 8

Descriptive Statistics of Teacher Support and Peer Support Measures by Gender, MOI and Banding

	ACRM	CCRM	AERM	CCRM	Teacher Support	Peer Support
Males	3.43	2.35	3.01	2.52	3.26	3.18
Females	3.59	2.28	3.06	2.49	3.39	3.57
CMI	3.42	2.26	2.82	2.41	3.51	3.15
EMI	3.58	2.34	3.16	2.56	3.47	3.26
Band 1	3.58	2.34	3.16	2.56	3.26	3.47
Band 2	3.51	2.20	2.91	2.33	3.08	3.57
Band 3	3.28	3.34	2.69	3.28	3.26	3.42

4.7 Correlations among Variables in this Study

Table 11 shows the correlations among variables in this study. We focused on the associations between the IVs and DVs. For school factors, Teacher Support was significantly correlated with CCRM, $r = .33$, $p < 0.001$, CERM, $r = .41$, ACRM, $r = .16$, $p < 0.001$, AERM, $r = .28$, $p < 0.001$.

Peer Support was significantly correlated with CCRM, $r = -.22$, $p < 0.001$, CERM, $r = -.17$, $p < 0.001$, ACRM, $r = .15$, $p < 0.001$ and AERM, $r = .09$, $p < 0.001$.

Grade was significantly related to CCRM, $r = -.10$, $p < 0.01$, CERM, $r = .11$, $p < 0.01$, and not significantly related to ACRM, $r = -.01$, $p < 0.01$, AERM, $r = -.02$, $p < 0.01$.

SES was significantly related to AERM, $r = .20$, $p < 0.01$ and did not have a significant relationship with CCRM, CERM or ACRM.

Table 9

Correlations Between the School Factors and Demographic Factors in Reading Motivation

	1	2	3	4	5	6	7
ACRM	1.00						
CCRM	.03						
AERM	.32**	.25**					
CERM	.08*	.70**	.39**				
Teacher Support	.16**	.33**	.28*	.44**			
Peer Support	.15**	-.22**	.09**	-.17**	-.05		
SES	-.06	.03	.16**	.05	.03	-.02	
Grade	-.01	-.10**	-.02	-.11**	-.14**	.04	.05

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, Gender: 1 = Male, 2 = Female, MOI: 1 = CMI, 2 = EMI

4.8 Relationships of reading motivation and school and demographic factors

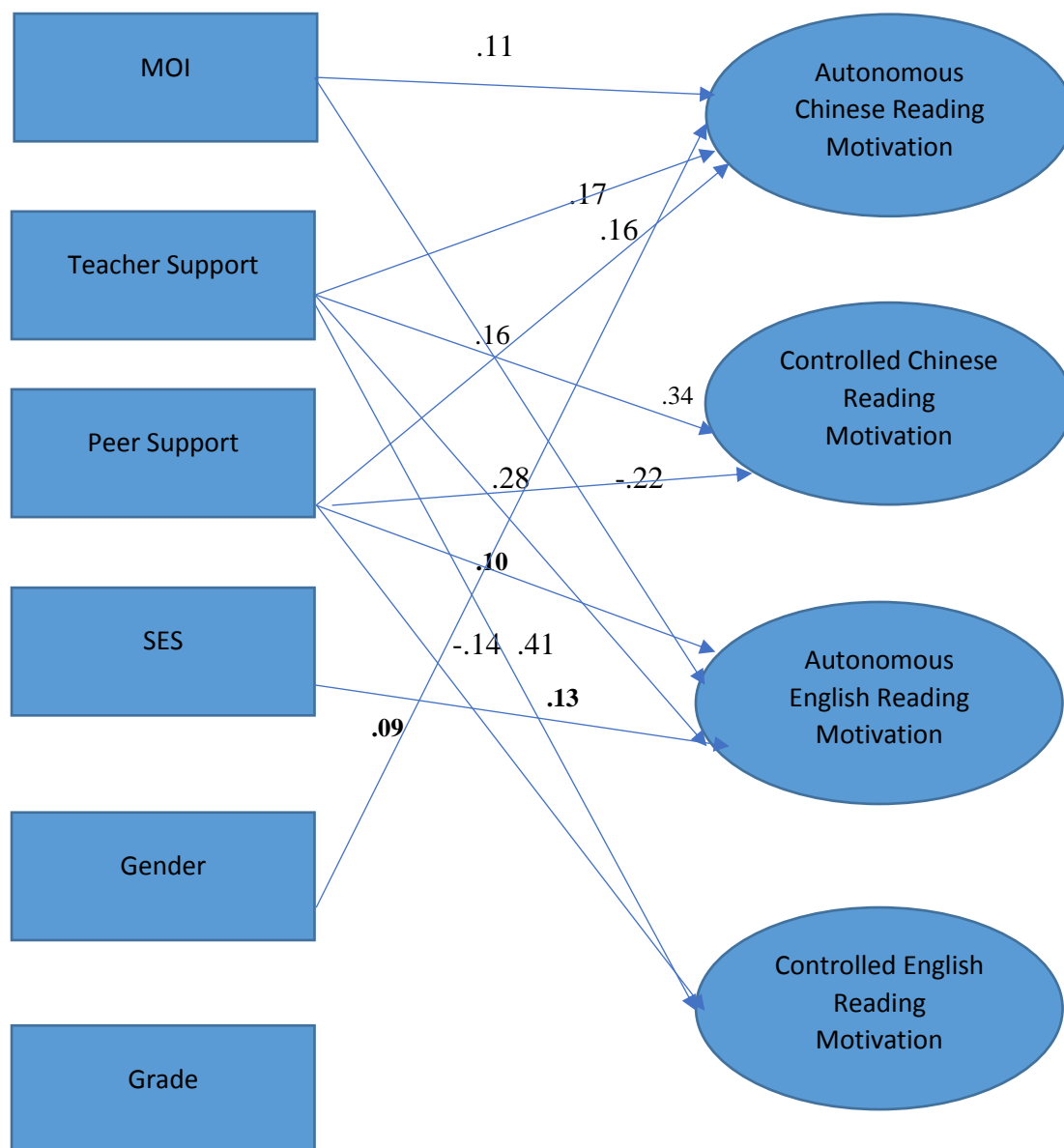
Structural Equations Modeling (SEM) was applied to test the conceptual model in reading motivation with MOI, teacher support, peer support, gender, grade and SES as predictors. IBM AMOS 23 was used to carry out the SEM of the theoretical model with maximum likelihood estimates. The conceptual model is presented in Figure 8 and the rectangles express the observed variables while the lines with arrows indicate each path being estimated. The rectangles to which the arrows are pointing are considered as outcome variables; those from which the arrows originate are considered as predictor variables. The fit of the model was mainly assessed by the measure of overall goodness of fit and values and parameters. The widely-adopted chi-square statistics can be affected by the number of estimate parameters and the sample size. Therefore, a number of indices were employed in this measurement model in order to study the goodness of fit of the mode (Bentler, 1990; Joreskog & Sorbom, 1993; Steiger, 1990).

Again, according to the recommendation of Hu and Bentle (1999) and Kline (2005), the following indices were presented: the chi-square test statistics, the p value, the root-mean-square error of approximation (RMSEA), and the comparative fit index (CFI), the goodness of

fit (GFI), the non-normed fit index (NNFI) and Tucker-Lewis indices (TLI). Previously mentioned before the adequate good fit suggested by CFI, GFI, NNFI and TLI should exceed .9 and RMSEA should be less than .05.

Then, we conducted the SEM for conceptual model using the whole data set ($n=941$). The conceptual model provided a good fit of SEM [$p<.0001$; CFI = .96; GFI = .93; NFI = .94 TLI = .94 and RMSEA = .06]. According to the recommendation of Hu and Bentler (1999) and Kline (2005), the following indices were presented: the chi-square test statistics, the p value, the root-mean-square error of approximation (RMSEA), and the comparative fit index (CFI), the goodness of fit (GFI), the non-normed fit index (NNFI) and Tucker-Lewis indices (TLI). An adequate good fit suggested by CFI, GFI, NNFI and TLI exceeded .9 and RMSEA was less than .07.

Figure 7 Conceptual Model of School Factors and Demographic Factors and Reading Motivation in Chinese and English



Note: Significant paths are shown and the non-significant paths are not shown.

4.9 Maximum Likelihood Estimates

Table 10

Standard parameter estimates in the conceptual theoretical model

	ACRM	CCRM	AERM	CERM
MOI	.11***	.02	.16***	.05
Teacher Support	.17***	.34***	.28***	.41***
Peer Support	.16***	-.22***	.10***	-.14***
SES	-.09	.04	.13***	.05
Gender	.09*	-.01	.03	.03
Grade	.02	-.07	.04	-.04

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, Gender: 1 = Male, 2 = Female, MOI: 1 = CMI, 2 = EMI

4.9.1 Addressing the Research Questions

Research Question 1: How are school factors, including medium of instruction, teacher support and peer support, related to L1 and L2 autonomous and controlled reading motivation?

MOI was a significant predictor of autonomous reading motivation in English and Chinese but was not a significant predictor controlled reading motivation in Chinese and English. Students in EMI schools were associated with higher autonomous reading motivation in English than students from Chinese schools but was not a significant predictor of controlled reading motivation in Chinese.

Teacher Support significantly predicted all reading motivation outcomes in this study. A higher level of teacher support was associated with higher levels of autonomous and controlled reading motivation in the two languages.

Peer Support was also a significant predictor of all reading motivation outcomes. Surprisingly, peer support had a negative relationship with controlled reading motivation in

Chinese and in English but a positive relationship with autonomous reading motivation in both languages.

To sum up, the current findings showed that teacher support and peer support were both significant predictors of controlled and autonomous reading motivation in the two languages. MOI only influenced students' autonomous reading motivation in English and in Chinese.

Research Question 2: How are demographic factors, including socio-economic status, gender and grade, related to L1 and L2 autonomous and controlled reading motivation?

SES was a significant predictor of autonomous reading motivation in English but was not a significant predictor of autonomous reading motivation in Chinese or of controlled reading motivation in either Chinese or English.

Gender was a significant predictor of autonomous reading motivation in Chinese but was not a significant predictor for autonomous reading motivation in English or of controlled reading motivation in either Chinese or English.

Grade was not significant predictors of autonomous reading motivation in two languages as well as the controlled reading motivation.

Research Question 3: Are there differential patterns of prediction of school factors and demographic factors for L1 and L2 reading motivation?

Overall, controlled motivation and autonomous reading motivation in English and Chinese were predicted by the same variables, except that gender was a significant predictor of autonomous reading motivation in Chinese but was not a significant predictor of autonomous reading motivation in English or controlled reading motivation in either Chinese or English.

SES was a significant predictor of autonomous reading motivation in English but was not a significant predictor of autonomous reading motivation in Chinese or controlled reading motivation in either Chinese or English.



Chapter 5: Discussion and Conclusions

5.1 Overview

This study found that autonomous reading motivation in both Chinese (L1) and English (L2) and controlled reading motivation in both Chinese (L1) and English (L2) were statistically differentiable. Relatively speaking, as shown in the study, school factors were more important than demographic factors in predicting reading motivation. Teacher Support and Peer Support were found to be the most important factors in both autonomous and controlled reading motivation for both languages. Surprisingly, peer support was positively associated with autonomous reading motivation but negatively with controlled reading motivation. Finally, MOI was associated with autonomous reading motivation in Chinese, and in English and gender was associated with autonomous reading motivation in Chinese and SES was associated with autonomous reading motivation in English.

In this Chapter, first we will discuss the use of Self-Determination Theory (SDT) in understanding reading motivation. Then, we will discuss findings related to each research questions raised in this study.

5.2 Self-Determination Theory

In this present study, SDT was used as the theoretical framework. Many studies have tested SDT in classroom settings and produced empirically validated theories for understanding educational motivation (Reeve, Deci, & Ryan, 2004). According to SDT, motivation falls along a continuum, from external factors such as fear, guilt and parents' and teachers' expectations to internal forms. The results of the present study were consistent with this view. From our measurement model, we have been able to demonstrate that autonomous reading motivation and controlled reading motivation were distinct in Chinese students.

Culture will influence a society's belief system, desired behaviors and educational practices (Greenfield, Keller, Fuligin, & Maynard, 2003; Kim & Park, 2008). It will also influence different aspects such as achievement beliefs (Chen & Stevenson, 1995) and motivation (Iyengar & Lepper, 1999). Different countries have different cultures; in Asian countries the pursuit of collectivism suggests that people are share with others in social contexts and motivated to promote goals (Hagger, Rentzelas, & Chatzisarantis, 2014; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Markus & Kitayama, 1991).

The findings of the current study, which align in SDT since SDT can contribute to our understanding of autonomous reading motivation and controlled reading motivation in Chinese (L1) and English (L2). Our measurement model provided a good fit for the sample size (n=941). SDT consists of intrinsic and extrinsic motivation; these were not related to our study in the four factors model of autonomous and controlled reading motivation.

5.3 Research Question 1: School Factors and Reading Motivation

5.3.1 Importance of Teachers' Support

The first research question of this study focused on examining the school factors of teacher support related to L1 and L2 autonomous and controlled reading motivation. We hypothesized that teacher support would be related positively to reading motivation in Chinese and English given previous findings showing the importance of the teacher, as reviewed earlier. The findings confirmed these hypotheses. Teacher Support significantly predicted all reading motivation outcomes and a higher level of teacher support was associated with higher levels of autonomous and controlled reading motivation in L1 and L2. These findings support the idea that teachers play an important role in promoting and shaping student's self-determined motivation and academic outcomes by providing support (Shen, Li, Sun, Rukavina, 2010;

Standage, Duda, & Ntoumains, 2005; Zhang, Solmon, Kosma, Carson, Gu, 2011) and also that they play vital roles in promoting early reading development (Baker, Dreher, & Guthrie, 2000; Bogner, Raphael, & Pressley, 2002). As effective teachers use different motivational strategies to motivate and provide support for children to read will increase student motivation and enhance student performance (Lam & Law, 2007).

It should be noted that teacher support in this present study was rated using a measure of generic teacher support in achievement motivation and not related specifically to reading motivation. Nevertheless, this finding is consistent with previous studies of teacher support in reading motivation (De Naeghel et al., 2012a, b; Deci & Ryan, 2000), demonstrating the importance of encouraging teachers to support their students' inherent psychological needs for relatedness, competency and autonomy within reading activities in order to encourage their motivation (Deci & Ryan, 2000).

Previous studies have shown that teachers play a critical role in stimulating students' intrinsic reading motivation (Gambrell, 1996; Guthrie, 2008; Guthrie, McRae, & Klauda, 2007; Santa et al., 2000). Teacher support of students' inherent psychological needs for autonomy, competence and relatedness can help to create an optimally motivating classroom climate (Deci & Ryan, 2000; Ryan & Deci, 2000).

As well, the findings of this study add to earlier findings that teacher support influences student's success (Wang & Eccles, 2013), well-being (Van Ryzin, Gravely, & Roseth, 2009) and adjustment to school (Deci et al., 1991; Wentxel & Wigfield, 2007). Undoubtedly, teachers have a most important role in meeting students' motivational needs through determining reward structures and regulating learning activities, having high expectations, and providing guidance and modelling (Good & Brophy, 1987).

Other researchers have also examined the influence of generic teacher support on academic achievement (Hamre & Pianta, 2001; Kiuru et al., 2014; O' Connor & McCartney, 2007; Pianta, La Paro, Payne, Cox, & Bradley, 2002; Pianta & Stuhlman, 2004; Valiente, Lemery-Chalfant, Swanson, & Reiser, 2008) , overall adjustment at school (Deci et al., 1991; Wentzel et al., 2010) and wellbeing (Van Ryzin, Gravely, & Roseth, 2009). This suggests an association with motivation during the adolescent period from 16 to 18-years of age, when teachers can meet and support their students' fundamental basic and developmental needs and promote positive adjustment by supporting them and encouraging them to seek help (Stroet, Opdenakker, & Minnaert, 2013).

Teacher support in promoting autonomous reading motivation can take many forms. Teachers may give some reading materials or reading tasks with age-appropriate choices, providing opportunities for students to take initiative in reading activities (Reeve, 2002; Sierens, 2010; Skinner & Belmont, 1993). This frees students to express their choices and not to suffer from teacher pressure when engaging in reading tasks and reading activities. Future studies may examine which aspects of teacher support will have an impact on autonomous reading motivation in L1 as well as in L2, which is an important predictor of reading outcomes.

In contrast, teachers may enhance controlled reading motivation by providing extrinsic incentives or creating pressure so that students' classroom participation is not regulated by their inner motivational resources (Deci, Connell, Ryan, 1989; Deci & Ryan, 1991). This present study has shown the positive relationship between controlled reading motivation in L1 and L2 and teacher support. To our best knowledge, there have not been any studies focusing on the role of teacher support in controlled reading motivation

In this study, the teacher support was related positively to controlled reading motivation, a less preferred form of motivation than autonomous reading motivation. Since teachers are in

the role of authority figures, students need to follow and obey their rules and instructions. Some students meet their teachers' expectations, in order to receive rewards or avoid punishment (Baker & Wigfield, 1999; De Naeghel et al., 2012; Watkins & Coffery, 2004). Therefore, given a negative relationship between controlled reading motivation and reading outcomes (Guay, Ratelle, & Chan, 2008), we do not know whether teacher support in promoting controlled reading motivation is beneficial to students or not. Special attention should be paid by teachers to enhance reading motivation. It is likely that different forms of support given by teachers can promote desirable and undesirable forms of reading motivation. The findings of the present study were not able to shed light on the relationships between different types of reading motivation and differentiable aspects of teacher support. Future studies should further explore such fine-grained relationships between teacher support and reading motivation.

In the L2 learning environment, teachers who try to create or improve their class environments are likely to enhance intrinsic motivation in L2 (Wu, 2003). Previous studies (Brown, 1990, 1994; Dickinson, 1995; Dornyei, 1994, 2001) have shown that learning environment is conducive to L2 intrinsic motivation. Other studies have confirmed its role in predicting perceived autonomy, perceived competence, positive attitudes to language learning and positive academic outcomes (Clement et al., 1994; Ehrman, 1996; Noels et al., 1999, 2000, 2001; Ramage, 1990; Tachibana et al., 1996).

In summary, teacher support emerged as the most important school factor of the few we have examined, in both autonomous and controlled reading motivation in L1 and L2 in this study. Given the importance of autonomous reading motivation in predicting reading outcomes, further studies should explore what aspects of teacher support are associated with autonomous reading motivation in L1 and L2. The role of controlled motivation in reading outcomes is less clear, as is its the relationship between teacher support and controlled reading motivation.

5.3.2 Peers Support and Reading Motivation

The first research question of this study focused on examining the school factors of peer support related to L1 and L2 autonomous and controlled reading motivation. We hypothesized that peer support would be related positively to reading motivation in Chinese languages and English languages given previous findings showing the importance of peer support, as reviewed earlier. A negative relationship was found between peer support and controlled motivation and a positive one between peer support and autonomous motivation.

The findings of this study are consistent with previous studies of positive relationship of peer support and achievement motivation (Wentzel & Asher, 1995). Students who perceive that their classmates care about them (Goodenow, 1993) who are accepted by peers (Wentzel & Asher, 1995) and who enjoy mutual friendships (Wentzel, Barry, & Caldwell, 2004) have been found to be more academically engaged at school. In addition, peer support has been found to be related strongly to the general psychological adjustment of college students when peers provide support such as sharing experience and teaching notes, study advice and some study strategies (Richardson & Skinner, 1992). Positive peer support has been found beneficial for students' academic competence and grades (Buhs, Ladd, & Herald, 2006; Diehl, Lemerise, Caverly, Ramsay, & Roberts, 1998; Flook, Repetti, & Ullman, 2005; Ladd, Kochenderfer, & Coleman, 1997; Kiuru et al., 2013; Ollendick, Weist, Borden, & Greene, 1992; O'Neil, Welsh, Parke, Wang, & Stand, 1997 ;; Zettergren, 2003).

Other researchers have also shown peer supports to be very important during adolescence, a time when the significant of friends increases (Berndt, 1982; Larson & Richards, 1991) and the importance of teachers and parents declines during transition to middle school (Eccles et al., 1993; Feldlaufer, Midgley, & Eccles, 1998; Larson & Richards, 1991; Spinath & Spinath, 2005). Friendships may benefit as well as other academic adjustments at school

(Ryan et al.). This study has added evidence that peer support is important for reading motivation in L1 and L2 for bilingual adolescents.

On the contrary, we have demonstrated a negative relationship between peer support and controlled reading motivation. To the best of our knowledge, there are no studies focusing on the influence of peer support on controlled reading motivation in learning L1 or L2. If more support is provided to their peers, the peers may be demotivated to read since peers are not authoritative figures. More support from peers will have negative effects, and reading motivation will decline. Special attention should be paid to the relationship between peer support and controlled reading motivation because many students will suffer from external pressure and if more sources come from outside they will have negative effects.

In a sense, this type of controlled reading motivation is reasonable in Hong Kong secondary schools. Special attention should be paid to peer support in controlled reading motivation because many students will suffer from external pressure, and if more sources come from outside, they will have negative effects. On the other hand, peer support has the strongest effect on autonomous reading motivation in both languages.

The implications of positive peer support on autonomous reading motivation in Chinese and English are important. Autonomous reading motivation refers to students participating voluntarily in their learning processes, which implies self-governing and the initiation of actions (Gillet, Vallerand, & Lafreniere, 2011). A previous study (De Naeghel and Van Keer, 2013) identified a difference between autonomous and controlled reading motivation in relation to peer support. Their research revealed that students with lower perceptions of peer support for their reading had higher autonomous reading motivation. These findings suggest that students are more likely to have autonomous than controlled reading motivation since they do not want pressure from their teachers and parents and can become demotivated by it. In summary,

peer support emerged as one of the important school factors among the few we have examined, in L1 and L2 reading motivation. Given the importance of autonomous reading motivation in predicting reading outcomes, further studies should explore what aspects of peer support are associated with autonomous reading motivation in L1 and L2. It is less clear about the role of controlled motivation in reading outcomes and the relationship between peer support and controlled reading motivation.

5.4 Research Question 2: Demographic Factors and Reading Motivation

5.4.1 Gender and reading motivation

The results shown there is no association between demographic factors of gender and reading motivation except that the autonomous Chinese reading motivation has a significant relationship with automotous reading motivation in Chinese. This is consistent with previous findings (Logan & Johnston, 2009; OECD, 2010a; van Schooten & de Glopper, 2002) that girls reported significantly higher than boys in autonomous reading motivation. In the domain of intrinsic reading motivation, there is a gender gap which favors girls than boys (United Kingdom; McGeown, Goodwin, Henderson, & Wright, 2012; United States; McKenna, Conradi, Lawrence, Jang, & Meyer, 2012; Mucherah & Yoder, 2008; International; Mullis et al., 2012 [PIRLS]; OECD, 2010 [PISA]).

Previous studies shown the girls reported higher intrinsic reading motivation in terms of reading efficacy and involvement (McGeown, 2012). Also, in other western studies (e.g., Chiu & McBride, 2006), girls tended to outperform boys and more likely to be good readers.

This present study shown there is a significant relationship between gender and Chinese reading motivation which are related to the same factors in Western studies and related to the first language. However, for the second language reading motivation may be more related

to other factors such as goal frequency, motivational intensity and self-efficacy, desire, integrative orientation, goals specificity, instrumental orientation, peer and teacher encouragement, mastery, parental encouragement, perceptions, luck and tolerance of ambiguity (Kissau, 2006). Thus, the factors are not the same as L1 and there is a significant relationship with automatic reading motivation in L1.

5.4.2 Grade and Reading Motivation

Out of our expectation, there was no association found between grade and reading motivation in this study. In western studies there has been evidence presented of a decline in students' motivation as they progress to upper grades (Anderman & Maehr, 1994; Anderman & Midgley, 1997; Gottfried, 1990; Gottfried, Fleming, & Gottfried, 2001; Lepper, Corpus, & Iyengar, 2005; Lepper, Setgi, Diadin, & Drake, 1997; Meece & Miller, 1999). Chinese students have been found to be more positively motivated than western students (Roger, 1998; Salili, 1996; Stevenson, 1993; Yan & Gaier, 1994).

In this study, there was no evidence of any significant difference between grade level and reading motivation. There are several possible reasons to explain this contrast with previous studies.

First, due to performance-oriented and competitive environment under the new Senior Secondary structure (NSS) (Education Bureau, 2009) that has been implemented in Hong Kong since the earlier studies, students are facing a more competitive and performance-oriented academic environment. This NSS system has an additional core subject called Liberal Studies, and students need to spend more time studying this extra subject rather than on other activities.

Another reason why the decline in reading motivation reported in western studies was not evident in this study may be the high value Chinese parents place on education. Because they expect their children to achieve good academic performance, the parents, the authority figures (Lepper et al., 2005), are more involved in their children academic matters. When students move to upper grade levels, their parents will decrease or minimize their children's extracurricular activities and help them to engage more in tutorials or private tuition.

Third, the previous studies showed that the students' perceptions of classroom instruction were correlated with their learning motivation and suggested that positive mastery-oriented learning environments facilitate positive student motivation (Ames, 1992; Ames & Archer, 1998; Pintrich, Conley, & Kempler, 2003; Wolters, 2004). In Hong Kong, since the change to the language policy in 2009/2010, students have more opportunity to choose schools that offer their preferred MOI, since many schools have the choice and can in fact shift from CMI to EMI or mixed CMI/EMI.

To sum up, the more challenging, competitive and performance-oriented education system in Hong Kong may have an effect on retaining reading motivation across grade level in Hong Kong. The reason for higher grade students not showing a decline in reading motivation may be related to the fact that they face more complicated public examination pressures.

5.4.3 SES and Reading Motivation

There was a positive relationship between SES and autonomous reading motivation in English (L2) only, but not in the other dimensions of reading motivation examined in this study. This finding is consistent with the previous studies (Kormos & Kiddle, 2013). Kormos and Kiddle also examined how SES is related to autonomous motivation to learn L2. Their findings suggested that, for Chilean students, the higher the SES, the higher the autonomous motivation

to learn L2. In Chinese studies other researchers have revealed that lower SES backgrounds are linked to less ability and academic achievement in English (Chung, Li, McBride, Wong & Lo, 2017).

In Hong Kong, L1 is used as the language of communication in over 90% of families (Cheung & Ng, 2003). Learning L2 is highly variable, yet L1 and L2 are regarded as equally important by the Hong Kong Government and society in general. In Hong Kong, both L1 and L2 are official languages. After many secondary schools made the shift of MOI from L2 to L1, students have much less exposure to English than they did in the past. Students from lower SES groups, whose parents' educational levels are lower, may have difficulties learning L2 (Chow, McBride-Chang, & Cheung, 2010). Higher SES families will put more resources into their children's education, for example arranging more private tutoring in both L1 and L2, buying more Chinese and English reading books and employing foreign helpers who can speak English with the children at home (Ho, 2010). 2010).

Higher SES families tend to have more positive attitudes towards English than do low SES families (KahnHorwitz, Shimron, & Sparks, 2006) since they have attained higher education levels and know how to motivate their children to read at home.

Hong Kong parents from low SES background may be ill-equipped to support their children to learn L2 (Chow, McBride-Chang, & Cheung, 2010), so these children are more likely to have reading difficulties in English (L2) (McBride-Chang, Liu, Wong, Wong, & Shu, 2011). Previous studies have also shown that low SES families in Hong Kong tend to have some difficulties in helping their children to learn English (L2) due to the parents' lower education levels (Chow, McBride-Chang, & Cheung. Previous local studies have demonstrated a relationship between SES and children's L2 reading achievement. The present study extended

these previous findings to adolescents, showing that SES is also associated with reading motivation in L2 in this age group.

In summary, high SES tends to have a positive relationship with autonomous English reading motivation, since higher SES parents tend to appreciate English (L2) more as an international language and may put more resources, for example, into purchasing English learning resources and hiring private tutors to teach their children at home. In contrast, because Chinese (L1) is the mother language and used in daily life, and children have plenty of exposure to it, so parents may not purchase Chinese learning resources as much as they do English resources. These family practices may have an impact on children's reading motivation in English.

5.5 Research Question 3: Same or Different Predictors of Autonomous Reading Motivation in Chinese and English

Regarding school factors, the current study found that both teacher support and peer support predicted autonomous reading motivation in L1 and L2. Except for SES predicting autonomous reading motivation in L2, none of the demographic factors investigated predicted reading motivation in either Chinese or English. This contradicts earlier findings reported in the literature, that gender differences and grade differences all had impacts on students' motivation in L1. While Lau (2009) found a grade difference in Chinese samples which were consistent with western studies and also reported a motivational decline from upper to lower grades and previous studies reported there was gender differences between boys and girls, in the present study, the only consistency with these earlier studies was a significant difference in autonomous Chinese reading motivation (McKenna et, al, 1995).

In previous research, Kim (2001) examined the college student at the age 18 year old in reading motivation. L1 is Korean and L2 is English, this study is using validated scale of Motivation for Questionnaire (MRQ) (Baker & Wigfield, 1999; Watkins & Coffey, 2004) for measuring L1 and using translated version of MRQ (Mori, 2002) for measuring L2. This measurement is similar studies in Hong Kong context of reading motivation in L1 (Lau, 2009), (Lin, 2012) and L2 (Lin, 2012). L1 and L2 are motivated by similar factors such as intrinsic motivation, learning goal oriented, avoidance and utility value, which is consistent with the findings of the present study.

5.6 Implications and Future Research

The results of this study support those of previous research (De Naeghel et al., 2012a, b) and the well-established Self-Determination Theory (SDT) (Deci & Ryan, 1985b, 1991, 2000; Ryan, 1995; Ryan & Deci, 2000b, 2002) for reading motivation. The focus of the present research was on Hong Kong Chinese students, whereas the Self-Determination Theory (SDT) has been based mainly on western samples. There is still a scarcity of studies using SDT in conceptualizing reading motivation. Further research is needed to investigate the applicability of SDT in understanding reading motivation at different levels of schooling and in students from different backgrounds.

The present study has a positive pedagogical implication for first language (L1) and second language (L2). The findings of this research demonstrate that, of all school factors, teacher support and peer support are the key predictors of reading motivation in Chinese (L1) (Guthrie, Wigfield, & VonSecker, 2000; Mucherah & Yoder, 2008) and English (L2) (Lau, 2004). School factors are very important to every student, especially for adolescents, and support from teachers and peers always occurs at school. In future studies, we need to explore

what aspects of teacher support and peer support are associated with autonomous reading motivation in Chinese (L1) and English (L2).

. The finding about the role of teacher support in predicting reading motivation in both Chinese and English has implications for teacher education and professional development.. Future research should examine what kinds of teacher support or teaching strategies are crucial for promoting reading motivation.

The positive relationship between peer support and autonomous reading motivation in both languages also has implications for practice and future research. We need to cultivate a supportive peer-support culture for students to promote a positive reading atmosphere. Future research should examine what kinds of peer support are crucial for promoting reading motivation.

5.7 Limitations of the Present Study

The results of this present study are believed to be reasonably sound due to the large sample size of over 941 students. The findings are limited, however, since the data were collected only by a self-reporting questionnaire. The participants may have been subject to various inaccuracies, such as filling in the wrong answers. The fixed-choice questions may have lacked flexibility; the choices may have led to some misunderstanding or participants providing biased answers, especially when providing sensitive information about SES.

The focus of this study was measuring the autonomous and controlled reading motivation, not reading such as reading comprehension, reading strategies and reading amount. Some researchers have previously conducted research on reading motivation and reading comprehension in L1 and L2 (Lin & McBride Chang, 2012), reading amount as a mediator of the effects of extrinsic reading motivation on reading comprehension (Schaffner, Schiefele &

Ulferts, 2013) and reading strategy use and reading motivation in Chinese students (Lau, 2003); these studies have been addressed some of the gaps in reading motivation. The inclusion of outcome variables will provide a fuller picture of the influence of school and demographic factors on reading motivation and reading outcomes.

Another possible limitation of the study is related to the Medium of Instruction (MOI). MOI may be related to academic achievement, meaning that students in EMI schools generally have higher academic achievement than students in CMI schools. We need to acknowledge that we did not control for academic achievement in this study.

Furthermore, this study focused on generic types of teacher support and peer support and there were no specific instruments used for measuring teacher support and peer support for measuring autonomous and controlled reading motivation in Chinese (L1) and English (L2) . This may have affected our measurement of teacher support and peer support in autonomous and controlled reading motivation in this study. Consequently, future research can investigate other related factors such as teacher beliefs (Hidi and Harackiewicz 2000), teacher behavior (Skinner & Belmont 1993), teacher and student relationships (Hughes et al, 2006), peer influence (Altermatt & Pomerantz, 2005; Berndt & Keefe, 1995; Guay, Boivin, & Hodges, 1999; Kindermann, 2007; Ryan, 2001) and parenting style (Dornbusch, Ritter, Leiderman, Roberts, Roberts & Fraleigh, 1987; Steinberg, Elmen, & Mounts, 1989) in reading motivation for both languages.

Moreover, this study only examined some school factors, namely teacher support, peer support, medium of instruction and demographic factors, including grade, gender and SES to predict reading motivation and not including reading outcomes. School environment and classroom environment can be explored further as school factors to predict the effects of reading motivation on reading outcome.

5. 8 Conclusion

The results of this present study have a positive pedagogical implication for first language (L1) and the second language (L2). This study demonstrated that school and demographic factors do influence the autonomous reading motivation of secondary school students in Hong Kong. Among the school factors and demographic factors, those associated with Teacher Support are believed to be the strongest in this sample of Chinese's Secondary 1, Secondary 4 and Secondary 6 students. This authenticates the generalizability of the extant Self-Determination Theory (SDT) and research on reading motivation support for secondary students and the robustness reported in this study.

We have been able to present convincing evidence that the form of teacher support delivered has an effect on secondary students' reading motivation. The present results are particularly reliable and informative because the factor of Teacher Support correlated positively with autonomous reading motivation in both Chinese (L1) and English (L2), which is consistent with the Self-Determination Theory (SDT) and prior research with western samples. The latent variable of Teacher Support predicted autonomous reading motivation positively in both Chinese (L1) and English (L2).

Based on this findings, we offer some implications for teachers. Although the reading motivation of Chinese (L1) and English (L2) have no association when the student goes to upper grades, teacher support still maintain the greatest influence on secondary students reading motivation. The present results suggest that the higher autonomous Chinese (L1) and English (L2) reading motivation come from the teacher support, which can create or enhance the teacher-student relationship.

In previous classroom research, the school factors of Teacher Support suggested teaching styles that provide autonomous teaching support which is the strongest predictor of

classroom engagement and academic achievement in adolescents (Jang, Kim & Reeve, 2012; Jang, Reeve, & Deci, 2000).

Teacher support is particularly important during the secondary school phase, when adolescents need teachers' help in many different ways including academic and social and emotional directions. With appropriate academic support from their teachers, students may enhance their academic achievement and performance, especially in reading Chinese (L1) and English (L2). Socially, teachers can help students to be more sociable when doing some activities at school. To give emotional support, teachers can identify some at-risk students and provide some counselling services. Thus, it is recommended that teachers provide support to all students in order to enhance their reading motivation in both Chinese (L1) and English (L2).

References

- Babones, S. (2016). Interpretive quantitative methods for the social sciences. *Sociology*, 50(3), 453-469. doi:10.1177/0038038515583637
- Besnoy, K. D., Dantzler, J., Besnoy, L. R., & Byrne, C. (2016). Using Exploratory and Confirmatory Factor Analysis to Measure Construct Validity of the Traits, Aptitudes, and Behaviors Scale (TABS). *Journal for the Education Of the Gifted*, 39(1), 3-22.
- Becker, Michael, McElvany, Nele, & Kortenbruck, Marthe. (2010). Intrinsic and Extrinsic Reading Motivation as Predictors of Reading Literacy: A Longitudinal Study. *Journal of Educational Psychology*, 102(4), 773-785.
- Boari, G., & Ruscone, M. N. (2015). A procedure simulating Likert scale item responses. *Electronic Journal Of Applied Statistical Analysis*, 8(3), 288-297. doi:10.1285/i20705948v8n3p288
- Caleon, I. S., Wui, M. G. L., Tan, J. P. L., Chiam, C. L., Soon, T. C., & King, R. B. (2015). Cross-cultural validation of the Academic Motivation Scale: A Singapore investigation. *Child Indicators Research*, 8(4), 925-942.
- Chanal, J., & Guay, F. (2015). Are Autonomous and Controlled Motivations School-Subjects-Specific? *PloS one*, 10(8), e0134660.
- Chan, S. M., Bowes, J., & Wyver, S. (2009). Chinese Parenting in Hong Kong: Links among Goals, Beliefs and Styles. *Early Child Development and Care*, 179(7), 849-862.
- Chung, Kevin K. H., Liu, Hongyun, McBride, Catherine, Wong, Anita M. -Y., & Lo, Jason C. M. (2017). How Socioeconomic Status, Executive Functioning and Verbal Interactions Contribute to Early Academic Achievement in Chinese Children. *Educational Psychology*, 37(4), 402-420.

- Chiu, M. M., & McBride-Chang, C. (2006). Gender, Context, and Reading: A Comparison of Students in 43 Countries. *Scientific Studies of Reading, 10*(4), 331-362.
- Chiu, Ming Ming, & Chow, Bonnie Wing Yin. (2010). Culture, Motivation, and Reading Achievement: High School Students in 41 Countries. *Learning and Individual Differences, 20*(6), 579-592.
- De Naeghel, J., Van Keer, H., Vansteenkiste, M., Haerens, L., & Aelterman, N. (2016). Promoting elementary school students' autonomous reading motivation: Effects of a teacher professional development workshop. *Journal Of Educational Research, 109*(3), 232-252.
- De Naeghel, J., Valcke, M., De Meyer, I., Warlop, N., van Braak, J., & Van Keer, H. (2014). The Role of Teacher Behavior in Adolescents' Intrinsic Reading Motivation. *Reading And Writing: An Interdisciplinary Journal, 27*(9), 1547-1565.
- De Naeghel, J., Van Keer, H., & Vanderlinde, R. (2014). Strategies for Promoting Autonomous Reading Motivation: A Multiple Case Study Research in Primary Education. *Frontline Learning Research, 2*(1), 83-101.
- De Naeghel, J., & Van Keer, H. (2013). The relation of student and class- level characteristics to primary school students' autonomous reading motivation: A multi- level approach. *Journal Of Research In Reading, 36*(4), 351-370.
- De Naeghel, J., Van Keer, H., Vansteenkiste, M., & Rosseel, Y. (2012). The Relation between Elementary Students' Recreational and Academic Reading Motivation, Reading Frequency, Engagement, and Comprehension: A Self-Determination Theory Perspective. *Journal Of Educational Psychology, 104*(4), 1006-1021.

- De Smedt, F., Van Keer, H., & Merchie, E. (2016). Student, Teacher and Class-Level Correlates of Flemish Late Elementary School Children's Writing Performance. *Reading And Writing: An Interdisciplinary Journal*, 29(5), 833-868.
- Deci, E., Ryan, R., Hunsley, John, Pelletier, Luc G., Vallerand, Robert J., & Koestner, Richard. (2008). Self-Determination Theory: A Macrotheory of Human Motivation, Development, and Health. *Canadian Psychology/Psychologie Canadienne*, 49(3), 182-185.
- Erten, İ. H., & İsmail Hakkı, E. (2009). Gender differences in academic achievement among Turkish prospective teachers of English as a foreign language. *European Journal Of Teacher Education*, 32(1), 75-91.
- Evans, S. (2002). The medium of instruction in Hong Kong: policy and practice in the new English and Chinese streams. *Research Papers In Education*, 17(1), 97-120.
- Evans, S. (2013). The Long March to Biliteracy and Trilingualism: Language Policy in Hong Kong Education Since the Handover. 33, 302-324.
- Froiland, J. M., & Oros, E. (2014). Intrinsic motivation, perceived competence and classroom engagement as longitudinal predictors of adolescent reading achievement. *Educational Psychology*, 34(2), 119-132. doi:10.1080/01443410.2013.822964
- Guay, F., Chanal, J., Ratelle, C. F., Marsh, H. W., Larose, S., & Boivin, M. (2010). Intrinsic, identified, and controlled types of motivation for school subjects in young elementary school children. *British Journal Of Educational Psychology*, 80(4), 711-735. doi:10.1348/000709910X499084
- Guay, F. (2016). The virtue of culture in understanding motivation at school: Commentary on the special issue on culture and motivation. *British Journal Of Educational Psychology*.

- Guvenc, H. (2015). The Relationship between Teachers' Motivational Support and Engagement versus Disaffection. *Educational Sciences: Theory And Practice*, 15(3), 647-657.
- Guiffrida, D. A., Lynch, M. F., Wall, A. F., & Abel, D. S. (2013). Do Reasons for Attending College Affect Academic Outcomes? A Test of a Motivational Model from a Self-Determination Theory Perspective. *Journal Of College Student Development*, 54(2), 121-139.
- Guthrie, J. T., Hoa, A. W., Wigfield, A., Tonks, S. M., Humenick, N. M., & Littles, E. (2007). Reading Motivation and Reading Comprehension Growth in the Later Elementary Years. *Contemporary Educational Psychology*, 32(3), 282-313.
- Hamid, M. O., Nguyen, H. M., & Baldauf, R. J. (2013). Medium of Instruction in Asia: Context, Processes and Outcomes. *Current Issues In Language Planning*, 14(1), 1-15.
- Hodis, F. A., & Hancock, G. R. (2016). Introduction to the special issue: Advances in quantitative methods to further research in education and educational psychology. *Educational Psychologist*, 51(3-4), 301-304. doi:10.1080/00461520.2016.1208750
- Huang, H. (2013). Online Reading Strategies at Work: What Teachers Think and What Students Do. *Recall*, 25(3), 340-358.
- Hughes, J. N., Luo, W., Kwok, O., & Loyd, L. K. (2008). Teacher-student support, effortful engagement, and achievement: A 3-year longitudinal study. *Journal Of Educational Psychology*, 100(1), 1-14. doi:10.1037/0022-0663.100.1.1
- Huang, J., & Mead, A. D. (2014). Effect of personality item writing on psychometric properties of ideal-point and likert scales. *Psychological Assessment*, 26(4), 1162-1172. doi:10.1037/a0037273

- Ioannis, S., Alexandra, T., & Papadomanolaki, E. (2016). Confirmatory Factor Analysis of the Track and Field Competencies Scale. *Choregia*, 12(1), 43-52.
- Jeongyeon, P. (2015). Insights into Korean EFL Students' Reading Motivation, Proficiency, and Strategy Use. *English Teaching*, 70(1), 57-74.
doi:10.15858/engtea.70.1.201503.57
- Jehangir, K., Glas, C. A., & van den Berg, S. (2015). Exploring the relation between socio-economic status and reading achievement in PISA 2009 through an intercepts-and-slopes-as-outcomes paradigm. *International Journal Of Educational Research*, 711-15.
doi:10.1016/j.ijer.2015.02.002
- Juhee, L. (2015). EFL Young Adolescents' Reading Motivation and Reading Comprehension in Their First and Second Languages. *English Teaching*, 70(4), 55-80.
doi:10.15858/engtea.70.4.201512.55
- Kikas, E., Silinskas, G., & Soodla, P. (2015). The effects of children's reading skills and interest on teacher perceptions of children's skills and individualized support. *International Journal Of Behavioral Development*, 39(5), 402-412.
doi:10.1177/0165025415573641
- Kiuru, N., Aunola, K., Lerkkanen, M., Pakarinen, E., Poskiparta, E., Ahonen, T., & ... Nurmi, J. (2015). Positive Teacher and Peer Relations Combine to Predict Primary School Students' Academic Skill Development. *Developmental Psychology*, 51(4), 434-446.
- Kim, K. k. (2011). Reading motivation in two languages: an examination of EFL college students in Korea. *Reading & Writing*, 24(8), 861-881.

- King, R. B., & McInerney, D. M. (2016). Culturalizing motivation research in educational psychology. *British Journal Of Educational Psychology*, 86(1), 1-7.
doi:10.1111/bjep.12106
- Kissau, Scott. (2006). Gender Differences in Second Language Motivation: An Investigation of Micro- and Macro-Level Influences. *Canadian Journal of Applied Linguistics / Revue Canadienne De Linguistique Appliquee*, 9(1), 73-96.
- Kiuru, Noona, Aunola, Kaisa, Lerkkanen, Marja-Kristiina, Pakarinen, Eija, Poskiparta, Elisa, Ahonen, Timo, . . . Nurmi, Jari-Erik. (2015). Positive Teacher and Peer Relations Combine to Predict Primary School Students' Academic Skill Development. *Developmental Psychology*, 51(4), 434-446.
- Klein, K. J., & Hodges, S. D. (2001). Gender differences, motivation, and empathic accuracy: When it pays to understand. *Personality and Social Psychology Bulletin*, 27(6), 720-730.
- Kormos, J., & Kiddle, T. (2013). The role of socio-economic factors in motivation to learn English as a foreign language: The case of Chile. *System*, 41(2), 399-412.
doi:10.1016/j.system.2013.03.006
- Kormos, & Kiddle. (2013). The role of socio-economic factors in motivation to learn English as a foreign language: The case of Chile. *System*, 41(2), 399-412.
- Lau, K. (2009). Grade Differences in Reading Motivation among Hong Kong Primary and Secondary Students. *British Journal Of Educational Psychology*, 79(4), 713-733.
- Lau, K. L. (2017). Reading motivation and strategy use of Hong Kong students: The role of reading instruction in Chinese language classes. In *Improving Reading and Reading*

Engagement in the 21st Century: International Research and Innovation (pp. 167-185).
Springer Singapore.

- Law, Y., & Yin-kum, L. (2011). The role of teachers' cognitive support in motivating young Hong Kong Chinese children to read and enhancing reading comprehension. *Teaching & Teacher Education*, 27(1), 73-84.
- Lauderdale, M. E., Yli-Piipari, S., Irwin, C. C., & Layne, T. E. (2015). Gender Differences Regarding Motivation for Physical Activity Among College Students: A Self-Determination Approach. *Physical Educator*, 72153-172.
- Ledesma, R. D., & Valero-Mora, P. (2007). Determining the Number of Factors to Retain in EFA: an easy-to-use computer program for carrying out Parallel Analysis. *Practical Assessment, Research & Evaluation*, 121-11.
- Lin, D., Wong, K., & McBride-Chang, C. c. (2012). Reading motivation and reading comprehension in Chinese and English among bilingual students. *Reading & Writing*, 25(3), 717-737.
- Liu, W. C., Wang, C. J., Kee, Y. H., Koh, C., Lim, B. C., & Chua, L. (2014). College Students' Motivation and Learning Strategies Profiles and Academic Achievement: A Self-Determination Theory Approach. *Educational Psychology*, 34(3), 338-353.
- Lo, Y. Y. (2014). L2 Learning Opportunities in Different Academic Subjects in Content-Based Instruction -- Evidence in Favour of "Conventional Wisdom". *Language And Education*, 28(2), 141-160.
- Lo, Y. Y., & Macaro, E. (2012). The medium of instruction and classroom interaction: evidence from Hong Kong secondary schools. *International Journal Of Bilingual Education & Bilingualism*, 15(1), 29-52.

- Liao, C., Kuo, B., Deenang, E., & Mok, M. C. (2016). Exploratory and confirmatory factor analyses in reading-related cognitive component among grade four students in Thailand. *Educational Psychology, 36*(6), 1102-1114. doi:10.1080/01443410.2015.1058342
- Lau, K., & Chan, D. W. (2003). Reading Strategy Use and Motivation among Chinese Good and Poor Readers in Hong Kong. *Journal Of Research In Reading, 26*(2), 177-90.
- Lau, K. (2009). Reading Motivation, Perceptions of Reading Instruction and Reading Amount: A Comparison of Junior and Senior Secondary Students in Hong Kong. *Journal Of Research In Reading, 32*(4), 366-382.
- Lau, K. (2004). Construction and Initial Validation of the Chinese Reading Motivation Questionnaire. *Educational Psychology, 24*(6), 845-865.
- Law, Yin-kum. (2011). The Role of Teachers' Cognitive Support in Motivating Young Hong Kong Chinese Children to Read and Enhancing Reading Comprehension. *Teaching and Teacher Education: An International Journal of Research and Studies, 27*(1), 73-84.
- Lo, Y. Y., & Lo, E. C. (2014). A Meta-Analysis of the Effectiveness of English-Medium Education in Hong Kong. *Review Of Educational Research, 84*(1), 47-73.
- Marsh, Herbert W., Hau, Kit-Tai, & Kong, Chit-Kwong. (2000). Late Immersion and Language of Instruction in Hong Kong High Schools: Achievement Growth in Language and Nonlanguage Subjects. *Harvard Educational Review, 70*(3), 302-46.
- Marinak, B. A., & Gambrell, L. B. (2010). Reading Motivation: Exploring the Elementary Gender Gap. *Literacy Research And Instruction, 49*(2), 129-141.
- Mcbride-Chang, Catherine, Liu, Phil D, Wong, Terry, Wong, Anita, & Shu, Hua. (2012). Specific Reading Difficulties in Chinese, English, or Both: Longitudinal Markers of

- Phonological Awareness, Morphological Awareness, and RAN in Hong Kong Chinese Children. *Journal of Learning Disabilities*, 45(6), 503-514.
- McGeown, S., Goodwin, H., Henderson, N., & Wright, P. (2012). Gender Differences in Reading Motivation: Does Sex or Gender Identity Provide a Better Account?. *Journal Of Research In Reading*, 35(3), 328-336.
- McGeown, S. P., Norgate, R., & Warhurst, A. (2012). Exploring Intrinsic and Extrinsic Reading Motivation among Very Good and Very Poor Readers. *Educational Research*, 54(3), 309-322.
- McInerney, D. M., Dowson, M., & Yeung, A. S. (2005). Facilitating Conditions for School Motivation: Construct Validity and Applicability. *Educational & Psychological Measurement*, 65(6), 1046-1066.
- Ndebele, M. m. (2015). Socio-economic factors affecting parents' involvement in homework: Practices and perceptions from eight Johannesburg public primary schools. *Perspectives In Education*, 33(3), 72-91.
- Monteiro, V. (2013). Promoting Reading Motivation by Reading Together. *Reading Psychology*, 34(4), 301-335.
- Molloy, Lauren E., Gest, Scott D., & Rulison, Kelly L. (2011). Peer Influences on Academic Motivation: Exploring Multiple Methods of Assessing Youths' Most "Influential" Peer Relationships. *Journal of Early Adolescence*, 31(1), 13-40.
- Norwalk, K. E., DiPerna, J. C., & Lei, P. (2014). Confirmatory factor analysis of the Early Arithmetic, Reading, and Learning Indicators (EARLI). *Journal Of School Psychology*, 52(1), 83-96. doi:10.1016/j.jsp.2013.11.006

- Mucherah, W., & Ambrose-Stahl, D. (2014). Relation of reading motivation to reading achievement in seventh-grade students from Kenya and the United States. *International Perspectives In Psychology: Research, Practice, Consultation*, 3(3), 154-166. doi:10.1037/ipp0000012
- Miller, M. G., Hahs-Vaughn, D. L., & Zygouris-Coe, V. (2014). A Confirmatory Factor Analysis of Teaching Presence within Online Professional Development. *Journal of Asynchronous Learning Networks*, 18(1), n1.
- Núñez, J. L., & León, J. (2015). Autonomy support in the classroom: A review from self-determination theory. *European Psychologist*, 20(4), 275-283. doi:10.1027/1016-9040/a000234
- Putnick, D. L., & Bornstein, M. H. (2016). Measurement invariance conventions and reporting: The state of the art and future directions for psychological research. *Developmental Review*, 41, 71-90. doi:10.1016/j.dr.2016.06.004
- Powell, R. B., Stern, M. J., Krohn, B. D., & Ardoin, N. (2011). Development and validation of scales to measure environmental responsibility, character development, and attitudes toward school. *Environmental Education Research*, 17(1), 91-111.
- Poon, A. K. (2013). Will the New Fine-Tuning Medium-of-Instruction Policy Alleviate the Threats of Dominance of English-Medium Instruction in Hong Kong?. *Current Issues In Language Planning*, 14(1), 34-51.
- Quirk, M., Unrau, N., Ragusa, G., Rueda, R., Lim, H., Velasco, A., & ... Loera, G. (2010). Teacher Beliefs About Reading Motivation and Their Enactment in Classrooms: The Development of a Survey Questionnaire. *Reading Psychology*, 31(2), 93-120. doi:10.1080/02702710902754051

- Quick, J., & Hall, S. (2015). Part three: The quantitative approach. *Journal Of Perioperative Practice*, 25(10), 192-196.
- Ryan, R., Deci, E., Hunsley, John, Pelletier, Luc G., Vallerand, Robert J., & Koestner, Richard. (2008). A Self-Determination Theory Approach to Psychotherapy: The Motivational Basis for Effective Change. *Canadian Psychology/Psychologie Canadienne*, 49(3), 186-193.
- Retelsdorf, J., Koller, O., & Moller, J. (2011). On the Effects of Motivation on Reading Performance Growth in Secondary School. *Learning And Instruction*, 21(4), 550-559.
- Silinskas, G., Pakarinen, E., Niemi, P., Lerkkanen, M., Poikkeus, A., & Nurmi, J. (2016). The effectiveness of increased support in reading and its relationship to teachers' affect and children's motivation. *Learning and Individual Differences*, 4553-64.
- Stutz, F., Schaffner, E., & Schiefele, U. (2016). Relations among reading motivation, reading amount, and reading comprehension in the early elementary grades. *Learning And Individual Differences*, 45101-113. doi:10.1016/j.lindif.2015.11.022
- Schiefele, U., Schaffner, E., Möller, J., Wigfield, A., Nolen, S., & Baker, L. (2012). Dimensions of Reading Motivation and Their Relation to Reading Behavior and Competence. *Reading Research Quarterly*, 47(4), 427-463.
- Schwabe, F., McElvany, N., & Trendtel, M. (2015). The School Age Gender Gap in Reading Achievement: Examining the Influences of Item Format and Intrinsic Reading Motivation. *Reading Research Quarterly*, 50(2), 219-232.
- Shek Kam, T., Mark Shiu Kee, S., Wing Wah, K., & Pui Ching Wong, C. (2001). The Transition from English to Mother-Tongue Chinese as Medium of Instruction; Issues

- and Problems as Seen by Hong Kong Teachers. *L1-Educational Studies In Language & Literature*, 1(1), 9-36.
- Sandilands, D., Oliveri, M. E., Zumbo, B. D., & Ercikan, K. (2013). Investigating Sources of Differential Item Functioning in International Large-Scale Assessments Using a Confirmatory Approach. *International Journal Of Testing*, 13(2), 152-174. doi:10.1080/15305058.2012.690140
- Silinskas, Pakarinen, Niemi, Lerkkanen, Poikkeus, & Nurmi. (2016). The effectiveness of increased support in reading and its relationship to teachers' affect and children's motivation. *Learning and Individual Differences*, 45(C), 53-64.
- Shu, H., Li, W., Anderson, R., Ku, Y.M. & Yue, X. (2002). The role of the home-literacy environment in learning to read Chinese. In W. Li, J.S. Gaffney & J.L. Packard (Eds.), *Chinese children's reading acquisition: Theoretical and pedagogical issues* (pp. 207–224). London, England: Kluwer Academic.
- Taboada, A., & Buehl, M. M. (2012). Teachers' Conceptions of Reading Comprehension and Motivation to Read. *Teachers And Teaching: Theory And Practice*, 18(1), 101-122.
- Tennant, J. E., Demaray, M. K., Malecki, C. K., Terry, M. N., Clary, M., & Elzinga, N. (2015). Students' Ratings of Teacher Support and Academic and Social-Emotional Well-Being. *School Psychology Quarterly*, 30(4), 494-512.
- Tse, S. K., Shum, M., Ki, W. W., & Chan, Y. M. (2007). The Medium Dilemma for Hong Kong Secondary Schools. *Language Policy*, 6(1), 135-162. doi:10.1007/s10993-006-9039-y
- Unrau, N., Ragusa, G., & Bowers, E. (2015). Teachers Focus on Motivation for Reading: "It's All about Knowing the Relationship". *Reading Psychology*, 36(2), 105-144.

- Van den Broeck, A., Ferris, D. L., Chang, C., & Rosen, C. C. (2016). A review of self-determination theory's basic psychological needs at work. *Journal Of Management*, 42(5), 1195-1229. doi:10.1177/0149206316632058
- Vieira, E. J., & Grantham, S. (2011). Perceptions of Control Facilitate Reading Engagement. *Reading Psychology*, 32(4), 322-348. doi:10.1080/02702711.2010.545278
- Wentzel, Kathryn R., Battle, Ann, Russell, Shannon L., & Looney, Lisa B. (2010). Social Supports from Teachers and Peers as Predictors of Academic and Social Motivation. *Contemporary Educational Psychology*, 35(3), 193-202.
- Wigfield, A., Guthrie, J. T., Tonks, S., & Perencevich, K. C. (2004). Children's Motivation for Reading: Domain Specificity and Instructional Influences. *Journal Of Educational Research*, 97(6), 299-309.
- Wu, X. (2003). Intrinsic motivation and young language learners: The impact of the classroom environment. *System*, 31(4), 501-517.
- Yeung, A. S., Lau, S., & Nie, Y. (2011). Primary and Secondary Students' Motivation in Learning English: Grade and Gender Differences. *Contemporary Educational Psychology*, 36(3), 246-256.
- Yeung, A. S., Lau, S., & Nie, Y. (2011). Primary and secondary students' motivation in learning English: Grade and gender differences. *Contemporary Educational Psychology*, 36(3), 246-256.
- Yildirim, S. (2012). Teacher Support, Motivation, Learning Strategy Use, and Achievement: A Multilevel Mediation Model. *Journal Of Experimental Education*, 80(2), 150-172.

- Yu, R., & Singh, K. (2018). Teacher support, instructional practices, student motivation, and mathematics achievement in high school. *The Journal of Educational Research*, 111(1), 81-94.
- Yunus, Osman, & Ishak. (2011). Teacher-student relationship factor affecting motivation and academic achievement in ESL classroom. *Procedia - Social and Behavioral Sciences*, 15, 2637-2641.

Appendix A: Questionnaire (Original)

Dear Students

The questionnaire aims to examine the relationships between school factors and demographic factors in relation to the reading motivation in L1 and L2 in Hong Kong. Please complete the questions below. There is no right or wrong answers for the questions. This survey is only for academic purposes, not for any other use. All answers will be kept strictly confidential and complete anonymous. Your participation is voluntary and will help us greatly. Thank you for your interest to take part in this research project.

Best regards

Lee Kwok Wai (EdD Candidate)

Department of Psychological Studies

Faculty of Education and Human Development

The Hong Kong Institute of Education

致各位同學

本人研究「香港中學生中文和英文的閱讀動機：學校因素和背景因素執行的研究計劃」，旨在探討香港中學生中文和英文閱讀動機，包括學校因素和背景因素的影響，從而促進相關研究、課程設計及專業發展。

請完成所有問題。每題並沒有對或錯的答案。這次調查只是作學術用途，本問卷調查以匿名方式處理，所有答案將會絕對保密。

謹此謝謝您的支持，期待着您的參與！

祝 台安

李國威博士候選人

心理研究學系

教育及人類發展學院

香港教育學院

INSTRUCTION TO STUDENTS 填表須知

1. Please complete the following questions to reflect your opinions as accurately as possible and to answer factual questions to the best of your knowledge.
每題並沒有標準答案，請根據你自己的理解和實際情形作答。
2. Please use the pencil or ball pen to blacken fill the appropriate boxes.
請用深色鉛筆或原子筆作答。
Mark like this: ●
正確的填塗方法：●
Not like this: ⊕ ⊙ ○
錯誤的填塗方法：⊕ ⊙ ○
3. If you want to change an answer, erase the original and then mark the new box.
若要作出修改，請將填錯的答案完全擦去。
4. The duration for completing this questionnaire is 15 minutes.
作答時間約需 15 分鐘左右。



The Education University
of Hong Kong Library

For private study or research only.
Not for publication or further reproduction.

Background Information**背景資料**

1. Grade: 年級: ☐ S1 中一 ☐ S4 中四 ☐ S6 中六
2. Class: 班級: _____
3. Gender: 性別: ☐ Male 男性 ☐ Female 女性
4. Age: 年齡: _____
5. Medium of instruction in class: 授課語言: ☐ English 中國語文 ☐ Chinese 英國語文
6. How do you evaluate your Chinese reading level?
如何評價你的中國語文閱讀水準?
- | Poor
差 | Moderate
中度 | Good
好 | Excellent
非常好 |
|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
7. How do you evaluate your English reading level?
如何評價你的英國語文閱讀水準?
- | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
|-----------------------|-----------------------|-----------------------|-----------------------|



Section A: Chinese Reading Motivation

甲部份: 中文閱讀動機

Respond to the following statements on a scale from 1 to 5, which 1 is represent your least agreement while 5 represent your highest level of agreement.

用 1 至 5 表明你對以下句子的同意程度，1 為非常不同意，而 5 為非常同意。

	Strongly Disagree 非常不同意	Disagree 不同意	Neutral 中立	Agree 同意	Strongly Agree 非常同意
A1. I like reading Chinese books because I really like reading. 我喜歡閱讀中文書，因為我真的很喜歡閱讀。	1 ○	2 ○	3 ○	4 ○	5 ○
A2. I like reading Chinese books because it's fun to read. 我喜歡閱讀中文書，因為閱讀帶來樂趣。	1 ○	2 ○	3 ○	4 ○	5 ○
A3. I like reading Chinese books because I enjoy reading. 我喜歡閱讀中文書，因為我享受閱讀的過程。	1 ○	2 ○	3 ○	4 ○	5 ○
A4. I like reading Chinese books because I think reading is fascinating. 我喜歡閱讀中文書，因為我覺得閱讀是引人入勝的。	1 ○	2 ○	3 ○	4 ○	5 ○

	Strongly Disagree 非常不同意	Disagree 不同意	Neutral 中立	Agree 同意	Strongly Agree 非常同意
A5. I like reading Chinese books because I think reading is challenging. 我喜歡閱讀中文書，因為閱讀是具有挑戰性的。	1 ○	2 ○	3 ○	4 ○	5 ○
A6. I like reading Chinese books because I think reading is interesting. 我喜歡閱讀中文書，因為閱讀是有趣味的。	1 ○	2 ○	3 ○	4 ○	5 ○
A7. I like reading Chinese books because I think reading is meaningful. 我喜歡閱讀中文書，因為閱讀是有意義的。	1 ○	2 ○	3 ○	4 ○	5 ○
A8. I like reading Chinese books because I think it is very useful for me to read. 我喜歡閱讀中文書，因為它是非常有用的。	1 ○	2 ○	3 ○	4 ○	5 ○
A9. I like reading Chinese books because it is important for me to read. 我喜歡閱讀中文書，因為閱讀對於我來說是很重要的。	1 ○	2 ○	3 ○	4 ○	5 ○

	Strongly Disagree 非常不同意	Disagree 不同意	Neutral 中立	Agree 同意	Strongly Agree 非常同意
A10. I like reading Chinese books because reading is of great value to me. 我喜歡閱讀中文書，因為閱讀對我具有重大的價值。	1 ○	2 ○	3 ○	4 ○	5 ○
A11. I like reading Chinese books because I want to learn new things. 我喜歡閱讀中文書，因為我想學到新的事物。	1 ○	2 ○	3 ○	4 ○	5 ○
A12. I like reading Chinese books because I can develop my talents through reading. 我喜歡閱讀中文書，因為通過閱讀可以發揮我的才能。	1 ○	2 ○	3 ○	4 ○	5 ○
A13. I like reading Chinese books because I will feel ashamed of myself if I don't read. 我喜歡閱讀中文書，如果我不閱讀，我會覺得很慚愧。	1 ○	2 ○	3 ○	4 ○	5 ○

	Strongly Disagree 非常不同意	Disagree 不同意	Neutral 中立	Agree 同意	Strongly Agree 非常同意
A14. I like reading Chinese books because I don't want to disappoint teachers and parents. 我喜歡閱讀中文書，因為我不想辜負老師和父母對我的期望。	1 ○	2 ○	3 ○	4 ○	5 ○
A15. I like reading Chinese books because I will feel guilty if I don't do it. 我喜歡閱讀中文書，如果我不閱讀，我會感到內疚。	1 ○	2 ○	3 ○	4 ○	5 ○
A16. I like reading Chinese books because I have to prove myself that I can get good reading grades. 我喜歡閱讀中文書，因為我要證明自己閱讀可以獲得良好的閱讀成績。	1 ○	2 ○	3 ○	4 ○	5 ○

	Strongly Disagree 非常不同意	Disagree 不同意	Neutral 中立	Agree 同意	Strongly Agree 非常同意
A17. I like reading Chinese books because I want others to think I'm a good reader. 我喜歡閱讀中文書，因為我希望別人認為我是一個良好的讀者。	1 ○	2 ○	3 ○	4 ○	5 ○
A18. I like reading Chinese books because I can be proud of myself if I get good reading grades. 我喜歡閱讀中文書，如果我閱讀成績良好，我可以為自己感到驕傲。	1 ○	2 ○	3 ○	4 ○	5 ○
A19. I like reading Chinese books because I will feel bad about myself if I don't do it. 我喜歡閱讀中文書，如果我不閱讀，我會感覺不好。	1 ○	2 ○	3 ○	4 ○	5 ○
A20. I like reading Chinese books because my teachers and parents expect me to do so. 我喜歡閱讀中文書，因為我的老師和父母都期望我這麼做。	1 ○	2 ○	3 ○	4 ○	5 ○
A21. I like reading Chinese books because teachers and parents think that I have to. 我喜歡閱讀中文書，因為老師和父母認為我要這樣做。	1 ○	2 ○	3 ○	4 ○	5 ○

	Strongly Disagree 非常不同意	Disagree 不同意	Neutral 中立	Agree 同意	Strongly Agree 非常同意
<p>A22. I like reading Chinese books because teachers and parents will only reward me if I read.</p> <p>我喜歡閱讀中文書，如果我閱讀，老師和父母會獎勵我。</p>	1 ○	2 ○	3 ○	4 ○	5 ○
<p>A23. I like reading Chinese books because teachers and parents will be disappointed me if I don't read.</p> <p>我喜歡閱讀中文書，如果我不閱讀。老師和父母將會對我很失望。</p>	1 ○	2 ○	3 ○	4 ○	5 ○

Section B: English Reading Motivation

乙部: 英文閱讀動機

	Strongly Disagree 非常不同意	Disagree 不同意	Neutral 中立	Agree 同意	Strongly Agree 非常同意
B1. I like reading English books because I really like reading. 我喜歡閱讀英文書，因為我真的很喜歡閱讀。	1 ○	2 ○	3 ○	4 ○	5 ○
B2. I like reading English books because it's fun to read. 我喜歡閱讀英文書，因為閱讀帶來樂趣。	1 ○	2 ○	3 ○	4 ○	5 ○
B3. I like reading English books because I enjoy reading. 我喜歡閱讀英文書，因為我享受閱讀的過程。	1 ○	2 ○	3 ○	4 ○	5 ○
B4. I like reading English books because I think reading is fascinating. 我喜歡閱讀英文書，因為我覺得閱讀是引人入勝的。	1 ○	2 ○	3 ○	4 ○	5 ○
B5. I like reading English books because I think reading is challenging. 我喜歡閱讀英文書，因為閱讀是具有挑戰性的。	1 ○	2 ○	3 ○	4 ○	5 ○
B6. I like reading English books because I think reading is interesting. 我喜歡閱讀英文書，因為閱讀是有趣味的。	1 ○	2 ○	3 ○	4 ○	5 ○

	Strongly Disagree 非常不同意	Disagree 不同意	Neutral 中立	Agree 同意	Strongly Agree 非常同意
B7. I like reading English books because I think reading is meaningful. 我喜歡閱讀英文書，因為閱讀是有意義的。	1 ○	2 ○	3 ○	4 ○	5 ○
B8. I like reading English books because I think it is very useful for me to read. 我喜歡閱讀英文書，因為它是非常有用的。	1 ○	2 ○	3 ○	4 ○	5 ○
B9. I like reading English books because it is important for me to read. 我喜歡閱讀英文書，因為閱讀對於我來說是很重要的。	1 ○	2 ○	3 ○	4 ○	5 ○
B10. I like reading English books because reading is of great value to me. 我喜歡閱讀英文書，因為閱讀對我具有重大的價值。	1 ○	2 ○	3 ○	4 ○	5 ○
B11. I like reading English books because I want to learn new things. 我喜歡閱讀英文書，因為我想學到新的事物。	1 ○	2 ○	3 ○	4 ○	5 ○
B12. I like reading English books because I can develop my talents through reading. 我喜歡閱讀英文書，因為通過閱讀可以發揮我的才能。	1 ○	2 ○	3 ○	4 ○	5 ○

	Strongly Disagree 非常不 同意	Disagree 不同意	Neutral 中立	Agree 同意	Strongly Agree 非常同意
B13. I like reading English books because I will feel ashamed of myself if I don't read. 我喜歡閱讀英文書，如果我不閱讀，我會覺得很慚愧。	1 ○	2 ○	3 ○	4 ○	5 ○
B14. I like reading English books because I don't want to disappoint teachers and parents. 我喜歡閱讀英文書，因為我不想辜負老師和父母對我的期望。	1 ○	2 ○	3 ○	4 ○	5 ○
B15. I like reading English books because I will feel guilty if I don't do it. 我喜歡閱讀英文書，如果我不閱讀，我會感到內疚。	1 ○	2 ○	3 ○	4 ○	5 ○
B16. I like reading English books because I have to prove myself that I can get good reading grades. 我喜歡閱讀英文書，因為我要證明自己閱讀可以獲得良好的閱讀成績。	1 ○	2 ○	3 ○	4 ○	5 ○
B17. I like reading English books because I want others to think I'm a good reader. 我喜歡閱讀英文書，因為我希望別人認為我是一個良好的閱讀者。	1 ○	2 ○	3 ○	4 ○	5 ○

	Strongly Disagree 非常不同意	Disagree 不同意	Neutral 中立	Agree 同意	Strongly Agree 非常同意
B19. I like reading English books because I will feel bad about myself if I don't do it. 我喜歡閱讀英文書，如果我不閱讀，我會感覺不好。	1 ○	2 ○	3 ○	4 ○	5 ○
B20. I like reading English books because my teachers and parents expect me to do so. 我喜歡閱讀英文書，因為我的老師和父母都期望我這麼做。	1 ○	2 ○	3 ○	4 ○	5 ○
B21. I like reading English books because teachers and parents think that I have to. 我喜歡閱讀英文書，因為老師和父母認為我要這樣做。	1 ○	2 ○	3 ○	4 ○	5 ○
B22. I like reading English books because teachers and parents will only reward me if I read. 我喜歡閱讀英文書，如果我閱讀，老師和父母會獎勵我。	1 ○	2 ○	3 ○	4 ○	5 ○
B23. I like reading English books because teachers and parents will be disappointed me if I don't read. 我喜歡閱讀英文書，如果我不閱讀。老師和父母將會對我很失望。	1 ○	2 ○	3 ○	4 ○	5 ○

Section C Teacher Support

丙部: 老師支援

	Strongly Disagree 非常不同意	Disagree 不同意	Neutral 中立	Agree 同意	Strongly Agree 非常同意
C1. Teachers are positive to my reading at school. 在學校閱讀，老師給我正面的支援。	1 ○	2 ○	3 ○	4 ○	5 ○
C2. I get encouragement from some of my teachers if I read well at school. 如果我在學校閱讀良好，老師會給我一些鼓勵。	1 ○	2 ○	3 ○	4 ○	5 ○
C3. If I go school my teachers encourage me to read. 如果我去上學，老師會鼓勵我閱讀。	1 ○	2 ○	3 ○	4 ○	5 ○
C4. My teachers help me with my reading. 老師會協助我閱讀。	1 ○	2 ○	3 ○	4 ○	5 ○
C5. It's important to me to have my teacher's help in reading. 老師對我的支援在閱讀過程是很重要的。	1 ○	2 ○	3 ○	4 ○	5 ○
C6. My teachers help me to work hard at school in reading. 在學校閱讀，老師會盡力協助我。	1 ○	2 ○	3 ○	4 ○	5 ○

Section D Peer Support

丁部: 朋輩支援

	Strongly Disagree 非常不同意	Disagree 不同意	Neutral 中立	Agree 同意	Strongly Agree 非常同意
D1. Most of my friends like reading in school. 我大部份的朋友都喜歡在學校閱讀。	1 ○	2 ○	3 ○	4 ○	5 ○
D2. Most of my friends want to be a good reader. 我大部份的朋友想成為一位良好的讀者。	1 ○	2 ○	3 ○	4 ○	5 ○
D3. Most of my friends think reading is waste of time. 我大部份的朋友認為閱讀是浪費時間。	1 ○	2 ○	3 ○	4 ○	5 ○
D4. Most of my friends want to avoid reading as much as possible. 我大部份的朋友盡量避免閱讀。	1 ○	2 ○	3 ○	4 ○	5 ○
D5. My friends say I should not read so much. 我的朋友說我不應該閱讀太多。	1 ○	2 ○	3 ○	4 ○	5 ○
D6. My friends tell me not to read. 我的朋友告訴我不要閱讀。	1 ○	2 ○	3 ○	4 ○	5 ○
D7. My friends tell me not to read and do other stuff. 我的朋友告訴我將時間投放於其他的東西多於閱讀。	1 ○	2 ○	3 ○	4 ○	5 ○

Section E Socio-Economic Status

戊部：社會經濟地位

E1. What is your family marital status?

你的家庭背景是什麼？

- ☐ Married 雙親
☐ Single 單親

E2. Where do you live?

你住在哪裡？

- ☐ Hong Kong Island 港島
☐ Kowloon 九龍
☐ New Territories 新界

E3. Which type of housing do you live in?

你居住在哪種類型的房屋？

- ☐ Public rental housing 租住公屋
☐ Subsidised home ownership housing 居者有其屋
☐ Private permanent housing 私人樓宇
☐ Temporary housing 臨時房屋

E4. What is your father's educational level?

你爸爸的教育水平是什麼程度？

- ☐ Bachelor Degree or above 大學或以上
☐ Secondary Level 中學程度
☐ Primary school or below 小學或以下

E5. What is your mother's educational level?

你媽媽的教育水平是什麼程度？

- ☐ Bachelor Degree or above 大學或以上
☐ Secondary Level 中學程度
☐ Primary school or below 小學或以下

E6. What is your father's occupation?

你爸爸的職業是什麼？

- ☐ Managers and administrators 經理或管理
☐ Professionals 專業人士
☐ Associate professionals 輔助專業人員
☐ Clerical support workers 文書
☐ Service and sales workers 服務和銷售人員
☐ Craft and related workers 工藝及有關人員

E7. What is your mother's occupation?

你媽媽的職業是什麼？

- ☐ Managers and administrators 經理或管理
☐ Professionals 專業人士
☐ Associate professionals 輔助專業人員
☐ Clerical support workers 文書
☐ Service and sales workers 服務和銷售人員
☐ Craft and related workers 工藝及有關人員

E8. Do you have any domestic helper at home?

你家裡有沒有家庭傭工？

- ☐ Yes 有
☐ No 沒有

E9. Do you have any subscription to newspaper at home?

你家裡有沒有訂閱報紙？

- ☐ Yes 有
☐ No 沒有

**-THE END-
-問卷完-**

~~~~~THANK YOU VERY MUCH FOR YOUR  
PARTICIPATION~~~~~

填答及呈交此份問卷將被視作同意參與此項研究。

## Appendix B: Revised Questionnaire (after deleting bad items)

Dear Students

The questionnaire aims to examine the relationships between school factors and demographic factors in relation to the reading motivation in L1 and L2 in Hong Kong. Please complete the questions below. There is no right or wrong answers for the questions. This survey is only for academic purposes, not for any other use. All answers will be kept strictly confidential and complete anonymous. Your participation is voluntary and will help us greatly. Thank you for your interest to take part in this research project.

Best regards

Lee Kwok Wai (EdD Candidate)

Department of Psychological Studies

Faculty of Education and Human Development

The Hong Kong Institute of Education

致各位同學

本人研究「香港中學生中文和英文的閱讀動機：學校因素和背景因素執行的研究計劃」，旨在探討香港中學生中文和英文閱讀動機，包括學校因素和背景因素的影響，從而促進相關研究、課程設計及專業發展。

請完成所有問題。每題並沒有對或錯的答案。這次調查只是作學術用途，本問卷調查以匿名方式處理，所有答案將會絕對保密。

謹此謝謝您的支持，期待着您的參與！

祝 台安

李國威博士候選人

心理研究學系

教育及人類發展學院

香港教育學院

### **INSTRUCTION TO STUDENTS 填表須知**

5. Please complete the following questions to reflect your opinions as accurately as possible and to answer factual questions to the best of your knowledge.  
每題並沒有標準答案，請根據你自己的理解和實際情形作答。
6. Please use the pencil or ball pen to blacken fill the appropriate boxes.  
請用深色鉛筆或原子筆作答。  
Mark like this: ●  
正確的填塗方法：●  
Not like this: ⊕ ⊙ ⊖  
錯誤的填塗方法：⊕ ⊙ ⊖
7. If you want to change an answer, erase the original and then mark the new box.  
若要作出修改，請將填錯的答案完全擦去。
8. The duration for completing this questionnaire is 15 minutes.  
作答時間約需 15 分鐘左右。

**Background Information****背景資料**

8. Grade: ☐ S1 中一 ☐ S4 中四 ☐ S6 中六  
年級:
9. Class: \_\_\_\_\_  
班級:
10. Gender: ☐ Male 男性 ☐ Female 女性  
性別:
11. Age: \_\_\_\_\_  
年齡:
12. Medium of instruction in class: ☐ English 中國語文 ☐ Chinese 英國語文  
授課語言:
- |                                                                        | <b>Poor</b><br>差      | <b>Moderate</b><br>中度 | <b>Good</b><br>好      | <b>Excellent</b><br>非常好 |
|------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-------------------------|
| 13. How do you evaluate your Chinese reading level?<br>如何評價你的中國語文閱讀水準? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>   |
| 14. How do you evaluate your English reading level?<br>如何評價你的英國語文閱讀水準? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>   |

## Section A: Chinese Reading Motivation

### 甲部份: 中文閱讀動機

Respond to the following statements on a scale from 1 to 5, which 1 is represent your least agreement while 5 represent your highest level of agreement.

用 1 至 5 表明你對以下句子的同意程度，1 為非常不同意，而 5 為非常同意。

|                                                                                                      | <b>Strongly Disagree</b><br>非常不同意 | <b>Disagree</b><br>不同意 | <b>Neutral</b><br>中立 | <b>Agree</b><br>同意 | <b>Strongly Agree</b><br>非常同意 |
|------------------------------------------------------------------------------------------------------|-----------------------------------|------------------------|----------------------|--------------------|-------------------------------|
| AA1. I like reading Chinese books because I really like reading.<br>我喜歡閱讀中文書，因為我真的很喜歡閱讀。             | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
| AA2. I like reading Chinese books because it's fun to read.<br>我喜歡閱讀中文書，因為閱讀帶來樂趣。                    | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
| AA3. I like reading Chinese books because I enjoy reading.<br>我喜歡閱讀中文書，因為我享受閱讀的過程。                   | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
| AA4. I like reading Chinese books because I think reading is fascinating.<br>我喜歡閱讀中文書，因為我覺得閱讀是引人入勝的。 | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
|                                                                                                      |                                   |                        |                      |                    |                               |

|                                                                                                                            | <b>Strongly<br/>Disagree<br/>非常不同意</b> | <b>Disagree<br/>不同意</b> | <b>Neutral<br/>中立</b> | <b>Agree<br/>同意</b> | <b>Strongly<br/>Agree<br/>非常同意</b> |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------|-----------------------|---------------------|------------------------------------|
| AA6. I like reading Chinese books because I think reading is interesting.<br>我喜歡閱讀中文書，因為閱讀是有趣味的。                           | 1 ○                                    | 2 ○                     | 3 ○                   | 4 ○                 | 5 ○                                |
| AA7. I like reading Chinese books because I think reading is meaningful.<br>我喜歡閱讀中文書，因為閱讀是有意義的。                            | 1 ○                                    | 2 ○                     | 3 ○                   | 4 ○                 | 5 ○                                |
| AA8. I like reading Chinese books because I think it is very useful for me to read.<br>我喜歡閱讀中文書，因為它是非常有用的。                 | 1 ○                                    | 2 ○                     | 3 ○                   | 4 ○                 | 5 ○                                |
| CA14. I like reading Chinese books because I don't want to disappoint teachers and parents.<br>我喜歡閱讀中文書，因為我不想辜負老師和父母對我的期望。 | 1 ○                                    | 2 ○                     | 3 ○                   | 4 ○                 | 5 ○                                |
| CA15. I like reading Chinese books because I will feel guilty if I don't do it.<br>我喜歡閱讀中文書，如果我不閱讀，我會感到內疚。                 | 1 ○                                    | 2 ○                     | 3 ○                   | 4 ○                 | 5 ○                                |
|                                                                                                                            |                                        |                         |                       |                     |                                    |



|                                                                                                                                           | <b>Strongly<br/>Disagree</b><br>非常不同意 | <b>Disagree</b><br>不同意 | <b>Neutral</b><br>中立 | <b>Agree</b><br>同意 | <b>Strongly<br/>Agree</b><br>非常同意 |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------------------------|----------------------|--------------------|-----------------------------------|
|                                                                                                                                           |                                       |                        |                      |                    |                                   |
| CA20. I like reading Chinese books because my teachers and parents expect me to do so.<br>我喜歡閱讀中文書，因為我的老師和父母都期望我這麼做。                      | 1 ○                                   | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                               |
|                                                                                                                                           |                                       |                        |                      |                    |                                   |
| CA21. I like reading Chinese books because teachers and parents think that I have to.<br>我喜歡閱讀中文書，因為老師和父母認為我要這樣做。                         | 1 ○                                   | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                               |
|                                                                                                                                           |                                       |                        |                      |                    |                                   |
| CA23. I like reading Chinese books because teachers and parents will be disappointed me if I don't read.<br>我喜歡閱讀中文書，如果我不閱讀。老師和父母將會對我很失望。 | 1 ○                                   | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                               |

## Section B: English Reading Motivation

### 乙部: 英文閱讀動機

|                                                                                                      | <b>Strongly Disagree</b><br>非常不同意 | <b>Disagree</b><br>不同意 | <b>Neutral</b><br>中立 | <b>Agree</b><br>同意 | <b>Strongly Agree</b><br>非常同意 |
|------------------------------------------------------------------------------------------------------|-----------------------------------|------------------------|----------------------|--------------------|-------------------------------|
| AB1. I like reading English books because I really like reading.<br>我喜歡閱讀英文書，因為我真的很喜歡閱讀。             | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
| AB2. I like reading English books because it's fun to read.<br>我喜歡閱讀英文書，因為閱讀帶來樂趣。                    | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
| AB3. I like reading English books because I enjoy reading.<br>我喜歡閱讀英文書，因為我享受閱讀的過程。                   | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
| AB4. I like reading English books because I think reading is fascinating.<br>我喜歡閱讀英文書，因為我覺得閱讀是引人入勝的。 | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
| AB6. I like reading English books because I think reading is interesting.<br>我喜歡閱讀英文書，因為閱讀是有趣味的。     | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
|                                                                                                      |                                   |                        |                      |                    |                               |

|                                                                                                                                           | <b>Strongly<br/>Disagree<br/>非常不<br/>同意</b> | <b>Disagree<br/>不同意</b> | <b>Neutral<br/>中立</b> | <b>Agree<br/>同意</b> | <b>Strongly<br/>Agree<br/>非常同意</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-------------------------|-----------------------|---------------------|------------------------------------|
| AB7. I like reading English books because I think reading is meaningful.<br>我喜歡閱讀英文書，因為閱讀是有意義的。                                           | 1 ○                                         | 2 ○                     | 3 ○                   | 4 ○                 | 5 ○                                |
| AB8. I like reading English books because I think it is very useful for me to read.<br>我喜歡閱讀英文書，因為它是非常有用的。                                | 1 ○                                         | 2 ○                     | 3 ○                   | 4 ○                 | 5 ○                                |
| CB18. I like reading English books because I can be proud of myself if I get good reading grades.<br>我喜歡閱讀英文書，如果我閱讀成績良好，我可以為自己感到驕傲。       | 1 ○                                         | 2 ○                     | 3 ○                   | 4 ○                 | 5 ○                                |
| CB20. I like reading English books because my teachers and parents expect me to do so.<br>我喜歡閱讀英文書，因為我的老師和父母都期望我這麼做。                      | 1 ○                                         | 2 ○                     | 3 ○                   | 4 ○                 | 5 ○                                |
| CB21. I like reading English books because teachers and parents think that I have to.<br>我喜歡閱讀英文書，因為老師和父母認為我要這樣做。                         | 1 ○                                         | 2 ○                     | 3 ○                   | 4 ○                 | 5 ○                                |
| CB22. I like reading English books because teachers and parents will only reward me if I read.<br>我喜歡閱讀英文書，如果我閱讀，老師和父母會獎勵我。               | 1 ○                                         | 2 ○                     | 3 ○                   | 4 ○                 | 5 ○                                |
| CB23. I like reading English books because teachers and parents will be disappointed me if I don't read.<br>我喜歡閱讀英文書，如果我不閱讀。老師和父母將會對我很失望。 | 1 ○                                         | 2 ○                     | 3 ○                   | 4 ○                 | 5 ○                                |

# Section C Teacher Support

## 丙部: 老師支援

|                                                                                                     | <b>Strongly Disagree</b><br>非常不同意 | <b>Disagree</b><br>不同意 | <b>Neutral</b><br>中立 | <b>Agree</b><br>同意 | <b>Strongly Agree</b><br>非常同意 |
|-----------------------------------------------------------------------------------------------------|-----------------------------------|------------------------|----------------------|--------------------|-------------------------------|
| C1. Teachers are positive to my reading at school.<br>在學校閱讀，老師給我正面的支援。                              | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
| C2. I get encouragement from some of my teachers if I read well at school.<br>如果我在學校閱讀良好，老師會給我一些鼓勵。 | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
| C3. If I go school my teachers encourage me to read.<br>如果我去上學，老師會鼓勵我閱讀。                            | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
| C4. My teachers help me with my reading.<br>老師會協助我閱讀。                                               | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
| C5. It's important to me to have my teacher's help in reading.<br>老師對我的支援在閱讀過程是很重要的。                | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |
| C6. My teachers help me to work hard at school in reading.<br>在學校閱讀，老師會盡力協助我。                       | 1 ○                               | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                           |

# Section D Peer Support

## 丁部: 朋輩支援

|                                                                                     | <b>Strongly<br/>Disagree</b><br>非常不<br>同意 | <b>Disagree</b><br>不同意 | <b>Neutral</b><br>中立 | <b>Agree</b><br>同意 | <b>Strongly<br/>Agree</b><br>非常<br>同意 |
|-------------------------------------------------------------------------------------|-------------------------------------------|------------------------|----------------------|--------------------|---------------------------------------|
| D3. Most of my friends think reading is waste of time.<br>我大部份的朋友認為閱讀是浪費時間。         | 1 ○                                       | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                                   |
| D4. Most of my friends want to avoid reading as much as possible.<br>我大部份的朋友盡量避免閱讀。 | 1 ○                                       | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                                   |
| D5. My friends say I should not read so much.<br>我的朋友說我不應該閱讀太多。                     | 1 ○                                       | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                                   |
| D6. My friends tell me not to read.<br>我的朋友告訴我不要閱讀。                                 | 1 ○                                       | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                                   |
| D7. My friends tell me not to read and do other stuff.<br>我的朋友告訴我將時間投放於其他的東西多於閱讀。   | 1 ○                                       | 2 ○                    | 3 ○                  | 4 ○                | 5 ○                                   |

## Section E Socio-Economic Status

### 戊部：社會經濟地位

E1. Which type of housing do you live in?

你居住在哪種類型的房屋？

- ☐ Public rental housing 租住公屋
- ☐ Subsidised home ownership housing 居者有其屋
- ☐ Private permanent housing 私人樓宇
- ☐ Temporary housing 臨時房屋

E2. What is your father's educational level?

你爸爸的教育水平是什麼程度？

- ☐ Bachelor Degree or above 大學或以上
- ☐ Secondary Level 中學程度
- ☐ Primary school or below 小學或以下

E3. What is your mother's educational level?

你媽媽的教育水平是什麼程度？

- ☐ Bachelor Degree or above 大學或以上
- ☐ Secondary Level 中學程度
- ☐ Primary school or below 小學或以下

E4. What is your father's occupation?

你爸爸的職業是什麼？

- ☐ Managers and administrators 經理或管理
- ☐ Professionals 專業人士
- ☐ Associate professionals 輔助專業人員
- ☐ Clerical support workers 文書
- ☐ Service and sales workers 服務和銷售人員
- ☐ Craft and related workers 工藝及有關人員

E5. What is your mother's occupation?

你媽媽的職業是什麼？

- ☐ Managers and administrators 經理或管理
- ☐ Professionals 專業人士
- ☐ Associate professionals 輔助專業人員
- ☐ Clerical support workers 文書
- ☐ Service and sales workers 服務和銷售人員
- ☐ Craft and related workers 工藝及有關人員

☐

☐

**-THE END-**

**-問卷完-**

~~~~~THANK YOU VERY MUCH FOR YOUR  
PARTICIPATION~~~~~

填答及呈交此份問卷將被視作同意參與此項研究。

Appendix C: Instruction for School Use

(revised October 2014)

INSTRUCTIONS FOR USE

1. Consent to Participate for Data Collection Site/ School

The Project Investigator must prepare a set of Consent forms / Information sheets for school/ data collection sites so that the school / organization is aware of the research study and agrees in writing to allow the Project Investigator to run the study in the school/ organization.

2. Guidelines on Obtaining Consent for Minor Participants

Please note the following guidelines on obtaining consent for minor participants (extracted from the HREC Operational Guidelines, paragraph 29):

The following guidelines for obtaining consent should be adopted if the research participants are minors:

- *For children aged below 9, only the signature of their parents/guardians is required; completion of the task, after verbal explanation of its nature by the researcher, provides implied consent by the child;*
- *For children aged 9 to 15, signature of both the children and their parents/guardians is required; and*
- *For adolescents aged 16 to 17, signature of the adolescents is required and consent from their parents/guardians is optional for studies involving minimal risk.*

3. Language of the Information Sheet

- (a) Information Sheets should be written in simple language which is comprehensible to a non-specialist. A good rule of thumb is that the Information Sheet should be readable by a Grade 6 student.
- (b) Please be concise and indicate clearly in what procedures a participant will be involved.
- (c) Please do not include too many technical details that are not necessary to participants.
- (d) Typically one page should be sufficient for providing appropriate and adequate information on the project for purposes of informed consent.
- (e) If the consent form and information sheet are to be presented to participants/ parents in Chinese, please also provide a Chinese version to HREC for review, and ensure that there is consistency between the English or Chinese version.

Sample Consent Form and Information Sheet for SCHOOLS

**THE HONG KONG INSTITUTE OF EDUCATION
Department of Psychological Studies**

CONSENT TO PARTICIPATE IN RESEARCH (FOR SCHOOL)

**Reading Motivation in L1 and L2 among Hong Kong Secondary School Students:
Influence of School and Demographic Factors**

My school hereby consents to participate in the captioned project supervised by Dr. Yeung and conducted by Mr. Lee Kwok Wai, who are a staff member and student respectively of the Department of Psychological Studies in the Hong Kong Institute of Education.

I understand that information obtained from this research may be used in future research and may be published. However, our right to privacy will be retained, i.e., the personal details of my students'/teachers' will not be revealed.

The procedure as set out in the **attached** information sheet has been fully explained. I understand the benefits and risks involved. My students'/teachers' participation in the project is voluntary.

I acknowledge that we have the right to question any part of the procedure and can withdraw at any time without negative consequences.

I agree that the captioned research project can be carried out at this school.

Signature:

Name of Principal/Delegate*:

(Prof/Dr/Mr/Mrs/Ms/Miss*)

Post:

Principal

Name of School:

Date:

(* please delete as appropriate)

INFORMATION SHEET

Reading Motivation in L1 and L2 among Hong Kong Secondary School Students: Influence of School and Demographic Factors

Your school is invited to participate in a project supervised by Dr. Yeung and conducted by Mr. Lee Kwok Wai, a staff member and student, respectively, of the Department of Psychological Studies in the Hong Kong Institute of Education.

The introduction of the research

The aim of this study is to investigate school factors including medium of instruction, teacher support and peer support and demographic factors including gender, grade and socio-economic status in Hong Kong students' motivation to read in first language (L1) and second language (L2).

The present project will employ a cross-sectional study to examine reading motivation in first language (L1) and second language (L2).

In order to have a more representative sample in my research, I would like to invite your band two school to participate in my research project.

The methodology of the research

I will collect samples from Secondary One, Secondary Four and Secondary Six students during the first term of 2015/2016. Around two hundred students from Secondary One, Secondary Four and Secondary will participate in this study.

Due to substantial changes in the ages of transition from junior forms to senior forms, we will include three different levels of secondary school students for our sample. Comparison of junior form and upper form students can provide a more comprehensive view of different age groups in this study.

Students will be asked to indicate their agreement with these questionnaires and 15 minutes will be given to each participant for completion. Teachers will explain the purpose first before the students are asked to complete the four scales.

The potential risks of the research (State explicitly if none)

All information obtained will be kept strictly confidential and it will only be used for research purposes.

Please understand that your students'/teachers' participation is voluntary. They have every right to withdraw from the study at any time without negative consequences. All information related to your students'/teachers' will remain confidential, and will be identifiable by codes known only to the researcher.

Describe how results will be potentially disseminated

My thesis will be published in a Journal

If you would like to obtain more information about this study, please contact Mr. Lee Kwok Wai at telephone number [REDACTED] or their supervisor Dr. Yeung at telephone number 29488283.

If you have any concerns about the conduct of this research study, please do not hesitate to contact the Human Research Ethics Committee by email at hrec@ied.edu.hk or by mail to Research and Development Office, The Hong Kong Institute of Education. .

Thank you for your interest in participating in this study.

Mr. Lee Kwok Wai
Principal Investigator



The Education University
of Hong Kong Library

For private study or research only.
Not for publication or further reproduction.

香港教育學院
心理研究學系

參與研究同意書(學校)

香港中學生中文和英文的閱讀動機：學校因素和背景因素的影響

本校同意參加由楊少詩博士負責監督,李國威先生負責執行的研究計劃。她/他們是香港教育學院學生/教員。

本人理解此研究所獲得的資料可用於未來的研究和學術發表。然而本人有權保護本校學生/教師的隱私,其個人資料將不能洩漏。

本人對所附資料的有關步驟已經得到充分的解釋。本人理解可能會出現的風險。本人是自願讓本校學生/教師參與這項研究。

本人理解本人及本校學生/教師皆有權在研究過程中提出問題,並在任何時候決定退出研究,更不會因此引致任何不良後果。

本人同意讓香港教育學院學生於本校進行與上述研究項目有關之研究。

簽署:

校長/ 學校代表*姓名:

職位:

學校名稱:

日期:

(*請刪去不適用者)

校長

(教授/博士/先生/女士/小姐*)

香港教育學院
心理研究學系

參與研究同意書(學校)

香港中學生中文和英文的閱讀動機：學校因素和背景因素的影響

誠邀

貴校參加楊少詩博士負責監督,李國威先生負責執行的研究計劃。她/他們是香港教育學院學生/教員。

研究計劃簡介

這項研究的目的是考察香港中學生中文和英文閱讀動機, 學校的因素包括教學語言, 老師的支持和朋輩支援, 人口因素包括性別, 年級和社會經濟地位。

本項目將採用橫斷面研究在研究的閱讀動機的中文和英文。

為了在我的研究比較有代表性的。

研究方法

由2015/2016學年首學期進行問卷調查, 參與者為中一, 中四和中六年級學生。

由於從初中到高中的學習期間產生重大變化, 我們將有三個不同年級的中學生為我們的樣本。因此我們必須比較初中和高中兩種級別的學生的從而令此研究結果更全面。

每個參與者進行問卷之前老師會解釋本研究的目的是, 每位學生需要填寫四份問卷, 需要15分鐘完成。

說明任何風險 (若無, 請明確指出)

獲得的所有資料會嚴格保密, 並僅用於研究目的。

貴校學生/教師的參與純屬自願性質。所有參加者皆享有充分的權利在研究開始前或後決定退出這項研究, 更不會因此引致任何不良後果。凡有關貴校學生/教師的資料將會保密, 一切資料的編碼只有研究人員得悉。

描述將如何發佈研究結果

期刊論文

如閣下想獲得更多有關這項研究的資料, 請電郵與 本 人 () 或本人的導師楊少詩博士 (siusze@ied.edu.hk) 聯絡。

如閣下對這項研究有任何意見, 可隨時與香港教育學院人類實驗對象操守委員會聯絡(電郵: hrec@ied.edu.hk; 地址: 香港教育學院研究與發展事務處)。

謝謝閣下有興趣參與這項研究。

李國威先生
<首席研究員簽署>



Appendix D: Information for Parent Use

(revised October 2014)

INSTRUCTIONS FOR USE

1. Consent to Participate for Data Collection Site/ School

The Project Investigator must prepare a set of Consent forms / Information sheets for school/ data collection sites so that the school / organization is aware of the research study and agrees in writing to allow the Project Investigator to run the study in the school/ organization.

2. Guidelines on Obtaining Consent for Minor Participants

Please note the following guidelines on obtaining consent for minor participants (extracted from the HREC Operational Guidelines, paragraph 29):

The following guidelines for obtaining consent should be adopted if the research participants are minors:

- *For children aged below 9, only the signature of their parents/guardians is required; completion of the task, after verbal explanation of its nature by the researcher, provides implied consent by the child;*
- *For children aged 9 to 15, signature of both the children and their parents/guardians is required; and*
- *For adolescents aged 16 to 17, signature of the adolescents is required and consent from their parents/guardians is optional for studies involving minimal risk.*

3. Language of the Information Sheet

- (a) Information Sheets should be written in simple language which is comprehensible to a non-specialist. A good rule of thumb is that the Information Sheet should be readable by a Grade 6 student.
- (b) Please be concise and indicate clearly in what procedures a participant will be involved.
- (c) Please do not include too many technical details that are not necessary to participants.
- (d) Typically one page should be sufficient for providing appropriate and adequate information on the project for purposes of informed consent.
- (e) If the consent form and information sheet are to be presented to participants/ parents in Chinese, please also provide a Chinese version to HREC for review, and ensure that there is consistency between the English or Chinese version.

Sample Consent Form and Information Sheet for PARENTS

THE HONG KONG INSTITUTE OF EDUCATION

Department of Psychological Studies

CONSENT TO PARTICIPATE IN RESEARCH

Reading Motivation in L1 and L2 among Hong Kong Secondary School Students: Influence of School and Demographic Factors

I _____ hereby consent to my child participating in the captioned research supervised by Dr. Yeung and conducted by Mr. Lee Kwok Wai.

I understand that information obtained from this research may be used in future research and may be published. However, our right to privacy will be retained, i.e., the personal details of my child will not be revealed.

The procedure as set out in the **attached** information sheet has been fully explained. I understand the benefits and risks involved. My child's participation in the project is voluntary.

I acknowledge that we have the right to question any part of the procedure and can withdraw at any time without negative consequences.

Name of participant

Signature of participant

Name of Parent or Guardian

Signature of Parent or Guardian

Date

INFORMATION SHEET

Reading Motivation in L1 and L2 among Hong Kong Secondary School Students: Influence of School and Demographic Factors

You are invited to participate with your child in a project supervised by Dr. Yeung and conducted by Mr. Lee Kwok Wai, who are staff / students of the Department of Psychological Studies in The Hong Kong Institute of Education.

The introduction of the research

The aims of this study is to investigate the school factors including medium of instruction, teacher support and peer support and demographic factors including gender, grade and socio-economic status in first language (L1) and second language (L2) of Hong Kong contexts.

The present project will employ the cross-sectional study in examining of reading motivation in first language (L1) and second language (L2).

In order to have more representative sample in my research, I would like to invite your band one school to participate in my research project.

The methodology of the research

I will collect sample from secondary one, secondary four and secondary six students during first term of 2015/2016. Around two hundred students from Secondary One, Secondary Four and Secondary will be participated in this study.

Due to substantial change of the age of transition from junior form to senior form, we will include three different levels of secondary school students for our sample. Comparison of junior forms and upper forms students can provide a more comprehensive view of different age group in this study.

Student will be asked to indicate the agreement with these questionnaires and 15 minutes will be given to each participant for completion. Teachers will explain the purposes first before filling the four scales.

The potential risks of the research (State explicitly if none)

All information obtained is kept strictly confidential and it is only used for research purpose.

Please understand that your students'/teachers' participation are voluntary. They have every right to withdraw from the study at any time without negative consequences. All information related to your students'/teachers' will remain confidential, and will be identifiable by codes known only to the researcher.

Describe how results will be potentially disseminated

My thesis will be published in Journal

If you would like to obtain more information about this study, please contact Mr. Lee Kwok Wai at telephone number [REDACTED] or their supervisor Dr. Yeung at telephone number 29488283.

If you or your child have/ has any concerns about the conduct of this research study, please do not hesitate to contact the Human Research Ethics Committee by email at hrec@ied.edu.hk or by mail to Research and Development Office, The Hong Kong Institute of Education.

Thank you for your interest in participating in this study.

Mr. Lee Kwok Wai
Principal Investigator



The Education University
of Hong Kong Library

For private study or research only.
Not for publication or further reproduction.

香港教育學院
心理研究學系

參與研究同意書

香港中學生中文和英文的閱讀動機：學校因素和背景因素的影響

茲同意敝子弟_____參加由楊少詩博士負責監督,李國威先生執行的研究項目。

本人理解此研究所獲得的資料可用於未來的研究和學術發表。然而本人有權保護敝子弟的隱私,其個人資料將不能洩漏。

本人對所附資料的有關步驟已經得到充分的解釋。本人理解可能會出現的風險。本人是自願讓敝子弟參與這項研究。

本人理解本人及敝子弟皆有權在研究過程中提出問題,並在任何時候決定退出研究,更不會因此引致任何不良後果。

參加者姓名:

參加者簽名:

父母姓名或監護人姓名:

父母或監護人簽名:

日期:

有關資料

香港中學生中文和英文的閱讀動機：學校因素和背景因素的影響

誠邀閣下及

貴子女參加楊少詩博士負責監督,李國威先生負責執行的研究計劃。她/他們是香港教育學院學生/教員。

研究計劃簡介

這項研究的目的是探討香港中學生中文和英文閱讀動機, 學校的因素包括教學語言, 老師的支持和朋輩支援, 人口因素包括性別, 年級和社會經濟地位。

本項目將採用橫斷面研究在研究的閱讀動機的中文和英文。

為了在我的研究比較有代表性的。

研究方法

由2015/2016學年首學期進行問卷調查, 參與者為中一, 中四和中六年級學生。

由於從初中到高中的學習期間產生重大變化, 我們將有三個不同年級的中學生為我們的樣本。因此我們必須比較初中和高中兩種級別的學生的從而令此研究結果更全面。每個參與者進行問卷之前老師會解釋本研究的目的是, 每位學生需要填寫四份問卷, 需要15分鐘完成。

說明任何風險 (若無, 請明確指出)

獲得的所有資料會嚴格保密, 並僅用於研究目的。

閣下及 貴子女的參與純屬自願性質。閣下及

貴子女享有充分的權利在任何時候決定退出這項研究, 更不會因此引致任何不良後果。凡有關 貴子女的資料將會保密, 一切資料的編碼只有研究人員得悉。

如閣下想獲得更多有關這項研究的資料, 請與李國威先生聯絡, 電話 [REDACTED] 或聯絡她/他們的導師楊少詩博士, 電話 29488283。

如閣下或

貴子女對這項研究有任何意見, 可隨時與香港教育學院人類實驗對象操守委員會聯絡(電郵: hrec@ied.edu.hk; 地址: 香港教育學院研究與發展事務處)。

謝謝閣下有興趣參與這項研究。

<首席研究員姓名>

首席研究員



The Education University
of Hong Kong Library

For private study or research only.
Not for publication or further reproduction.

Appendix E: Instruction for Participants Use

(revised October 2014)

INSTRUCTIONS FOR USE

1. Consent to Participate for Data Collection Site/ School

The Project Investigator must prepare a set of Consent forms / Information sheets for school/ data collection sites so that the school / organization is aware of the research study and agrees in writing to allow the Project Investigator to run the study in the school/ organization.

2. Guidelines on Obtaining Consent for Minor Participants

Please note the following guidelines on obtaining consent for minor participants (extracted from the HREC Operational Guidelines, paragraph 29):

The following guidelines for obtaining consent should be adopted if the research participants are minors:

- *For children aged below 9, only the signature of their parents/guardians is required; completion of the task, after verbal explanation of its nature by the researcher, provides implied consent by the child;*
- *For children aged 9 to 15, signature of both the children and their parents/guardians is required; and*
- *For adolescents aged 16 to 17, signature of the adolescents is required and consent from their parents/guardians is optional for studies involving minimal risk.*

3. Language of the Information Sheet

- (a) Information Sheets should be written in simple language which is comprehensible to a non-specialist. A good rule of thumb is that the Information Sheet should be readable by a Grade 6 student.
- (b) Please be concise and indicate clearly in what procedures a participant will be involved.
- (c) Please do not include too many technical details that are not necessary to participants.
- (d) Typically one page should be sufficient for providing appropriate and adequate information on the project for purposes of informed consent.
- (e) If the consent form and information sheet are to be presented to participants/ parents in Chinese, please also provide a Chinese version to HREC for review, and ensure that there is consistency between the English or Chinese version.

Sample Consent Form and Information Sheet for PARTICIPANTS

**THE HONG KONG INSTITUTE OF EDUCATION
Department of Psychological Studies**

CONSENT TO PARTICIPATE IN RESEARCH

Reading Motivation in L1 and L2 among Hong Kong Secondary School Students: Influence of School and Demographic Factors

I _____ hereby consent to participate in the captioned research supervised by Dr. Yeung and conducted by Mr. Lee Kwok Wai.

I understand that information obtained from this research may be used in future research and may be published. However, my right to privacy will be retained, i.e., my personal details will not be revealed.

The procedure as set out in the **attached** information sheet has been fully explained. I understand the benefits and risks involved. My participation in the project is voluntary.

I acknowledge that I have the right to question any part of the procedure and can withdraw at any time without negative consequences.

Name of participant _____

Signature of participant _____

Date _____

INFORMATION SHEET

Reading Motivation in L1 and L2 among Hong Kong Secondary School Students: Influence of School and Demographic Factors

You are invited to participate in a project supervised by Dr. Yeung and conducted by Mr. Lee Kwok Wai, who are staff / students of the Department of Psychological Studies in The Hong Kong Institute of Education.

The introduction of the research

The aims of this study is to investigate the school factors including medium of instruction, teacher support and peer support and demographic factors including gender, grade and socio-economic status in first language (L1) and second language (L2) of Hong Kong contexts.

The present project will employ the cross-sectional study in examining of reading motivation in first language (L1) and second language (L2).

In order to have more representative sample in my research, I would like to invite your band one school to participate in my research project.

The methodology of the research

I will collect sample from secondary one, secondary four and secondary six students during first term of 2015/2016. Around two hundred students from Secondary One, Secondary Four and Secondary will be participated in this study.

Due to substantial change of the age of transition from junior form to senior form, we will include three different levels of secondary school students for our sample. Comparison of junior forms and upper forms students can provide a more comprehensive view of different age group in this study.

Student will be asked to indicate the agreement with these questionnaires and 15 minutes will be given to each participant for completion. Teachers will explain the purposes first before filling the four scales.

The potential risks of the research (State explicitly if none)

All information obtained is kept strictly confidential and it is only used for research purpose.

Your participation in the project is voluntary. You have every right to withdraw from the study at any time without negative consequences. All information related to you will remain confidential, and will be identifiable by codes known only to the researcher.

Describe how results will be potentially disseminated

My thesis will be published in Journal

If you would like to obtain more information about this study, please contact Mr. Lee Kwok Wai at telephone number [REDACTED] or their supervisor Dr. Yeung at telephone number 29488283.

If you have any concerns about the conduct of this research study, please do not hesitate to contact the Human Research Ethics Committee by email at hrec@ied.edu.hk or by mail to Research and Development Office, The Hong Kong Institute of Education.

Thank you for your interest in participating in this study.

Mr. Lee Kwok Wai
Principal Investigator



The Education University
of Hong Kong Library

For private study or research only.
Not for publication or further reproduction.

香港教育學院
心理研究學系

參與研究同意書

香港中學生中文和英文的閱讀動機：學校因素和背景因素的影響

本人_____同意參加由楊少詩博士負責監督,李國威先生執行的研究項目。

本人理解此研究所獲得的資料可用於未來的研究和學術發表。然而本人有權保護自己的隱私,本人的個人資料將不能洩漏。

本人對所附資料的有關步驟已經得到充分的解釋。本人理解可能會出現的風險。本人是自願參與這項研究。

本人理解我有權在研究過程中提出問題,並在任何時候決定退出研究,更不會因此引致任何不良後果。

參加者姓名:

參加者簽名:

日期:



有關資料

香港中學生中文和英文的閱讀動機：學校因素和背景因素的影響

誠邀閣下參加楊少詩博士負責監督,李國威先生負責執行的研究計劃。她/他們是香港教育學院學生/教員。

研究計劃簡介

這項研究的目的是探討香港中學生中文和英文閱讀動機, 學校的因素包括教學語言, 老師的支持和朋輩支援, 人口因素包括性別, 年級和社會經濟地位。

本項目將採用橫斷面研究在研究的閱讀動機的中文和英文。

為了在我的研究比較有代表性的。

研究方法

由2015/2016學年首學期進行問卷調查, 參與者為中一, 中四和中六年級學生。

由於從初中到高中的學習期間產生重大變化, 我們將有三個不同年級的中學生為我們的樣本。因此我們必須比較初中和高中兩種級別的學生的從而令此研究結果更全面。

每個參與者進行問卷之前老師會解釋本研究的目的是, 每位學生需要填寫四份問卷, 需要15分鐘完成。

說明任何風險 (若無, 請明確指出)

獲得的所有資料會嚴格保密, 並僅用於研究目的。

閣下的參與純屬自願性質。閣下享有充分的權利在任何時候決定退出這項研究, 更不會因此引致任何不良後果。凡有關閣下的資料將會保密, 一切資料的編碼只有研究人員得悉。

描述將如何發佈研究結果

期刊論文

如閣下想獲得更多有關這項研究的資料, 請電郵與 本 人 () 或本人的導師楊少詩博士 (siusze@ied.edu.hk) 聯絡。

如閣下對這項研究有任何意見, 可隨時與香港教育學院人類實驗對象操守委員會聯絡(電郵: hrec@ied.edu.hk; 地址: 香港教育學院研究與發展事務處)。

謝謝閣下有興趣參與這項研究。

李國威先生
首席研究員