福岡女子大学文学部・国際文理学部紀要
「文藝と思想」第 76 号　2012 年 2 月　47～68 頁

Increasing Reading Fluency, Motivation and Comprehension through Extensive Reading

J. LAKE
Trevor A. HOLSTER

Reading is an important skill to acquire for developing proficiency in a second language. Reading is also important for its own sake, reading to learn for personal development, for future professional career needs, and further academic studies and research. Fluency, motivation, and comprehension are important components of reading development. Many studies have looked at these components independently and have found that students can improve on them in a reading course. However, there have been few studies done in an English as a foreign language context. This study looks at gains in reading fluency, positive second language reading self-concept, motivation, and comprehension over the course of a semester based on the treatment of extensive reading.

Introduction

Reading fluency and comprehension

In second language acquisition theory and research, fluency is often contrasted with accuracy (Skehan, 1998; Skehan & Foster, 2001; DeKeyser, 2001). However, these studies are focused on what happens during a task with fluency, accuracy, and complexity as variables when learners are pushed to increase in one dimension. For example, when task complexity increases, accuracy and fluency may decrease, or when pushed to be more accurate, then complexity and fluency

may decrease. This is because when attentional demands are at their limits, cognitive resources must be shifted to meet the increasing demands. Grabe (2009, p. 292) points out that in first language (L1) reading research on fluency "accuracy is an assumed subcomponent" (see also, Pressley, 2006; Rasinski, Blachowicz, & Lems, 2006; Rasinski, 2010; Rasinski, Reutzel, Chard, & Linan-Thompson, 2011; Samuels, 2006; Samuels & Farstrup, 2011). Grabe suggested that limits to cognitive resources may occur in the early learning stages of new second language (L2) knowledge or in special task conditions where a learner is being pushed to increase in a particular dimension. After these early learning stages and in cases of being pushed to increase fluency, increases in fluency should lead to increases in comprehension accuracy (Grabe, 2009, Grabe & Stoller, 2011; Nation, 2009). Fluency also changes the way language knowledge is structured, so as Nation and Newton (2009, p. 152) note, it is "not surprising that developments in fluency are related to developments in accuracy."

In discussing fluency, Grabe (2009, pp. 291-203) mentions four dimensions: automaticity, accuracy, reading rate, and prosodic structuring. There are many theories of automaticity (see for example, DeKeyser, 2001; Segalowitz, 2000, 2003, 2010). Automaticity in reading, to put it simply, has to do with the ability to rapidly process text without conscious awareness. Accuracy can be defined as rapidly and completely recognizing word parts, words, and texts. Accuracy needs a certain degree of speed so that a complete unit can be maintained in working memory and comprehended. Reading rate for fluency is a rapid overall rate of extended text for comprehension. A rapid rate is necessary to comprehend beyond the subword or word level, that is, to understand meanings of passages. For example, letters need to be processed rapidly enough to recognize words and words need to be processed rapidly to comprehend phrases and sentences. Prosodic structuring is the ability to "recognition of prosodic phrasing and contours of text" (Grabe, 2009, p. 292). This is the ability to recognize phrases or chunks of text so that reading matches structural units in prose. Given this concept of fluency, it is easy to see that increases in fluency should lead to greater comprehension accuracy because understandings can bridge word, phrase, and sentence boundaries. Also, the more reading becomes unconscious the more cog-

nitive resources are freed for conscious processes and strategies.

Motivation and interest

In academic learning domains, two key features of motivated learning are domain specific academic self-concepts and competence beliefs (Bong & Skaalvik, 2003; Brophy, 1999, 2010; Chapman & Tunmer, 2003; Dweck, 1992, 2000; Marsh, 1992, 2007; Pajares & Schunk, 2005). This section will explain self-concepts followed by a section that reviews literature on competence beliefs or self-efficacy. These terms need some explanation because they both relate to self and competence beliefs.

The academic self-concept can be thought of as an academic self-schema or motivated learning schema, "a network of connected insights, skills, values, and dispositions that enable students to understand what it means to engage in academic activities with the intension of accomplishing their learning goals and with an awareness of the strategies they use in attempting to do so" (Brophy, 1999, p. 81). When students engage in academic work that is relevant to their academic self-concept with an accompanying belief of competence, this creates an optimal learning situation or motivational zone of proximal development (Brophy, 1999; 2010). General academic self-concept may be composed of many dimensions that are domain specific, for example, math self-concept, history self-concept, or foreign language self-concept. These in turn may be composed of other academic domains such as writing or speaking. The specific domain of this study is reading in a second language and at this level of specificity a positive self-concept can be characterized as being interested in reading.

The psychological construct of interest is a component of many theories of motivation. For example in contemporary expectancy-value theories of motivation such as that developed by Eccles and her colleagues (Eccles, 1983; Eccles & Wigfield, 2002; Wigfield & Eccles, 2002), especially as part of the value construct; in social-cognitive theory and self-efficacy theory (Bandura, 1986, 1997, 2001), especially as part of internal personal determinants of behavior and self-efficacy; flow theory and autotelic activities (Csikszentmihalyi, 1990a, 1990b, 1993), especially as a part of individual engagement (Hunter & Csikszentmihalyi, 2003;

Shernoff, Csikszentmihalyi, Schneider, & Shernoff, 2003); goal orientation theory (Dweck & Leggett, 1988; Pintrich, 2000), especially as a part of mastery beliefs or learning goal orientations; and self-determination theory (Deci & Ryan, 1985, 2000, 2002; Ryan & Deci, 2000), especially as related to intrinsic motivation.

There has been a long history of the role of interest in education by psychologists and educators and they often distinguish between some type of individual and situational interest (e.g., Dewey, 1913, 1916). In the framework that has been developed by Hidi (1990, p. 551) "Personal, individual interest develops slowly over time and tends to have long-lasting effects on a person's knowledge and values", while situational interest "tends to be evoked more suddenly by something in the environment and may have only a short term effect, marginally influencing an individual's knowledge and values". In her review, Hidi listed various positive effects of individual interests on cognitive performance, such as: better retention in memory, inferencing, comprehension, perseverance, better concentration, and learning quality. To investigate situational interest she looked at interesting text and found positive effects such as: better comprehension, better and more creative responses, more learning, and better recall. A further development by Hidi and Renninger (2006) was the creation of a four-phase model of interest development. The first two phases of triggered situational interest and maintained situational interest were much like the above. The third phase was characterized as an emerging individual interest as students began to value the object or topic and act on their own. This may then lead to the fourth phase of well-developed individual interest associated with personal meaning, value, and knowledge.

Interest, as with many other psychological constructs, such as attitude, motivation, and self-concept can exist on different levels from the more global and trait-like, to domain specific dispositions, and to the short-lived specific instances that vary from moment-to-moment states. Interest as a psychological construct can be studied as relatively unstable and state-like (situational) interest or as a relatively more enduring dispositional (individual) interest. It is important to specify construct level in motivational research because this determines how constructs are measured and how they relate to other constructs. In this study, for the domain of reading, the more stable dispositional type of interest will be referred to

as reading interest. At this more dispositional level, reading interest will represent a positive reading self-concept. This study will use a more fluid and dynamic variable related to specific reading activities and tasks that is more proximal to reading behavior referred to as reading self-efficacy.

Self-efficacy

Bandura's (1986, 1997, 2001) social cognitive theory of human behavior relates an individual's actions and cognitions with environmental influences. "People create social systems, and these systems, in turn, organize and influence people's lives" (Bandura, 2006, p. 164). As a part of social cognitive theory, competence perceptions and control beliefs are important agency components of human development and change (Bandura, 1986, 1997, 2001). For learning and goal setting theorists, of special importance is the theory of self-efficacy (Bandura, 1997) that relates to beliefs people have about their capabilities to learn or perform certain actions at given levels and situations. The emphasis of this theory is on competence beliefs. In goal theory springing from the work of efficacy theory, the goal construct can also be represented in more specific or more general terms. Bandura and Schunk (1981; see also Bandura, 1997; Schunk, 1990) relate specific, proximal, and challenging goals to higher performance and the development of self-efficacy. Linnenbrink and Pintrich (2002, p. 315) note that, "Students who have more positive self-efficacy beliefs (i.e., they believe they can do the task) are more likely to work harder, persist, and eventually achieve at higher levels." In the field of foreign language learning Hsieh and Schallert (2008) found that among self and differing attributional beliefs, self-efficacy was the greatest predictor of achievement.

Second Language Learning Motivation

There are many individual differences that account for differences in second language learning (Dornyei & Skehan, 2003; Ellis, 2004; Robinson, 2002; Sawyer & Ranta, 2001). Many of these individual differences are relatively fixed (e.g., intelligence and aptitude) or have little impact on language achievement. The individual difference that has the most impact on language learning achievement is

motivation.

Much of the earlier work on L2 motivation was done by Gardner and Lambert (1972; see also Gardner, 1985, 2001, 2010) from a social psychological perspective. The motivational model proposed by Gardner attributed attitudes and willingness to integrate with the second language culture as important components in motivational orientation to learn a second language. Taken from Gardner's model for motivation studies is the idea of integrative orientation that, in simple terms, is the interest a learner has in integrating with the target culture and instrumental orientation that, again in simple terms, are specific practical reasons for learning a second language such as getting a job. An individual learner might have any combination of these orientations.

The dominance of Gardner's model from the 1950s through the 1980s based on L2 motivation research done in the bilingual context of Canada began to fade in the early 1990s when there were calls to expand the L2 motivation research agenda (Crookes & Schmidt, 1991; Dornyei, 1994; Oxford, 1994; Oxford & Shearin, 1994). Much of the newer research criticized the Gardner model as being more applicable to second language learning situations rather than foreign or global language situations. Yashima (2000, 2004) for example, uses a model of the willingness to communicate where a specific target culture is replaced by a more general "international posture". Dörnyei (2005; Ryan, 2005), building on the concept of "possible selves" (Markus & Nutrias, 1986) and "imagined community" (Norton, 2001), conceptualizes an "ideal language self" that becomes a target for a language learner. Dörnyei and Ushioda (2011) note that there has been "a gradual convergence of self theories and motivation theories in mainstream psychology" (p. 80).

Reading motivation

There is a growing body of research in L1 reading motivation, much of this research has been conducted by Guthrie, Wigfield, and colleagues (Guthrie, 2008; Guthrie & Wigfield, 2000; Guthrie, Wigfield, & Perencevich, 2004; Wigfield & Guthrie, 2010). Their research centers on an overarching concept of reading engagement that encompasses many different dimensions that relate to achievement. Important concepts and research findings are that intrinsic motivation,

self-efficacy, learning goal orientation, and social factors are strongly related to achievement. They explain that "if a person is intrinsically motivated to read and believes she is a capable reader, the person will persist in reading difficult texts and exert effort in resolving conflicts and integrating text with prior knowledge" (Guthrie & Wigfield, 2000, p. 408). Other dimensions integrated with engagement include such reading concepts as curiosity, involvement, importance, interests, challenge, attitudes, and reading comprehension.

There has been little research done in L2 reading research. Mori (2002) drew on and adapted L1 research done by Wigfield and Guthrie (1997) to explore L2 reading motivation with Japanese university students. She found dimensions similar to those found in L1 research (Lau, 2009 found similar results to Wigfield & Guthrie, 1997, in a Chinese context). She found that her study supported an expectancy-value approach to reading motivation. In a follow up study (Mori, 2004), she again found support that her data could be explained largely by an expectancy-value model although some factors were difficult to interpret. She found that intrinsic value and expectancy for success were indistinguishable but that they were the largest predictors of TOEIC scores. In research done with Japanese high school students, Takase (2007) found that L2 intrinsic reading motivation correlated with amount of L2 reading. In a study involving extensive reading, reading rate, and students' attitudes and beliefs towards L2 texts, Yukimaru, Pennington, and Tanoue (2011) found no actual improvement on measures of reading rates regardless of proficiency although students "feel their reading rate has increased"; in addition, they identified some beliefs that "changed positively" (p.272). These results were less interpretable because, although students' subjective perceptions were of speed increases, no objective increases were found. This is encouraging in the sense that perhaps this is a Type II error where there were actual effects that measurement failed to detect. In another study with French as a second language, Mills, Pajares, and Herron (2006) found reading self-efficacy correlated with L2 reading proficiency ($r = .29$). They found in their study that "reading self-efficacy positively influences reading proficiency" (p. 284). In sum, these studies show that reading ability is related to an intrinsic factor of motivation and self-efficacy as in L1 reading contexts, but that these

studies along with the other studies reviewed support Grabe's (2009, p. 190) contention that, "Much more research is needed on L2 reading motivation. Theories of reading motivation that are generally supported by research should be developed for L2 contexts."

Extensive reading

Extensive reading is a very effective approach to reading instruction for foreign language learners and has been shown to lead to improvements in vocabulary, writing, motivation, speaking, listening, spelling, grammar, and, of course, reading abilities (Bamford & Day, 2004; Cirocki, 2009; Day & Bamford, 1998; Day, Bassett, Bowler, Parminter, Bullard, Furr, Prentice, Mahmood, Stewart, & Robb, 2011; Grabe, 2009; Grabe & Stoller, 2011; Iwahori, 2008; Nation, 2009). An extensive reading program involves students reading many stories or informative texts at an appropriate level of difficulty that they choose themselves. This can be contrasted with intensive reading instruction where all students in a class read a single difficult passage from a text chosen by the teacher. Seymour and Walsh (2006, p. 113) state, "The best way to develop reading fluency is through extensive reading" and thus "it is important to consider how you could incorporate an extensive reading component" into an academic English program.

In an extensive reading program, since they can choose books that are personally interesting and meaningful to them, students are motivated to read the selected book. Over time and books overall reading motivation is increased. The large amount of input also helps improve other language skills so that overall proficiency improves. Hunt and Beglar (2005, p. 39) suggest that extensive reading should be the primary process for implicit learning because "extensive reading can maximize the amount of meaningful input accessible to learners."

Extensive reading programs make use of graded readers. These are books that are graded at different levels of difficulty based on the difficulty of vocabulary and grammar. Students read many books quickly that they choose themselves and they may read at higher levels as they improve in reading so an extensive reading program needs many books at different levels.

Assessment of progress for extensive reading is different from intensive

reading. For example, in contrast to intensive reading where a student might be assessed on how well they understood and translated a short but difficult passage, in extensive reading the focus is on reading fluency and they might be assessed by showing that they read and understood a large number of books over the course of a semester.

Beglar, Hunt, and Kite (in press) point out that few studies have been done in L2 reading research on examining large amounts of reading and fluency. Also, those that have been done tended to have problematic designs or analyses. In their carefully controlled study, they found that more extensive reading improved fluency more than intensive reading. They also found that reading graded texts improved fluency more than reading ungraded texts.

Research Questions

The studies reviewed here suggest that in both L1 and L2 contexts there exist relationships between a positive reading self-concept and reading self-efficacy, positive reading self-concept and reading fluency, positive reading self-concepts and extensive reading, and extensive reading with fluency. Many of these studies point out that much more research on these variables and the relationships among these variables is needed. There have been no studies that have measured gains in positive reading self-concept, reading self-efficacy, reading fluency, reading comprehension all together in a Japanese university EFL context through a treatment of extensive reading. This study and the research questions are designed to address this gap.

Research question 1:

Can extensive reading increase motivation by improving students' positive reading self-concept as measured by a dispositional reading interest measure?

Research question 2:

Can extensive reading increase reading motivation by improving students' situational and functional competence as measured by a reading self-efficacy measure?

Research question 3:

Is there a relationship between gains in positive reading self-concept as measured by a reading interest measure to gains in situational and functional competence as measured by a reading self-efficacy measure?

Research question 4:

Can extensive reading improve reading fluency as measured by reading speed?

Research question 5:

Can extensive reading improve reading comprehension as measured by reading comprehension tests?

Methods

Participants

The participants in this study are first year female Japanese students in a public university in western Japan. Most of the participants were 18 or 19 years old, an age that can be characterized as the developmental period known as emerging adulthood (Arnett, 2000, 2004). Emerging adulthood is a period in life where developmental changes and identity explorations are still ongoing. Academic self-constructs are being constructed and related to other career and life goals. The selection of these participants was based on a convenience sample drawn from four academic English reading classes taught by three different teachers. The teachers were all using the same syllabus framework and using similar books given by the academic program. The participants were from three different departments: International Liberal Arts, Environmental Science, and Food and Health Sciences. The mean TOEFL score of the participants was 440 with a standard deviation of 20. Given the standard error of measurement of the TOEFL, these students can be considered to be at a similar level of proficiency to each other. The students were asked to participate in a research project by filling out a questionnaire. The participants were told that participation was voluntary, would not affect their grades, and promised that anonymity would be maintained.

Instrumentation

The motivational instruments used in this study were based on well established theory in the general psychology literature. Reading self-efficacy as used here refers to the belief in being capable of successfully reading and understanding written texts at different levels for sources differing in levels of difficulty.

The reading self-efficacy scale was created for a previous study (n = 539, alpha reliability = .85 and had a .44 correlation with TOEIC Bridge scores; Lake, 2011). Seven items for the Reading Self-Efficacy scale were created based on a review of the literature previously described (e.g., "I can read and understand newspaper articles in English"). The 6-item responses ranged from *this is definitely not true of me* to *this is definitely true of me*.

The reading interest scale was created for this study based on theory derived from the theory and research on reading interest using seven items (e.g., "I like to learn new things by reading in English"). The 6-item responses ranged from *this is definitely not true of me* to *this is definitely true of me*.

The reading speed and comprehension measures were taken from Quinn, Nation, and Millet (2007). Participants read 550 word passages and the number of words were divided by minutes to get a reading rate in words per minute (wpm). Comprehension tests were then given on those same passages. Three reading speed and comprehension tests were given at the beginning of the course and three given at the end with averages for each three used as a measure that followed the recommendations given in Nation (2009).

The number of books read were simple counts of how many graded readers were read over the semester. This was triple checked with number of books checked out of the graded reader library and number of books listed in student reading logs and the counts were found to be accurate.

Procedures

The reading interest and reading self-efficacy scale were given at the beginning of the semester. In three of the four classes, students were encouraged to read many easy graded readers. A short amount of class time was also given to

reading the graded readers and recording relevant information. A course book with difficult grammar and vocabulary was also used in the classes for tasks in intensive reading. In one of the four classes, students were not encouraged to read many graded readers but were taught TOEFL reading strategies and were encouraged to study for the reading section of the TOEFL test. Although some graded readers were read, the books were too few in number to be considered extensive reading so this class functioned as a control group so comparisons could be made with the extensive reading group.

At the end of the semester the reading interest and self-efficacy scales were given again. Reading speed and comprehension were again measured. Total number of books read were counted.

Rasch analysis was conducted on the four sets of motivational variables. Rasch analysis is a type of item response analysis that creates interval measures with known item parameters. Items and students were measured using the same interval scale. For the reading self-efficacy scale, the item parameters were known so these known parameters were used through a process known as "anchoring" to measure students at both the beginning and the end of the semester. For the reading interest scale created for this study, item parameters were found using Rasch analysis and then these same parameters anchored for the end of semester administration. This allows for interval measures of student gains or losses with known precision and error.

Results

This study has examined reading motivation at two levels, a more dispositional reading self-concept level measured by reading interest, and a more functional activity-based level measured by reading self-efficacy. These two measures were administered twice, at the beginning of the semester and at the end of the semester with a treatment group that consisted of students reading easy graded readers during the semester and a control group that studied for the reading section of the TOEFL and used a few graded readers. Also measured were two important components of reading ability, fluency as measured by a reading speed

measure, and comprehension as measured by reading comprehension tests. These were also measured at the beginning and the end of the semester by the primary researcher in his classes. Finally, statistical results of dependent-means *t*-test were calculated.

Table 1. Reading Interest for experimental and control groups

		RI 1		RI 2					
	Books	*M*	*SD*	*M*	*SD*	RI Gain	*df*	*t*	*r*
Extensive Reading (n = 41)	13.3	0.30	1.45	1.00	1.73	0.70	40	−3.79***	0.51
TOEFL Reading (n = 14)	4.6	0.80	0.76	0.76	1.20	−0.04	13	0.19 *ns*	

Note. RI = Reading Interest; units in logits.
1 = Time 1; 2 = Time 2; Books = Number of books read;
t tests ***p < .001; *ns* = not significant p > .05.

Research question one asked if extensive reading can increase motivation by improving students' reading self-concept as measured by reading interest. For the experimental group, as Table 1 shows, measured reading interest significantly gained from the beginning (M = .30, SE = .23) to the end of the semester (M = 1.0, SE = .27), $t(40)$ = -3.79, p < .001, r = .51. In the TOEFL reading control group reading interest decreased from the beginning (M = .80, SE = .20) to the end of the semester (M = .76, SE = .32), $t(13)$ = .19, p > .05, although this was not significant. This large effect size (Cohen, 1988) for the extensive reading group on reading interest is an important finding because dispositional constructs such as reading self-concept often take years to develop and become more stable with age, thus a substantial increase over a single semester shows that improvement is possible and can be one of the goals of a reading curriculum.

Table 2. Reading Self-efficacy for experimental and control groups

		RSE 1		RSE 2					
	Books	*M*	*SD*	*M*	*SD*	Gain	*df*	*t*	*r*
Extensive Reading (n = 41)	13.3	−0.029	1.16	0.49	1.09	0.78	40	−4.30***	0.56
TOEFL Reading (n = 14)	4.6	0.55	0.65	0.51	0.91	−0.04	13	0.21 *ns*	

Note. RSE = Reading Self-efficacy; units in logits.
1 = Time 1; 2 = Time 2; Books = Number of books read;
t test ***p < .001; *ns* = not significant p > .05.

Research question two asked if extensive reading can increase motivation by improving students situational and functional competence as measured by reading self-efficacy. Table 2, shows that reading self-efficacy significantly gained from the beginning (M = -.29, SE = .18) to the end of the semester (M = .49, SE = .17), $t(40)$ = -4.30, $p < .001$, r = .56. In the TOEFL reading control group reading interest decreased from the beginning (M = .55, SE = .17) to the end of the semester (M = .51, SE = .24), $t(13)$ = .21, $p > .05$, although this was not significant. This large effect size for the extensive reading group on reading self-efficacy is an important finding because reading self-efficacy leads to important reading outcomes such as reading fluency, engagement, strategy use, and comprehension.

Research question three asked if there is a relationship between gains in positive reading self-concept as measured by a reading interest measure to gains in situational and functional competence as measured by a reading self-efficacy measure. There was a significant relationship between gains in reading interest and self-efficacy, r = .45, $p < .001$.

Table 3. Reading speed and reading comprehension gains

	Beginning of semester		End of semester						
Reading	*M*	*SD*	*M*	*SD*	Gain	Increase	*df*	*t*	*r*
Speed	122.79	24.17	142.31	25.86	19.52	16%	26	−7.03***	0.81
Comp.	69.94	14.33	84.29	6.33	14.35	21%	26	−5.33***	0.73

Note. Reading Speed in words per minute.
Comp. = Reading Comprehension in percentages.
***= $p < .001$.

Research question four asked if extensive reading improved fluency as measured by reading speed. As shown in Table 3, reading speed significantly gained from the beginning (M = 122.79, SE = 4.65) to the end of the semester (M = 142.31, SE = 4.98), $t(26)$ = -7.03, $p < .001$, r = .81, or to put it another way, on average reading speed increased by about 20 words per minute, a 16% increase, over a 1000 words per hour increase.

Research question five asked if extensive reading improved comprehension as measured by comprehension tests. As shown in Table 3, reading comprehension significantly gained from the beginning (M = 69.94, SE = 2.81) to the end of the semester (M = 84.29, SE = 1.24), $t(26)$ = -5.33, $p < .001$, r = .73, or to put it

another way, average reading comprehension increased 21% at the same time reading fluency increased.

Conclusion

This study has shown that important components of reading development can be improved over the course of a semester through extensive reading. Fluency, motivation, and comprehension significantly improved and, more importantly, large effect sizes were found for all components measured.

Reading motivation was conceptualized at two different levels: a more stable dispositional level, as a positive L2 reading self-concept and this in turn was operationalized as reading interest; a more dynamic situational and functional level, as L2 reading self-efficacy. Reading interest, as with other psychological traits and dispositional variables, by definition is more stable and impervious to change. However, due to the relatively large numbers of books read a large effect was found. The more dynamic variable reading self-efficacy is more susceptible to change and thus had a larger effect size.

A limitation of this study was the small numbers of participants and convenience sampling of both control and experimental groups. With larger numbers, it may be possible to test a model of reading motivation. Future research might want to test a theory that at a particular point in time, higher positive reading dispositions lead to higher reading self-efficacy producing better reading outcomes. Other future research might take a longitudinal approach to test a theory that over many successful reading outcomes, such as fluently reading and understanding books, that adds incrementally to reading self-efficacy, and that increasing self-efficacy adds to a stable reading interest. Models could be tested that are unidirectional or bidirectional.

Worth noting, is that the control group that studied reading for the TOEFL test had negative gains that were not significant, that is, this group showed no improvements in reading interest or self-efficacy. This group also read graded readers but not enough to be considered extensive reading. Making meaningful gains on tests that measure general English proficiency such as the TOEIC or

TOEFL generally require hundreds of hours of study (Ross, 1998; Swinton, 1983). Since it is important to maintain a high level of motivation to study for hundreds of hours, then ironically, classes focused on teaching for tests such as TOEIC or TOEFL, might actually lead to lower scores, unless some attention is paid to motivational issues.

Bean (2008, p. 21) noted that in the context of L1 reading programs, teachers and administrators "involved in developing a comprehensive reading program must think about how motivation to read is incorporated into the overall plan." In an EFL context, Komiyama (2009, p. 37) suggested that "teachers need to reconsider our reading pedagogy and move beyond traditional approaches that focus on vocabulary, grammar, and text structure. Strengthening and maintaining student motivation are crucial to reading instruction because reading in an L2 requires a lot of time, effort, and perseverance." Echoing points made in this study, Komiyama continues that teachers "need to be aware of links between motivational approaches and reading development; we need to nurture student motivational orientations that are most likely to yield positive results."

Building L2 reading fluency and a positive L2 reading self or identity is important if students are to read beyond the reading classroom. Reading ability and motivation should be learning that transfers outside the classroom for personal growth, enjoyment, and well-being; professional career development, flexibility, and leadership; and for current and future academic purposes. This is also important to develop lifelong learners that are able to adjust to an ever advancing technological and informationally dense world, find and create meaning for themselves and society, communicate interculturally, and develop self-direction through practical intelligence and wisdom.

References

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*, 469-480.

Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York: Oxford University Press.

Bamford, J., & Day, R. R. (Eds.). (2004). *Extensive reading activities for teaching language.*

Cambridge: Cambridge University Press.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*, 1-26.

Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science, 1*(2), 164-180.

Bandura, A., & Schunk, D. H. (1981). Cultivating competence, self-efficacy, and intrinsic interest though proximal self-motivation. *Journal of Personality and Social Psychology, 41*, 586-598.

Bean, R. M. (2008). Developing an effective reading program. In S. B. Wepner & D. S. Strickland (Eds.), *The administration and supervision of reading programs*. (pp. 11-29). New York: Teachers College Press.

Beglar, D., Hunt, A., & Kite, Y. (in press). The effect of pleasure reading on Japanese university EFL learners' reading rates. *Language Learning*

Bong, M., & Skaalvik, E. M. (2003). Academic self-concept and self-efficacy: How different are they really? *Educational Psychology Review, 15*, 1-40.

Brophy, J. (1999). Toward a model of the value aspects of motivation in education: Developing appreciation for particular learning domains and activities. *Educational Psychologist, 34*, 75–85.

Brophy, J. (2010). *Motivating students to learn* (3rd ed.). New York: Routledge.

Chapman, J. W., & Tunmar, W. E. (1995). Development of young children's reading self-concepts: An examination of emerging subcomponents and their relationship with reading achievement. *Journal of Educational Psychology, 87*, 154-167.

Chapman, J. W., & Tunmar, W. E. (2003). Reading difficulties, reading-related self-perceptions, and strategies for overcoming negative self-beliefs. *Reading & Writing Quarterly, 19*, 5-24.

Cirocki, A. (Ed.). (2009). *Extensive reading in English language teaching*. Munich, Germany: Lincom.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.

Crookes, G., & Schmidt, R. (1991). Motivation: Reopening the research agenda. *Language Learning, 41*, 469-512.

Csikszentmihalyi, M. (1990a). *Flow*. New York: Harper & Row.

Csikszentmihalyi, M. (1990b). Literacy and intrinsic motivation. *Daedalus, 119*, 115-140.

Csikszentmihalyi, M. (1993). *The evolving self*. New York: HarperCollins.

Day, R. R., & Bamford, J. (1998). *Extensive reading in the second language classroom*. New York: Cambridge University Press.

Day, R. R., Bassett, J., Bowler, B., Parminter, S., Bullard, N., Furr, M., Prentice, N., Mahmood, M., Stewart, D., & Robb, T. (2011). *Bringing extensive reading into the classroom*. Oxford: Oxford

University Press.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268.

Deci, E. L., & Ryan, R. M. (Eds.). (2002). *Handbook of self-determination research*. Rochester, NY: University of Rochester.

DeKeyser, R. M. (2001). Automaticity and automatization. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 125-151). Cambridge: Cambridge University Press.

Dewey, J. (1913). *Interest and effort in education*. Boston: Houghton Mifflin.

Dewey, J. (1916). *Democracy and Education*. New York: Macmillan.

Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. *Modern Language Journal, 78*, 273–284.

Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, NJ: Erlbaum.

Dörnyei, Z. (2009). The L2 motivational self system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 9-42). Clevedon, UK: Multilingual Matters.

Dörnyei, Z., & Skehan, P. (2003). Individual differences in second language learning. In C. J. Doughty & M. H. Long (Eds.), *The handbook of second language acquisition* (pp. 589-630). Malden, MA: Blackwell.

Dörnyei, Z., & Ushioda, E. (Eds.). (2009). *Motivation, language identity and the L2 self*. Clevedon, UK: Multilingual Matters.

Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2nd ed.). Harlow, England: Longman.

Dweck, C. S. (1992). The study of goals in psychology. *Psychological Science, 3*, 165-167.

Dweck, C. S. (2000). *Self-theories: Their role in motivation, personality, and development.* Philadelphia: Taylor & Francis.

Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95*, 256-273.

Eccles, J. S. (1983). Expectancies, values and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motives* (pp. 75-146). San Francisco: Freeman.

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. In S. T. Fiske, D. L. Schacter, & C. Zahn-Waxler (Eds.), *Annual review of psychology* (Vol. 53) (pp. 109-132). Palo Alto, CA: Annual Reviews.

Ellis, R. (2004). Individual differences in second language learning. In A. Davies & C. Elder (Eds.). *The handbook of applied linguistics* (pp. 525-551). Malden, MA: Blackwell.

Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold.

Gardner, R. C. (2001). Integrative motivation and second language acquisition. In Z. Dörnyei & R.

Schmidt (Eds.), *Motivation and second language acquisition* (pp. 1-20). Honolulu, HI: Second Language Teaching & Curriculum Center, University of Hawaii Press.

Gardner, R. C. (2010). *Motivation and second language acquisition: The socio-educational model*. New York: Peter Lang.

Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and motivation in second language learning*. Rowley, MA: Newbury House.

Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. New York: Cambridge University Press.

Grabe, W., & Stoller, F. L. (2011). *Teaching and researching reading*. (2nd ed.). Harlow, UK: Pearson.

Guthrie, J. T. (Ed.). (2008). *Engaging adolescents in reading*. Thousand Oaks, CA: Corwin.

Guthrie, J. T., & Wigfield, A. (2000). Engagement and motivation in reading. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research: Vol. III* (pp. 403-422). Mahwah, NJ: Lawrence Erlbaum.

Guthrie, J. T., Wigfield, A., & Perencevich, K. C. (Eds.). (2004). *Motivating reading comprehension: Concept-oriented reading instruction*. Mahwah, NJ: Lawrence Erlbaum.

Hidi, S. (1990). Interest and its contribution as a mental resource for learning. *Review of Educational Research, 60*, 549–571.

Hidi, S., & Renninger, A. (2006). The four-phase model of interest development. *Educational Psychologist*, *41*, 111–127.

Hsieh, P. H., & Schallert, D. L. (2008). Implications from self-efficacy and attribution theories for an understanding of undergraduates' motivation in a foreign language course. *Contemporary Educational Psychology, 33*, 513–532.

Hunt, A., & Beglar, D. (2005). A framework for developing EFL reading vocabulary. *Reading in a Foreign Language, 17*(1). 23-59.

Hunter, J. P., & Csikszentmihalyi, M. (2003). The positive psychology of interested adolescents. *Journal of Youth and Adolescence, 32*, 27-35.

Iwahori, Y. (2008). Developing reading fluency: A study of extensive reading in EFL. *Reading in a Foreign Language, 20*, 70–91.

Komiyama, K. (2009). CAR: A means of motivating students to read. *English Teaching Forum, 3*, 32-37.

Lake, J. (2011). *Positive L2 self: Linking positive psychology with L2 motivation*. Manuscript submitted for publication.

Lau, K.-T. (2009). Grade differences in reading motivation among Hong Kong primary and secondary students. *British Journal of Educational Psychology, 79*, 713-733.

Linnenbrink, E. A., & Pintrich, P. R. (2002). Motivation as an enabler for academic success. *School Psychology Review, 31*, pp. 313-327.

Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist, 41*, 954-969.

Marsh, H. W. (1992). Content specificity of relations between academic achievement and aca-

demic self-concept. *Journal of Educational Psychology*, *84*, 35-42.

Marsh, H. W. (2007). *Self-concept theory, measurement and research into practice: The role of self-concept in educational psychology*. Leicester, UK: British Psychological Society.

Mills, N., Pajares, F., & Herron, C. (2006). A reevaluation of the role of anxiety: Self-efficacy, anxiety, and their relation to reading and listening proficiency. *Foreign Language Annals, 39*, 276-295.

Mori, S. (2002). Redefining motivation to read in a foreign language. *Reading in a Foreign Language, 14*, 91-110.

Mori, S. (2004). Significant motivational predictors of the amount of reading by EFL learners in Japan, RELC Journal, 35, 63-81.

Nation, I. S. P. (2009). *Teaching ESL/EFL reading and writing*. New York: Routledge.

Nation, I. S. P., Newton, J. (2009). *Teaching ESL/EFL listening and speaking*. New York: Routledge.

Norton, B. (2001). Non-participation, imagined communities and the language classroom. In M. P. Breen (Ed.), *Learner contributions to language learning: New directions in research* (pp. 159-171). Harlow, UK: Longman.

Oxford, R. L. (1994). Where are we regarding language learning motivation? *The Modern Language Journal, 78*, 512-514.

Oxford, R. L., & Shearin, J. (1994). Language learning motivation: Expanding the theoretical framework. *Modern Language Journal, 78*, 12-28.

Pajares, F., & D.H. Schunk. (2005). Self-efficacy and self-concept beliefs. In H. W. Marsh, R. G. Craven & D. M. McInerney (Eds.), *International advances in self research, 2*, (pp. 95–121). Greenwich, CT: Information Age.

Pintrich, P. R. (2000). Multiple goals, multiple pathways: The role of goal orientation in learning and achievement. *Journal of Educational Psychology, 92*, 544-555.

Pressley, M. (2006). *Reading instruction that works: The case for balanced teaching. (3rd Ed.)*. New York: Guilford.

Quinn, E., Nation, I. S. P., & Millett, S. (2007). *Asian and Pacific speed readings for ESL learners*. Retrieved from http://www.victoria.ac.nz/lals/staff/paul-nation.aspx.

Rasinski, T. V., Blachowicz, C., & Lems, K. (Eds.). (2006). *Fluency instruction: Research-based best practices*. New York: Guilford.

Rasinski, T. V. (2010). *The fluent reader*. (2nd Ed.). New York: Scholastic.

Rasinski, T. V., Reutzel, D. R., Chard, D., & Linan-Thompson, S. (2011). Reading fluency. In M. L. Kamil, P. D. Pearson, E. B. Moje, & P. P. Afflerbach (Eds.), *Handbook of reading research IV*, (pp. 286-319). New York: Routledge.

Robinson, P. (2002). *Individual differences and instructed language learning*. Amsterdam: John Benjamins.

Ross, S. (1998). *Measuring gain in language programs: Theory and research*. Sydney, NSW: NCELTR.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic moti-

vation, social development, and well-being. *American Psychologist, 55*, 68-78.

Ryan, S. (2005). Language learning motivation within the context of globalization: An L2 self within an imagined global community. *Critical Inquiry in Language Studies: An International Journal, 4*(2), 23-45.

Samuels, S. J. (2006). Reading fluency: Its past, present, and future. In T. Rasinsky, C. Blachowicz, & K. Lems (Eds.), *Fluency instruction: Research-based best practices* (pp. 7–20). New York: Guilford.

Samuels, S. J., & Farstrup, A. E. (Eds.). (2011). *What research has to say about reading instruction* (4th Ed.). Newark, DE: International Reading Association.

Sawyer, M., & Ranta, L. (2001). Aptitude, individual differences, and instructional design. In P. Robinson (Ed.). *Cognition and second language instruction*. (pp. 319-353). Cambridge: Cambridge University Press.

Schunk, D. H. (1990). Goal setting and self-efficacy during self-regulated learning. *Educational Psychologist, 26*, 207-231.

Segalowitz, (2000). Automaticity and attention skill in fluency performance. In H. Riggenbach (Ed.), *Perspectives on fluency* (pp. 200–219). Ann Arbor, MI: University of Michigan Press.

Segalowitz, N. (2003). Automaticity and second languages. In C. J. Doughty & M. H. Long (Eds.), *The handbook of second language acquisition* (pp. 382–408). Oxford: Blackwell.

Segalowitz, N. (2010). *Cognitive bases of second language fluency*. New York: Routledge.

Seymour, S., & Walsh, L. (2006). *Essentials of teaching academic reading*. Boston: Houghton Mifflin.

Shernoff, D. J., Csikszentmihalyi, M., Schneider, B., & Shernoff, E. S. (2003). Student engagement in high school classrooms from the perspective of flow theory. *School Psychology Quarterly, 18*, 158-176.

Skehan, P. (1989). *Individual differences in second language learning*. London: Edward Arnold.

Skehan, P. (1998). *A cognitive approach to language learning*. Oxford: Oxford University Press.

Skehan, P., & Foster, P. (2001). Cognition and tasks. In P. Robinson (Ed.), *Cognition in second language instruction* (pp. 183-205). New York: Cambridge University Press.

Swinton, S. (1983). *A manual for assessing language growth in instructional settings*. *TOEFL Research Report 14*, Princeton, NJ: ETS.

Takase, A. (2007). Japanese high school students' motivation for extensive L2 reading. *Reading in a Foreign Language, 19*, 1–18.

Wigfield, A., & Eccles, J. S. (2002). The development of competence beliefs, expectancies for success, and achievement values from childhood through adolescence. In A. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 91-120). San Diego, CA: Academic Press.

Wigfield, A., & Guthrie, J. T. (1997). Relations of children's motivation for reading to the amount and breadth of their reading. *Journal of Educational Psychology, 89*, 420–432.

Wigfield, A., & Guthrie, J. T. (2010). The impact of Concept-Oriented Reading Instruction on

students' reading motivation, reading engagement, and reading comprehension. In J. L. Meece & J. S. Eccles (Eds.). *Handbook of research on schools, schooling, and human development* (pp. 463-477). Mahwah, NJ: Erlbaum.

Yashima, T. (2000). Orientations and motivation in foreign language learning: A study of Japanese college students. *JACET Bulletin, 31*, 121–133.

Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *Modern Language Journal, 86*, 55–66.

Yukimaru, N., Pennington, W., & Tanoue, Y. (2011). Does the effectiveness of extensive reading differ according to reading proficiency?. In *Proceedings of the JACET 50th Commemorative International Convention*. Fukuoka, Japan: JACET.