

A Causal Relationship between Turkish EFL Students’ Academic Achievement and Borrowed Library Books

İngilizceyi Yabancı Dil Olarak Öğrenen Türk Öğrencilerin Akademik Başarısı ile Kütüphaneden Ödünç Alınan Kitaplar Arasındaki Nedensel İlişki

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Abstract

A large body of research since 1990 indicates a positive relationship between various library services and students’ academic achievement. This present study has been conducted to revitalize the important role of libraries and books necessary for the success of many students, irrespective of their age. Therefore, this quantitative study investigates the possible relationship between Turkish students’ academic achievement mean (GPA) and number of books borrowed from a university library during their undergraduate study at a private university. Based on ANOVA, Scheffe Test, and Spearman Correlation, the analysis of 478 academic achievement records of English Language Teaching (ELT) graduates reported a statistically significant correlation between number of borrowed library books and students’ academic achievement mean: the more books one borrowed, the higher was the academic achievement.

Key words: academic achievement, book collection, library, reading

Özet

1990’den bu yana çok sayıda araştırma öğrencilerin akademik başarıları ve kütüphane hizmetleri arasında pozitif bir ilişki olduğunu göstermiştir. Bu çalışmanın amacı yaşa bakılmaksızın birçok öğrencinin başarısında önemli rol oynayan kütüphane ve kitaplara dikkati çekmektir. Dolayısıyla bu nicel çalışma özel bir üniversitede Türk öğrencilerin lisans öğrenimleri boyunca üniversite kütüphanesinden ödünç aldıkları kitap sayısı ile lisans ortalamaları arasında olası bir ilişki olup olmadığını araştırmaktadır. ANOVA, Scheffe Test ve Spearman Korelasyonuna dayanarak 478 İngilizce Öğretimi mezunu öğrencinin raporlanmış akademik başarı kayıtlarına göre, istatistiksel olarak kütüphaneden ödünç alınmış

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kitap sayısı ile öğrencilerin akademik başarı ortalamaları arasında anlamlı bir ilişki bulunmaktadır. Ödünç alınmış bir fazla kitap , daha yüksek akademik başarı getirir.

Anahtar Kelimeler: akademik başarı, kitap koleksiyonu, kütüphane, okuma

I. Introduction

Over the past decades, a bulk of research has been conducted worldwide to find out about the relationship between library use and students' academic achievement (Lance et al., (1994); Smith, (2001); Williams and Wavell, (2001); Burgin and Bracy, (2003); Lonsdale, (2003); Lance et al., (2005); Lance and Loertscher, (2005); Snyder and Parker, 2007; Small and Snyder, 2010). Despite the negligible results of a few conflicting research (Tarr & Sinclair-Tarr, 2006), an overwhelming number of studies validate the close link between libraries and academic achievement. For example, a significant study by Lance, Welborn, and Hamilton-Pennel (1994) revealed that library collection and staff size largely contributed to students' academic success on standardized tests. Further studies in different states across the U.S. strengthened the same view that well-resourced and well-staffed libraries provide learners with higher test scores (Pennell and Rodney, 2005). Likewise, a nationwide study by Tarr and Sinclair-Tarr (2005) in 10 US states also drew attention to the significant impact of resource-rich libraries on student academic achievement. From these studies and many more, including thousands of schools and universities, it is evident that libraries play an important role in the academic success of many students. Relatedly, in relation to the Colorado study by Lance & Loertscher (2005), the literature review of the present study discusses the four major aspects of a library – a) librarians, b) learning experience, c) library tools, and d) book collection- which all play an important role in students' academic achievement. In line with all these, **the purpose of the present study** is to investigate whether the number of borrowed books from a university library by Turkish English Language Teaching (hereafter ELT) graduates resulted in a higher GPA (Grade Point Average) –a simple numerical index that summarizes students' academic performance throughout their undergraduate program.

a. Librarians

Library research also reports on the significant connection between the library staffing and academic performance (Reynolds and Carroll, 2001). For instance, a nationwide survey of curriculum leaders linked poor academic achievement to both understaffed libraries and lack of cooperation between teachers and librarians (Siminitus, 2002). Relatedly, a study by Roberson (2005) seems to be quite thought-provoking in that instructors and principals were found to be rather reluctant in their attitudes towards library activities. This may be because the same study unveiled that 76 per cent of the instructors were not well-instructed on the role of libraries in learning during their undergraduate programs. From this respect, Todd (2002)'s remarks are worthy to mention: 'It is actions and evidences that show what makes a

real difference to student learning, and that the teacher librarian contributes in tangible and significant ways to the development of human understanding, meaning making and constructing knowledge (p. 2).⁷

On the other hand, in a qualitative study conducted by Small, Snyder, and Parker (2007), a statistically significant relationship was found out between well-staffed libraries and academic performance. In the same study the participants consisting of teachers and students were asked to comment on the assistance provided by the librarian. In their written descriptive reports, the participants expressed that without the useful service offered by the librarian, they would not have received the good grades from multiple assignments and projects. Moreover, based on their research on the relationship between library staffing and student achievement, Burgin and Bracy (2003) argue that the more library staff hours the schools and universities offer, the more successful the students are in their academic performance. Also, a study on the instructional role of the library staff demonstrated that librarians from top-rated schools were highly collaborative, responsive and therefore contributory to students academic achievement (Smith, 2001).

b. Learning experience

Williams and Wavell (2001a) made use of focus groups and case studies in order to inquire about the influence of school library on student learning. Their investigation of various curriculum subjects in the four areas of motivation, progression, independence and interaction indicated that libraries indeed can contribute to a variety of learning experiences. They also found out that libraries, by providing alternative learning opportunities, indirectly develop students' social and individual responsibility thereby leading to independent learning. A study by Kinnell (1994) based on interviews, observation, surveys, and records including 150 teachers and more than 800 students revealed that libraries contribute to cross-curricular skills like problem-solving, communication, use of information technology, study, numeracy, and personal and social development. Additionally, the same study proposes that besides textbooks and worksheets, library books and material are valuable and supplementary teaching and learning resources. Todd (1995) reported as well on the constructive benefits of library use to integrated information skills, positive learning attitudes, and academic achievement. Todd firmly believes that 'integrated information skills instruction has a positive impact on students' abilities to identify information-handling strategies to solve their information needs in a particular curriculum content area' (p. 8). Other library studies are in agreement that libraries are able to develop students' self esteem, responsibility, confidence, problem solving ability, independence, collaboration, and learning skills (Murray, 1999; Oberg, 1999; Dyer, 1999; Zweizig, 1999).

c. Library technology

The digital storage of information in diverse formats such as DVD-ROM encyclopedias has recently changed the traditional service provided by the libraries. As mentioned by Welch and Braybrook (2001) the great demand for digital

information 'is transforming the concept of collection and the physical entity of the library itself' (p. 4). Therefore, Fitzgibbons (2000) points out that in order to comply with the constantly increasing computer-assisted instruction, libraries are now largely equipped with computer-based databases. Accordingly, Book (2002) hints at the greater responsibility of the modern day librarian like uploading and downloading of software programs, maintenance of system back-ups, supervising students' internet usage, and assisting data retrieval, all which use up their time, skills and energy. According to Lohnsdale (2003), knowledge of information and communications technologies (ICTs) and easy access to these digital resources can greatly contribute to academic achievement. Moreover, Williams, Wavell and Coles (2001) report on the great benefits of connecting personal and network computers to library resources. Lohnsdale (2003) further states that the presence of information on various multi-media tools and learning environments in a digitized world has increased the role of lifelong learning.

d. Book Collection

Further library studies point to the close connection between large collection of books and academic achievement (Yoo, 1998; Lance et al., 2000; Baughman, 2000; Burgin and Bracy, 2003; Lonce et al., 2005). According to Long et al. (2005), academic achievement, in particular reading scores in norm-referenced tests are positively correlated to libraries with large and up-to-date collections. In line with this, Elley (1992) pointed out that a steady increase in reading literacy was noted with greater access to books and therefore large collections of books were required for effective reading programs. Froese (1997) further concluded that students in educational institutions with access to library books perform significantly better than those who do not have an easy access to books. Froese's reading test results also indicate that students who have an important number of books in their home library outperform those whose access to books is limited. Interestingly, even though the same study confirmed the strong relationship between borrowing books from a school library and reading literacy, it did not find any statistically significant correlation between reading achievement and borrowing books from the classroom library.

Similarly, Novljan (1998) based on Reading Literacy Study in relation to Slovenia mentions that 'better test results were closely related to the existence of large school libraries (approximately 7,000 books), large classroom libraries (approximately sixty books) and regular effective lending of books' (p. 229). Based on data from National Assessment of Educational Progress (NAEP) in 41 U.S. states, Krashen (1995) mentioned that the number of books in a school library per student is directly related to how well they perform in reading tests. With reference to another study by Progress in International Reading Literacy Study (PIRLS) in forty countries, Krashen (2006) argues that socio-economic status as well has a direct impact on both reading achievement and academic performance. Accordingly, he points out that students from higher socio-economic status have better academic performance, for they have easy access to library books which is associated with

more reading. Likewise, a reading survey by Yoo (1998) indicated that when students read in the library on a weekly basis, their reading attitudes improve significantly after a year.

II. Methodology

There is abundant evidence that more access to books leads to more reading which in turn results in better writing, spelling, grammar, vocabulary, and literacy development (Krashen, 2004; Mason 2006). Likewise, a substantial body of research including first and second language acquisition also supports the great benefits of extensive reading – large amount of reading outside the class: reading ability (Yoon, 2002), reading activity (Mullis, 2003), word knowledge (Horst, 2005), lifelong reader (Aarnoutse & Van Leeuwe, 1998), social skills (Allan, Ellis and Pearson, 2005), and general knowledge (Clark & Rumbold, 2006). In this context, the following remarks by Maynard, Mackay, Smyth (2010) are noteworthy:

The importance of reading undertaken in childhood cannot be underestimated; it provides a foundation for the acquisition of knowledge as well as for a love of reading for pleasure. The strength of this foundation depends not only on the encouragement children receive from parents and teachers, but also on the efforts of those who work in children's libraries. Indeed, the role played by libraries in providing access to reading material cannot be over-emphasized (pp. 239).

In light of these, the main aim of this study is to further support the evidence that school libraries are strong predictors of students' academic achievement. Even though studies in many countries confirm the positive relationship between school libraries, reading literacy and academic achievement, the extent to which this existing evidence is transferable to both a Turkish and ELT context is not well-known. Therefore, this present study has been conducted to see to what extent the amount of books borrowed from a university library relates to Turkish ELT students' academic achievement. In line with a body of evidence it is hypothesized that the number of library books borrowed by students will either positively or negatively correlate with their academic achievement (GPA).

Data for this study consists of 478 Turkish ELT students' graduation GPA and total number of books borrowed from the university library during their undergraduate study between 2006 and 2010. Student Affairs Office and library administration enthusiastically provided the required data of 355 female and 123 male students for the necessary statistical calculations. Particularly, library staff was very collaborative and supportive, because they were very much interested in role of library in students' academic achievement. Also, it was the first time for the library staff to participate in a study whose results may provide valuable insights and suggestions regarding the library use. All parties – library staff, student affairs office, and researchers- were rather sensitive to protect the confidentiality of student educational records; therefore, no student name was released.

Each ELT student's graduation GPA retrieved from Students Affairs Office has been matched to his or her library record of books. The data has been transferred to

SPSS program in order to obtain the necessary statistical calculations and results. Correspondingly, one way ANOVA, Scheffe Test, and Spearman correlational methods were used respectively to analyze the data and discuss the outcomes of the study.

III. Results

Table 1. Descriptive statistics in relation to students' academic achievement (GPA) and number of borrowed books.

Descriptive		Academic Achievement (GPA)						
Books	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean			
					Lower Bound	Upper Bound	Minimum	Maximum
between 0-3	144	2,4921	,48606	,04050	2,4120	2,5721	1,98	3,96
between 4-8	95	2,7293	,52459	,05382	2,6224	2,8361	2,00	3,84
between 9-19	120	2,7598	,56012	,05113	2,6586	2,8611	1,99	3,99
20 and more	119	3,1790	,59424	,05447	3,0711	3,2869	2,00	4,00
Total	478	2,7774	,59668	,02729	2,7238	2,8311	1,98	4,00

Table 1 indicates the descriptive statistics respectively in relation to students' academic achievement mean (GPA) and the number of books borrowed from the library. Based on the analysis, for example, the academic achievement mean of 144 students who borrowed books between 0 to 3 from the university library during their entire undergraduate study is limited to $M=2,49$ out of 4,00 and $SD=.48$. On the other hand, the highest academic achievement mean ($M=3,17$ $SD=.59$) was noted among 119 students who borrowed more than 20 books throughout their undergraduate studies in the department of English Language Teaching. Therefore, we may conclude from the descriptive statistics that students' academic achievement seems to be associated with number of books borrowed from the university library; in other words, the more books are borrowed, the higher the academic achievement.

Table 2. One way ANOVA analysis of academic achievement mean in relation to number of books.

ANOVA
Academic Achievement Mean

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	31,171	3	10,390	35,521	,000
Within Groups	138,654	474	,293		
Total	169,825	477			

Analysis of Variance (ANOVA) was employed to determine the influence of number of borrowed books from the university library on students' academic achievement mean. The analysis of Table 2 shows a highly statistically significant relationship ($F(3,474)=35,521, p=.000$) between number of books and academic achievement. In addition to ANOVA, Scheffe test is used to test for statistical difference between the groups.

Table 3. Scheffe test multiple comparison of academic achievement in relation to number of books.
Academic Achievement Mean
Scheffe

(I) number of books	(J) number of books	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
between 0-3	4-8 between	-,23718*	,07149	,012	-,4377	-,0366
	9-19 between	-,26775*	,06685	,001	-,4553	-,0802
	20 and more	-,68691*	,06700	,000	-,8749	-,4989
4-8 between	0-3 between	,23718*	,07149	,012	,0366	,4377
	9-19 between	-,03057	,07428	,982	-,2390	,1778
	20 and more	-,44973*	,07441	,000	-,6585	-,2410
9-19 between	0-3 between	,26775*	,06685	,001	,0802	,4553
	4-8 between	,03057	,07428	,982	-,1778	,2390
	20 and more	-,41916*	,06997	,000	-,6155	-,2229
20 and more	0-3 between	,68691*	,06700	,000	,4989	,8749
	4-8 between	,44973*	,07441	,000	,2410	,6585
	9-19 between	,41916*	,06997	,000	,2229	,6155

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	20 and more	-,68691*	,06700	,000	-,8749	-,4989
4-8 between	0-3 between	,23718*	,07149	,012	,0366	,4377
	9-19 between	-,03057	,07428	,982	-,2390	,1778
	20 and more	-,44973*	,07441	,000	-,6585	-,2410
9-19 between	0-3 between	,26775*	,06685	,001	,0802	,4553
	4-8 between	,03057	,07428	,982	-,1778	,2390
	20 and more	-,41916*	,06997	,000	-,6155	-,2229
20 and more	0-3 between	,68691*	,06700	,000	,4989	,8749
	4-8 between	,44973*	,07441	,000	,2410	,6585
	9-19 between	,41916*	,06997	,000	,2229	,6155

*. The mean difference is significant at the 0.05 level.

Table 3 shows the significant difference among groups in relation to number of books and academic achievement. It is apparent from the analysis on the same Table that students' academic achievement means are strongly related to the number of books borrowed from the library. As an example, those students who borrowed more than 20 books from the library during their undergraduate study had higher academic achievements. Apart from number of borrowed books between 4 to 8 and 9 to 19, this pattern of academic achievement is true for every group ($p < .05$), according to the results of Scheffe test. Correspondingly, statistical analysis of Scheffe test confirms the significance of group differences.

Table 4. Spearman Correlational coefficient in relation to academic achievement and number of books.

Correlations			Academic GPA	Borrowed Books
Spearman's rho	academic	Correlation	1,000	,420**
	achievement	and Coefficient		
	number of books	Sig. (2-tailed)	.	,000
		N	478	478

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

The Spearman correlation analysis is used to measure the strength of association between two variables: academic achievement and number of borrowed books from the library. As indicated in Table 4, the statistically significant correlation coefficient between academic achievement and number of borrowed books is $r = .42$ and $.00 \text{ sig } p = <.05$. According to Fraenkel and Wallen (2006), correlations between 0,40 and 0,60 in educational research are found to be highly related and have practical and theoretical value. Therefore, the analysis shows a significant correlation between students' academic achievement and number of books borrowed from the library.

IV. Discussion

The results of this present study confirmed that there is a positive, significant relationship between Turkish ELT students' academic achievement and number of borrowed books from the university library. This study conducted in Turkey further supports previous research which has consistently shown that school library can remarkably contribute to students' education from several aspects including academic achievement. The quantitative findings of the study suggest that the significant relationship between number of borrowed library books and academic achievement (GPA) has some similarities to the relationship between certain library services and school achievement reported in previous research. In this respect, number of library books borrowed by students has been determined as a significant factor that correlates with student academic achievement in line with similar possible library factors such as staffing, collections, facilities, and budget.

The statistical analysis and findings of this exploratory study is worth consideration even though the population was relatively selective and small. As shown in Table 1, a strong relationship is observed between number of books borrowed from the university library and students' academic achievement. For example, those students who borrowed more than 20 books from the university library were found to have the highest academic achievement mean of $M = 3,17$ and $SD = .59$. It has been noticed

that parallel to the decrease in the number of borrowed library books, there is a decline in the mean of students' academic achievement. As an example, academic achievement dropped to $M=2,75$ for students who borrowed between 9 to 19 books from the library during their 4 year undergraduate study. Interestingly, no significant difference in academic achievement was observed among student groups who either borrowed between 9-19 books ($M=2,75$ and $SD=.56$) or 4-8 books ($M=2,72$ and $SD=.52$) from the university library. As it was hypothesized, students' academic achievement mean ($M=2,49$ and $SD=.48$) was found to be the lowest for students who borrowed less than 4 books from the university library throughout their university academic life. Based on statistically significant results by ANOVA, Sheffe test, and Spearman Correlation Coefficient, we can conclude that the more books students borrow from the library-which may imply more reading- the higher their academic achievement and vice versa. In other words, a significant positive correlation ($r= .42$ and $.00$ sig $p= <.05$) exists between the number of books borrowed from the university library over the years and students academic achievement mean (GPA).

The outcomes of this study once again reinforce the manifold importance of books and reading activity as pointed out by (Krashen, 2001; Yoon, 2002; Mullis, 2003; Horst, 2005; Allan, Ellis and Pearson, 2005; Clark & Rumbold, 2006). It can be inferred from this study that those students who borrowed an important number of library books were engaged in more reading which probably resulted in significant increases in every aspect of literacy including school achievement. Relatedly, Clark and Rumbold (2006) consider the following factors crucial for reading activity: freedom of book selection, easy access to reading material, a wide range of book collection, school time for reading, and comfortable reading environment. Therefore, with regard to this study, increasing the size and title of book collection in a university library may optimize the positive correlation with student academic achievement. The strong relationship between reading and student academic achievement has been well summarized by Sanacore (2002):

Determining students' attitudes toward reading, giving them experiences with different texts, providing them with opportunities to select resources and to read them in school, and helping them to connect skills and strategies to interesting and meaningful contexts, are only a few of the ways that support the lifetime reading habit... Other important considerations include building resilience in literacy learners, finding time to engage children in pleasurable reading across the curriculum, making picture books acceptable and respectable for older students, guiding students to solve authentic problems through reading, conducting book talks, encouraging different interpretations of text, supporting a variety of projects and outcomes, and promoting leisure reading at home (pp. 83).

V. LIMITATIONS & RECOMMENDATIONS

This exploratory study was limited to a relatively small group of students' academic mean (GPA), therefore, it is essential to investigate the reliability of these outcomes with larger populations. The statistical analysis of 478 students' academic achievement indicated a positive relationship between number of books borrowed from the library and academic achievement. However, it is not clear if similar statistical results can be obtained with greater student numbers. Correspondingly, similar to the library researches in the U.S., a nationwide investigation across Turkey can contribute a lot to the role of libraries in student school achievement.

Also, the students' academic means (GPA) were from the department of English Language Teaching, so future studies that target alternative disciplines may provide different results for the same hypothesis. For example, what kind of relationship would the analysis of academic achievement means of math graduates report for the same context? Therefore, further studies that test the link between academic achievement of math, physics, or chemistry graduates and number of books borrowed from the library may be thought-provoking for many. As well, as a comparative study that compares the academic means of students from social and natural sciences in relation to number of borrowed books from a library can produce interesting results in this context.

Undoubtedly, there has been substantial research on several aspects of technology use in school library. Todd (2001), for example, considers the modern information environment no longer confined by time and space because of its complex and fluid characteristics. Digital data resources provided by many school libraries have been touted as a mean to encourage students' quest for knowledge. In the present study, even though one of the goals of the researchers was also to inquire about a possible relationship between academic mean and electronic library resources, this could not be investigated because of lack of digital infrastructure. Therefore, more library studies that compare the link between print and electronic books to students' school achievement can add a new dimension to the role of future libraries.

Although the researchers also considered to examine parents' education and socio-economic status as potential variables that may have an impact on students' academic achievement, they were not permitted to access the relevant demographic data by the Students Affairs Office for confidential reasons. Thus, further library studies that target other possible variables such as parents' education, socio-economic status, study year, and gender in line with number of borrowed books may come up with valuable and insightful findings.

VI. Conclusion

This study investigated the possible relationship between 478 Turkish students' academic achievement mean (GPA) and number of books borrowed from the university library during their four year undergraduate study at the department of English language teaching. The results and findings of the present study indicated

that a statistically significant correlation exists between students' academic means and number of borrowed library books. It was apparent from the statistical analysis of this quantitative study that the more books students borrowed from the library, the higher was their academic achievement mean. However, it is suggested that further in-depth studies are necessary in several other disciplines as well before generalizations can be made about the impact of a certain library service. Finally, this study suggests that libraries are valuable places from which students can borrow books at least and thereby increase their academic achievement.

References

- Aarnoutse, C and van Leeuwe, J.(1998). 'Relation between reading comprehension, vocabulary, reading pleasure and reading frequency'. *Educational Research and Evaluation* 4(2): 143-166.
- Allan, J, Ellis, S and Pearson, C. (2005). *Literature circles, gender and reading for enjoyment*. Edinburgh: Scottish Executive.
- Baughman, J.C .(2000). 'School Libraries and MCAS Scores', A paper presented at a symposium sponsored by the Graduate School of Library and Information Science, Massachusetts
- Book, B .(2002). 'Teacher Librarian Workload Survey 2001', *The ACT Teacher* 2(1):19-20
- Burgin R and Bracy P. (2003). 'An essential connection: how quality school library media centers improve student achievement in North Carolina', *RB Software and Consulting* Available at : www.rbargin.com/NCschools2003/NCSchoolStudy.pdf (retrieved at May 2011)
- Clark, C and Rumbold, K .(2006). 'Reading for pleasure: A research overview', National Literacy Trust, Available at: http://content.scholastic.com/content/collateral_resources/pdf/i/Reading_for_pleasure.pdf
- Dyer, J.(2001). 'Library Volunteer and Service Providers: A Prototype for Creating a 'Grace Space'', *11th National Library Technicians Conference*, URL (consulted at January 2011) <http://conferences.alia.org.au/libtec2001/papers/dyer.html>
- Elley, W.B. (1992). *How in the World Do Students Read? IEA Study of Reading Literacy*. Hamburg: International Association of the Evaluation of Educational Achievement
- Fitzgibbons, S.(2000). 'School and Public Library Relationships: Essential Ingredients in Implementing Educational Reforms and Improving

- Student Learning', *School Library Media Research Online* 3(2), URL (consulted at January 2011) <http://www.ala.org/ala/mgrps/divs/aasl/aaslpubsandjournals/slmrb/slmrc/ontents/volume32000/relationships.cfm>
- Fraenkel, JR and Wallen, NE. (2006). *How to design and evaluate research in education (6th Edition)*. New York: McGraw-Hill International Edition.
- Froese, V (1997) 'The Relationship of School Materials and Resources to reading Literacy: An International Perspective, Information Rich but Knowledge Poor' *Emerging Issues for Schools and Libraries Worldwide, Research and Professional Papers Presented at the Annual Conference of the International Association of School Librarianship held in conjunction with the Association for Teacher Librarianship in Canada*, July 6–11
- Horst, M.(2005). 'Learning L2 vocabulary through extensive reading: a measurement study'. *Canadian Modern Language Review* 61: 355–82
- Kinnell, M.(1994). 'Working for Achievement: School Libraries and Curriculum Delivery', *Education Libraries Journal* 37(1):3–12
- Krashen, S.(1995). 'School Libraries, Public Libraries, and the NAEP Reading Scores', *School Library Media Quarterly* 23(4):235-237
- Krashen, S.(2001). 'Current Research: The Positive Impact of Libraries', *California School Library Association Journal* 25 (1): 21–4.
- Krashen, S.(2004). *The Power of Reading: Insights from the Research*, 2nd ed., Portsmouth, NH: Heinemann.
- Krashen S, Lee S and McQuillan J.(2006). *An Analysis of the PIRLS (2006) Data: Can the School Library Reduce the Effect of Poverty on Reading Achievement?*, California: California School Library Association
- Lance K, Welbom L and Hamiiton- Pennell C.(1994). *The impact of school library media centres on academic achievement*. American Association of School Libraries .ERIC ED353989
- Lance, K, Rodney, M and Hamilton-Pennell, C.(2005). *Powerful libraries make powerful learners: The Illinois study*. Canton, IL: Illinois School Library Media Association. Retrieved January 25, 2011 from: <http://www.islma.org/pdf/ILStudy2.pdf>
- Lance, K and Loertscher, D.(2005). *Powering Achievement: School Library Media Programs make a Difference. 3rd Edition*. San Jose, CA: Hi Willow.
- Lonsdale M.(2003). *Impact of School Libraries on Student Achievement: a Review of the Research*. Victoria: Australian Council for Educational Research

- Mason, B.(2006).‘Free Voluntary Reading and Autonomy in Second Language Acquisition: Improving TEOFL Scores from Reading Alone.’ *International Journal of Foreign Language Teaching* 2(I):2-5
- Mullis,V, Martin, M, Gonzales, EJ and Kennedy, A.N.(2003). *PIRLS 2001 International report*. Boston: International Study Center
- Murray, J.(1999). ‘An Inclusive School Library for the 21st Century: Fostering Independence’, *65th IFLA Council and General Conference*, Bangkok, Thailand, August 20–28.
- Novljan, S.(1998).‘In Librarianship Professionalism is the Condition for Success’.*64th IFLA General Conference August 16-August 21, 1998*. Viewed at <http://archive.ifla.org/IV/ifla64/071-153e.htm>
- Oberg, D.(1999). ‘A Library Power Case Study of Lakeside Elementary School, Chattanooga, Tennessee’, *School Libraries Worldwide* 5(2): 63–79
- Reynolds, S and Carroll, M (2001) ‘Where Have All the Teacher Librarians Gone?’ *Access* 15(2):30–4
- Roberson, DN Jr. (2005).‘*The self-directed learning past and present*’.ERIC ED490435
- Sally, M, Sophie M and Fiona S. (2008). ‘A survey of young people’s reading in England: Borrowing and choosing books’. *Journal Of Librarianship And Information Science* 40(4):239-253
- Sanacore, J.(2002).‘Struggling literacy learners benefit from lifetime literacy efforts’. *Reading Psychology* 23(2):67-86
- Simintus J.(2002).California School Library Media Centres and student achievement, *SBC Pacific Bell*, Available at: <http://www.kn.pacbell.com/survey/kl2libraries.pdf>
- Small R, Snyder and Parker K.(2007). *New York State's school libraries and library media specialists: an impact study*. New York Library Association. Available at: http://www.nyla.org/content/user_1/Preliminary_Report_Small.pdf
- Smith E.G. (2001). *Texas School Libraries: Standards, Resources, Services, and Students' Performance*. Texas: EGS Research and Consulting
- Tarr, W and Sinclair-Tarr, S.(2006). ‘Using large-scale assessments to evaluate the effectiveness of school library programs in California’ *Edexcellence Consulting, Inc*. Available at: http://www.edexcellence.com/37_Tarr.pdf
- Todd, R.(2001).‘A sustainable future for teacher-librarians: inquiry learning, actions and evidence’ *.Orana* 37 (3):10-20.
- Todd, R.(1995).‘Integrated Information Skills Instruction: Does it Make a Difference?’ *School Library Media Quarterly* 23(2):22-35

- Todd , R.(2002). School librarians as teacher : Learning outcomes and evidence-based practice,*Paper presented at the 68th IFLA Council and General Conference*, Glasgow
- Welch, B and Braybrook, P.(2002).‘Paradigm Shifts and the Teacher-Librarian’. *FYI: Journal for the School Information Professional* 6(2):4–10
- Williams, D, and Wavell, C.(2001a).‘Recent Research on the Impact of the School Library Resource Centre on Learning’. *School Librarian* 49(3):123–7.
- Yoo, JH.(1998).‘The Educational Impact of the School Library’. *ERIC ED* 417 736.
- Yoon, JC.(2002).‘Three decades of sustained silent reading: A metaanalytic review of the effects of SSR on attitude toward reading’. *Reading Improvement* 39(4):186–95
- Zweizig, D, Hopkins, D, Webb, N, Whelage, G, and Wheelock, A.(1999). ‘Findings from the Evaluation of the National Library Power Program’ (an Executive Summary). *DeWitt Wallace-Reader’s Digest Fund*. Available at:
<http://www.wallacefunds.org/frames/framesetpublications.htm>