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STUDENTS' VIEWS OF IMPACT OF TEXTBOOKS ON THEIR ACHIEVEMENTS

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Abstract

The history of curricula and textbooks development in Pakistan has remained contentious particularly during Zia Ul Haq era (1977- 1988) and after. There have been quite a few reviews of the curricula and textbooks undertaken both by Ministry of Education, Government of Pakistan and independent researchers. These reviews have mainly employed document/textbook analysis methods and few of them explored teachers or students' views of curricula and textbooks. This paper argues that since teachers and students are the ultimate users and beneficiaries of textbooks so their views are worth exploring before suggesting or initiating any change process including curricula and textbooks reforms. To fill some of this gap, therefore, this study explored secondary school students' views of impacts textbooks had on their achievements. Data were collected through a questionnaire from a sample of 112 secondary school students of Karachi. The data were analysed and chi-square test was applied to test the hypotheses at 5% level of significance. The analysis of data indicated that Oxford University Press (OUP) textbooks had more impact for the achievement of students than Sindh Textbook Board (STB) textbooks. The study highlights curricula and textbooks as debatable phenomena and has attempted to bring students' perspective into this debate. Based on its findings, this paper suggests reforms in the curricula and textbooks in order to enhance their impact for students' achievements and calls for further research to explore students and teachers' voices in order to undertake meaningful curricular reforms in Pakistan.

Keywords: Textbooks; students' achievements; students' views; Pakistan

Introduction

The Ministry of Education, Government of Pakistan undertook a review of all textbooks in 2002 and recommended that no major changes were required in the curriculum and textbooks (Khan, 2005). However, Sustainable Development Policy Institute (SDPI, 2003), a non-government organization (NGO) based in Islamabad, carried out an independent review of textbooks and found significant problems in the national curricula and textbooks that would, according to the report, have serious consequences for national life in Pakistan. The report caught headlines in the print and electronic media and attracted strong opposition from a sector of the masses (Mustafa, 2004; Qureshi, 2006) that forced the government to undertake a second review of the national curricula and textbooks. The second review, also, did not propose any significant changes in the curricula and textbooks. However, other researchers such as Ahmad (2004) and Nassem (2006) found flaws in them and suggested reforms in curricula and textbooks. These researchers mostly employed document and textbook analysis methods to generate data and none of them explored teachers or students' views of the curricula and textbooks. It is argued that since students are the ultimate receivers of instructions from curricula and textbooks so their views of impact of curricula and textbooks on their achievements are worth exploring before initiating any change process including curricula and textbooks reform (Mitra, 2004; Laren 2006; Hargreaves; 1996). To fill some of this this gap, therefore, this study explored secondary school students' views of impacts OUP textbooks or STB textbooks had on their achievements. The overarching hypothesis *there are*

significant differences in views about achievements between students using OUP textbooks and students using STB textbooks guided this study.

Literature Review

Theoretical Framework

Textbooks are taught in the schools to achieve aims and goals of education espoused in the national curriculum. In a developing country like Pakistan, textbooks are the only teaching tool for teachers and learning tool for students. They convey academic ideas and define the national curriculum for most of the teachers (Haq & Haq, 1998; Bednarz, 2004). Therefore, textbooks play an important role in students' achievements as a result of their schooling. Achievement, according to Steinberger (1993, p. 2) is "...student ability and performance; it reflects the whole child; it is intricately related to human growth and cognitive, emotional, social, and physical development; it is not related to a single instance, but occurs across time and levels, through a student's life in public school and on into post-secondary years and working life". This definition provides a wider view of student achievement and does not confine the term to the scores obtained by students on paper/pencil tests. For the purpose of this study student achievement was defined in terms of cognitive, social and emotional development. Student comprehension, conceptual change learning, developing virtues of good citizens (civic sense), development of self-esteem and positive attitude to social life are considered student achievement for the purpose of the current study. However, in this paper a review literature on two components of student achievement, that is, comprehension and self-esteem is presented as follows.

Textbooks and Student Comprehension

Comprehension is the ability to grasp the meaning of material. This may be shown by translating material from one form to another (e.g. words to numbers), by interpreting material (e.g. explaining or summarizing), and by estimating future trends (e.g. predicting consequences or effects).

Comprehension of a text depends on at least four factors; readability, illustrations, hands/minds on activities and previous knowledge. Firstly, comprehension of a textbook depends on its readability. Readability is the ease with which a text can be read and comprehended. The quality of paper and ink used, font size and line spacing are fundamental factors which enhance textbooks readability. Readability also depends on the linguistic competencies used in the textbook and those possessed by the students. The readability factor is equally important across subjects including both languages and sciences (Indian Educational Review, 1995). Secondly, comprehension of a textbook is enhanced through the use of illustrations. Seguin (1989) describes three types of illustrations; (1) photographs—either original or copied, (2) drawings—either figurative or technical, drawn with a desire for realism, maps and (3) diagrams, sketches, statistical graphs. Illustrations often explain to a child more than a whole page of words (Dossal, 1996). Thirdly, textbooks should suggest practical observations, surveys, measurement and information research activities that engage students' mind for better comprehension of ideas. Fourthly, textbooks should evoke the previous knowledge of students for better comprehension of the text (Dole, 2000). Comprehension provides a base for other components of students' achievements including self-esteem.

Textbooks and Student Self-Esteem Development

Self-esteem is “the value each of us places on our own characteristics, abilities, and behaviours” (Woolfolk, 2007, p. 85). It is usually a favourable opinion of oneself (Elmer, 2001). It implies that self-esteem is appreciation of self and self-worth. People with high self-esteem have positive attitude, value themselves highly, are convinced of their own abilities and view themselves as competent, in control of their own lives and able to do what they want to do.

Developing students’ self-esteem is an important responsibility of schools. There are many different tools that can help build self-esteem in children and among them are textbooks that can deliver positive messages about confidence, courage, self-esteem, and self-worth. Textbooks can help in developing the self-esteem of the students by enhancing their knowledge and thinking skills to enable them to deal with problems of their daily lives. Textbooks present characters and situations that have the potential of affecting students’ self-esteem. The degree to which textbooks influence a child's sense of self-worth is largely determined by the extent to which that child identifies with the characters and situations and becomes emotionally involved with them (US-CCR, 1980). Stereotyping of any section of students in textbooks discourages them. Poussaint (as cited in US-CCR, 1980) asserts that this discouragement leads to embarrassment and these students withdraw or absent themselves from the school. Other students might develop a rebellious attitude against a system that looks down upon them. Girls also have been found to be affected by textbooks that fail to present adequate female role models. It implies that textbooks and contents there in have immense power of influencing either positively or negatively the development of students’ self-esteem.

Related Research Studies

A review of the related literature revealed little research carried out in Pakistan exploring students’ views of the impact textbooks have on their achievements. Most studies carried out in Pakistan have focused on content analysis of social studies textbooks followed by Urdu and English textbooks. Mostly researchers have analysed textbooks and their contents in relation to what knowledge, values and attitude they attempt to promote among students (e.g. see SDPI, 2003; Ahmad, 2004; SPDC, 2003; Nayyar and Salim, 2003; Mattu and Hussain, 2003). These studies on textbooks carried out in Pakistan show inaccuracies, flaws in textbooks and being laden with stereotypical and ideological contents.

Studies carried out elsewhere explored students’ views both qualitatively and quantitatively (e.g. Stodolsky, Salk and Glaessner, 1991; Lockheed et al. 1986; Alazizi, 2004; Chiodo & Byford, 2004; Vansledright, 1997). However, none of these studies explored views of students regarding impact of textbooks on their achievements. In case of Lockheed et al (1986), they explored the effects of mathematics textbooks on student achievements but they did not explore students’ views. Moreover, their definition of student achievement was limited to test scores only. What differentiates this study from earlier studies is its focus on students’ views of impact textbooks had on their achievements by employing a causal comparative design. As explained earlier student achievement in this study refers to cognitive, social and emotional development.

Method

The nature of the research question²⁰ formulated for this study begged for a prospective causal comparative research design. The impact of use of STB or OUP textbooks was

²⁰ What are the views of secondary students on the impact STB or OUP textbooks had on their achievements?

investigated on the achievements of secondary students of private schools in Karachi who formed the two categories, one using OUP textbooks and the other using STB textbooks. Five hypotheses were developed on the various components of the dependent variable, two of which are reported in this paper. A purposive sampling technique was used to conveniently choose three equally reputed private schools in Karachi. A five point likert scale questionnaire was constructed in the light of the literature reviewed which sought to measure the views of students regarding the impact of textbooks on their achievements. The collected data were tabulated under two categories of low level of agreement and high level of agreement of the respondents to each hypothesis. Yates correction was applied to the chi square test of each hypothesis. Odds ratios were also calculated. Chi square test results are presented in the following sections.

Results of the Chi Square Tests

This section presents the results of the chi square tests applied to two of the null hypotheses²¹ followed by analysis of results and discussions on the results. Conclusions are drawn from the discussions on the results of tests of hypotheses on the basis of which recommendations are made for curriculum developers and textbook writers. This section also presents suggestions for future researchers.

Results of Tests of the Two Hypotheses

A chi square test was performed to examine the relation between textbooks and students' comprehension. The relation between these variables was not significant, $\chi^2(1, N = 112) = 0.590, p < .05$ (see Table 1).

Table 1
Students' perception regarding impact of textbooks on their comprehension

| Categories | Level of Agreement | | Row Total |
|--------------|--------------------|------------|-----------|
| | High (22-35) | Low (7-21) | |
| OUP | 38 | 1 | 39 |
| | 97.4% | 2.6% | 100.0% |
| STB | 67 | 6 | 73 |
| | 91.8% | 8.2% | 100.0% |
| Column Total | 105 | 7 | 112 |
| | 94.6% | 5.4% | 100.0% |

$\chi^2 = 0.590$ $df = 1$ $p = 0.05$

Again, a chi square test was performed to examine the relation between textbooks and students' self-esteem development. The relation between these variables was significant, $\chi^2(1, N = 112) = 4.141, p < .05$. This seems to represent the fact that based on the odds ratio students were 5.09 time more likely to develop self-esteem if used OUP textbooks than if used STB textbooks (see Table 2).

²¹ H₁. There is no significant difference in views about the impact of textbooks on comprehension between students using OUP textbooks and students using STB textbooks.

H₂. There is no significant difference in views about the impact of textbooks on self-esteem between students using OUP textbooks and students using STB textbooks.

Table 2

Students' perception regarding the impact textbooks have on the development of their self-esteem

| Categories | Level of Agreement | | Row Total |
|--------------|--------------------|------------|-----------|
| | High (22-35) | Low (7-21) | |
| OUP | 37 | 2 | 39 |
| | 94.9% | 5.1% | 100.0% |
| STB | 57 | 16 | 73 |
| | 78.1% | 21.9% | 100.0% |
| Column Total | 94 | 18 | 112 |
| | 86.5% | 13.5% | 100.0% |

$$\chi^2 = 4.141 \quad \underline{df} = 1 \quad p = 0.05 \quad \text{odds ratio} = 5.09$$

Discussion, Conclusion and Recommendations

Chi square test of the first hypothesis indicated students' views to suggest that both OUP and STB textbooks equally enhanced their comprehension. However, it is important to note the high agreement of students to the illustrations provided in OUP textbooks as compared to mix responses of students to the illustrations provided in STB textbooks (see Table 3). There are two possibilities for this result about STB textbooks. One, perhaps students using STB textbooks had no experience of looking at textbooks having better illustrations so their opinions were not much informed and second, their positive responses regarding the role of illustrations in STB textbooks suggests that how even low quality illustrations were important for comprehensibility of the text.

The second hypothesis was rejected to mean that the OUP textbooks had more positive impact on students' self-esteem development than STB textbooks did. It means that in the opinion of the students there were contents in STB textbooks that ignored or underestimated particular segments of the society and their culture and promoted narrow outlook towards life in the students. Moreover, STB textbooks in the views of students did not contain enough suitable material that could inspire self-worth in them. These results support previous findings of studies which have reported attitudinal changes in students through reading texts towards fellow human beings, animals, minorities, gender etc. and self-esteem development in students (Nayyar, 2003; Dean, 2007; Nassem, 2006; Mattu & Hussain, 2003).

These results mirrored students views of contributions textbooks made to their achievements. Quite clearly these results, particularly the results of the second hypothesis, point at some areas where STB textbooks require reformation. Particularly while selecting text, care may be taken so that something which is discouraging, discriminating and narrow in its outlook does not find a place or infuse into the textbooks. Supporting, though partially, findings of earlier studies this study revealed that depending on their content textbooks play very crucial roles in shaping the personalities of the students. They help students to comprehend the ideas contained in the texts and relate it to their own world realities. Textbooks provide an outlook to the students and determine how they view themselves, their fellow beings, minorities, gender and nationalities and how they play their role in their society. Based on these findings this study recommends that Pakistani textbooks may be reformed keeping stakeholder views in mind in order to improve their positive impacts on the achievements of the students.

For researchers it is recommended that further robust studies may be conducted to examine students and teachers' views of curricula and textbooks. Their voices are crucial for the development of comprehensive reforms and their implementations.

Table 3

Responses of Students Regarding the Impact of OUP or STB Textbooks Had on Their Achievements

| Items | OUP | | | | | | | | STB | | | | | | | | | |
|--|------|----------------|-------------|-----------|-------------|---------------|-------------|-------|-----|------|----------------|-----------|-----------|-----------|---------------|-----------|-------|-----|
| | Rank | High agreement | | Uncertain | | Low agreement | | Total | | Rank | High agreement | | Uncertain | | Low agreement | | Total | |
| | | No. | % | No. | % | No. | % | No. | % | | No. | % | No. | % | No. | % | No. | % |
| Comprehension | | | | | | | | | | | | | | | | | | |
| provide diagrams along with the text to enhance your understanding of the concepts | 1 | 37 | 94.9 | 0 | 0 | 2 | 5.13 | 39 | 100 | 2 | 58 | 79.5 | 9 | 12.3 | 6 | 8.2 | 73 | 100 |
| encourage you to interact with the information given in the text | 2 | 35 | 89.7 | 4 | 10.3 | 0 | 0 | 39 | 100 | 1 | 65 | 89 | 6 | 8.2 | 2 | 2.7 | 73 | 100 |
| provide photographs along with the text to bring clarity to your understanding of the concepts | 2 | 35 | 89.7 | 2 | 5.13 | 2 | 5.13 | 39 | 100 | 4 | 45 | 61.6 | 15 | 20.5 | 13 | 17.8 | 73 | 100 |
| distract your attention by presenting drawings that confuse your understanding of the concepts | 3 | 2 | 5.13 | 6 | 15.4 | 31 | 79.5 | 39 | 100 | 6 | 31 | 42.5 | 16 | 21.9 | 26 | 35.6 | 73 | 100 |
| activate your prior knowledge before giving you a new concept | 4 | 30 | 76.9 | 6 | 15.4 | 3 | 7.69 | 39 | 100 | 3 | 54 | 74 | 15 | 20.5 | 4 | 5.5 | 73 | 100 |
| discourage your reading of text because the language used is difficult to understand | 5 | 7 | 17.9 | 5 | 12.8 | 27 | 69.2 | 39 | 100 | 5 | 16 | 21.9 | 15 | 20.5 | 42 | 57.5 | 73 | 100 |
| present too many concepts without discussing them enough | 6 | 15 | 38.5 | 5 | 12.8 | 19 | 48.7 | 39 | 100 | 7 | 26 | 35.6 | 20 | 27.4 | 27 | 37 | 73 | 100 |
| Total | | | 78.3 | | 10.3 | | 62 | | | | | 62 | | 19 | | 19 | | |
| Self-esteem | | | | | | | | | | | | | | | | | | |
| be sure about your academic achievements | 1 | 32 | 82.1 | 4 | 10.3 | 3 | 7.69 | 39 | 100 | 1 | 57 | 78.1 | 6 | 8.2 | 10 | 13.7 | 73 | 100 |
| enjoy being at school | 2 | 27 | 69.2 | 7 | 17.9 | 5 | 12.8 | 39 | 100 | 2 | 55 | 75.3 | 7 | 9.6 | 11 | 15.1 | 73 | 100 |
| create a sense of belongingness to your school | 3 | 25 | 64.1 | 7 | 17.9 | 7 | 17.9 | 39 | 100 | 4 | 50 | 68.5 | 12 | 16.4 | 11 | 15.1 | 73 | 100 |
| participate in the sports events of your school | 4 | 22 | 56.4 | 4 | 10.3 | 13 | 33.3 | 39 | 100 | 5 | 38 | 52.1 | 20 | 27.4 | 15 | 20.5 | 73 | 100 |
| resist accepting responsibilities given by the teachers | 5 | 7 | 17.9 | 4 | 10.3 | 28 | 71.8 | 39 | 100 | 3 | 52 | 71.2 | 13 | 17.8 | 8 | 11 | 73 | 100 |
| misbehave in the class room | 6 | 5 | 12.8 | 1 | 2.56 | 33 | 84.6 | 39 | 100 | 7 | 15 | 20.5 | 8 | 11 | 50 | 68.5 | 73 | 100 |
| stay isolated from class fellows | 7 | 2 | 5.13 | 5 | 12.8 | 32 | 82.1 | 39 | 100 | 6 | 20 | 27.4 | 20 | 27.4 | 33 | 45.2 | 73 | 100 |
| Total | | | 72.9 | | 11.7 | | 15.4 | | | | | 57 | | 17 | | 26 | | |

References

- Ahmad, I. (2004). Islam, democracy and citizenship education: An examination of social studies curriculum in Pakistan. *Current Issues in Comparative Education*, 7(1), 39-49.
- Alazizi, K. (2004). Students' perceptions of social studies: A study of middle school and high school students in Jordan. *International Journal of Scholarly Academic Intellectual Diversity*, 8(1), 3-13.
- Bednarz, S. W. (2004). US world geography textbooks: their role in education reform. *International Research in Geographical and Environmental Education*, 13(3), 223-238.
- Chiodo, J., & Byford, J. (2004). Do they really dislike social studies? A study of middle school and high school students. *The Journal of Social Studies*, 28(1).
- Dole, J. A. (2000). Readers, texts and conceptual change learning. *Reading and Writing Quarterly*, 16(2), 99-118.
- Dossal, Z. A. (1996). Textbook reforms. *Education 2000*, 2(4), 10-12.
- Elmer, N. (2001). *Self-esteem: the costs and causes of self-worth*. England: York Publishing Services. Retrieved October 15, 2007, from <http://www.jrf.org.uk/bookshop/eBooks/1859352510.pdf>
- Haq, M., & Haq, K. (1998). *Human development in South Asia 1998: The education challenge*. Karachi: Oxford University Press.
- Hargreaves, A. (1996). Revisiting voice. *Educational Researcher*, 25(1), 12-19.
- Khan, A. A. (2005, August, 19). US concern at Pakistan textbooks. BBC News, Retrieved October 21, 2007, from http://news.bbc.co.uk/2/hi/south_asia/4167260.stm
- Laren, T. H. (2006). The importance of student voice. *International Journal of Leadership in Education*, 9(4), 363-367.
- Lefton, L. A., & Brannon, L. (2003). *Psychology* (8th ed.). Boston: Allyn and Bacon.
- Lockheed, M. E., Vail, S. C., & Fuller, B. (1986). How textbooks affect achievement in developing countries: Evidence from Thailand. *Educational Evaluation and Policy Analysis*, 8(4), 379-392.
- Mattu, A., & Hussain, N. (2003). Class and gender in school texts. In A. H. Nayyar & A. Salim (Eds.), *The Subtle subversion: The state of curricula and textbooks in Pakistan* (pp. 91-99). Islamabad: SDPI.
- Mitra, D. L. (2004). The significance of students: can increasing "student voice" in schools lead to gains in youth development? *Teachers College Record*, 106(4), 651-688.
- Nayyar, A. H. (2003). Insensitivity to religious diversity of nation. In A. H. Nayyar & A. Salim (Eds.), *The Subtle subversion: The state of curricula and textbooks in Pakistan* (pp. 9-62). Islamabad: SDPI.
- Nayyar, A. H., & Salim, A. (2003). Glorification of war and the military. In A. H. Nayyar & A. Salim (Eds.), *The Subtle subversion: The state of curricula and textbooks in Pakistan* (pp. 80-90). Islamabad: SDPI.
- SDPI [Social Policy Development Institute], (2003). *The subtle subversion: The state of curricula and textbooks in Pakistan*. Islamabad: SDPI.

- Seguin, R. (1989). *The elaboration of school text books: Methodological guide*. UNESCO. Retrieved April 3, 2007, from http://www.unesco.org/education/pdf/55_16.pdf
- Social Policy and Development Centre (2003). *Social development in Pakistan: Annual review 2002-03: The state of education*. Karachi: Social policy and Development Centre.
- Steinberger, E. D. (1993). *Improving student achievement*. Virginia: American Association of School Administrators. Retrieved July 5, 2007 from <http://eric.ed.gov/PDFS/ED358519.pdf>
- Stodolsky, S. S., Salk, S., & Glaessner, B. (1991). Students views about learning math and social studies. *American Educational Research Journal*, 28(1), 89-116.
- US-CCR [United States Commission on Civil Rights], (1980). *Characters in textbooks: a review of literature*. Washington, D.C.: Clearinghouse Publication 62. Retrieved April 4, 2007, from <http://www.law.umaryland.edu/Marshall/usccr/documents/cr11062.pdf>
- Vansledright, B. A. (1997). And Santayana lives on: Students' views on the purpose of studying American history. *Journal of Curriculum Studies*, 29(5), 529-557.
- Woolfolk, A. (2007). *Educational psychology* (10th ed.). Boston: Pearson.