

Incentives: The Effects on Reading Attitude and Reading Behaviors of Third-Grade Students

Gayle M. Stanfield

Georgia College and State University

Abstract

The purpose of this study was to investigate whether third grade literacy students who receive incentive rewards as part of their instruction will exhibit significantly higher reading habits and attitudes toward recreational reading than they did before the incentives were introduced. The study examined 19 third grade students with fairly high intellectual abilities. The students were given an Elementary Reading Attitude Survey (ERAS) as a pre- and postmeasure. Weekly data were kept on the number of Accelerated Reader (AR) books read as well as scores on the AR tests. Baseline was the first four weeks of school, the incentives (prizes) were given the next four weeks. Findings indicated that students' attitudes became worse over the entire length of the study. Prizes included certificates, food, books, pencils, bookmarks, or anything that might be attractive to the recipient. The conclusion was that the reading incentives were counter productive even though the number of books read and the scores on the test remained the same.

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Educators and researchers point to motivation as a critical determinant to student success in reading and writing, especially during the elementary school years (Miller & Meece, 1999, in citing Calfee & Nelson-Barber, 1991; O'Flahavan, Gambrell, Guthrie, Stahl, Baumann, & Alvermann, 1992). Research indicates that students who are motivated to read spend more time reading than those children who are not motivated (Edmunds & Tancock, 2003, in citing Anderson, Wilson, & Fielding, 1988; Guthrie, Wigfield, Metsala, & Cox, 1999; Morrow, 1992; Wigfield & Guthrie, 1997). Fitzgibbons (2004) hypothesized that "motivation to read is an essential ingredient to the development of good readers and as importantly to lifelong readers, and that there is evidence that reading attitudes and behavior are linked to reading achievement" (p.21). The purpose of this study was to investigate the effects of incentive rewards on the reading attitudes and behaviors of third grade students.

Motivation

Three factors aid in determining the reader's motivation for reading: (a) reading interest of the learner, (b) attitude, and (c) behavior are all important considerations (Fitzgibbons, 2004). When addressing these three factors to aid in determining the cause for the motivation, it is necessary to focus on the learner's intrinsic and extrinsic reading motivation. Gagne & Deci (2005) and Guthrie, Wigfield, VonSecker, (2000), in citing Deci & Ryan (1985); Deci, Vallerand, Pelletier, & Ryan (1991) provide definitions for motivation, both intrinsic, and extrinsic. Researchers make a distinction between intrinsic and extrinsic motivation. Intrinsic motivation refers to being motivated to do an activity for no apparent reward except the activity

itself. Extrinsically motivated behaviors contain an external controlling variable. Motivation occurs when the learner successfully completes instructional activities, assignments, and makes progress toward an educational goal.

Attitude. Fitzgibbons (2004), in citing Alexander and Filler (1975), provides a definition for reading attitude, stating it is feelings toward reading which causes the learner to move toward or avoid a reading situation. Attitude, for the purpose of this study, is defined as a combination of feelings and behaviors related to a specific learning situation. Attitude serves as a major factor in how well a learner will receive activities related to their learning circumstances (Thames, Reeves-Kazalskis, 1992). Understanding the role of attitude in developing readers is important for two principal reasons. First, attitude may affect the level of ability ultimately attained by a student - through its influence on such factors as engagement and practice. Second, even for the fluent reader, poor attitude may occasion a choice not to read when other options exist, a condition now generally known as aliteracy (McKenna, Kear, & Ellsworth, 1995).

Intrinsic Motivation. Teachers have long recognized that motivation is at the heart of many of the pervasive problems educators face in teaching young children to read (Gambrell, Plamer, Codling, & Mazzoni, 1995). Research conducted by Wigfield and Guthrie (1997) and cited in Cole (2003), concluded "that reading motivation is multifaceted. Being aware of at least some of the facets involved in developing intrinsic motivation in students can help educators come closer to the goal of instilling in all students a love of reading and learning" (p.327).

Extrinsic Motivation. Fawson and Moore (1999) suggested that rewards connect to children's reading behavior in order for them to see a link between the reward and their reading. This study further noted that children who need to be initially motivated to read by the use of an incentive should have the incentive removed making the reward less salient as soon as students

begin to increase their reading. Consequently, the extrinsic reward could be eliminated altogether and that reading behavior itself would be supported.

Roles of Teachers, Home, and Libraries

Teachers. Teachers are constantly looking for new and inventive ways to enhance and encourage students to read and to be life-long readers. The use of incentives to encourage reading is a common practice used by many educators to increase reading motivation. Incentives can be tangible rewards such as certificates, food and books, or intangible rewards like verbal praise (Edmunds, 2003, in citing Kohn, 1993; McQuillan, 1997; Guthrie & Wigfield, 2000). It should also be noted that tangible rewards of various kinds undermine intrinsic motivation. (Deci, Koestner, & Ryan, 2001 as cited in Edmunds, 2003). However, teachers can incorporate into a classroom their knowledge of readers' beliefs, reasons, and purposes for reading. Furthermore affective reactions can improve students' self-worth and their intrinsic motivations to read (Cole, 2003 in citing Schunk & Zimmerman, 1997).

Ormrod, (1995), in citing Deci & Ryan (1985), states that "rewards are unlikely to be beneficial, at least over the long run, when people interpret them as bribes or as limits on their freedom" (p. 464). Reinforcement may be useful when desirable behaviors will seemingly not take place any other way. Initially, a new activity may be difficult or frustrating and require external encouragement to continue. However, with continuing practice, ability and skill are likely to get better, and they may eventually find the activity intrinsically rewarding. Intrinsic motivation for learning is more likely to occur if students view the classroom as autonomy supportive (Guthrie, Wigfield, & VonSecker, 2000 in citing Deci, Schwartz, Sheiaman, and Ryan 1981; Grolnick and Ryan 1987). Effective strategy instruction can increase students'

competence and their awareness of competence, which is motivating (Pressley, Borkowski, & O'Sullivan, 1995 as cited in Guthrie, Wigfield, & VonSecker, 2000).

Home and Libraries. Wojciechowski & Zweiq (2003) concluded in their study that making a connection between home and school reading strengthened the reading habits of students who participated in their study. Student engagement in and enjoyment of recreational reading was heightened due to the positive impact of parental support and encouragement. McQuillan (1997) cited several studies (Lance, Welborn, & Hamilton-Pennell, 1993; Krashen, 1993; McQuillan, 1996), which show that better libraries lead to more reading and higher test scores. Further, McQuillan (1997) cited Krashen (1993) in a study that concluded children, who have access to books, a quiet comfortable place to read, and see others take pleasure in reading, will read. McQuillan (1997) further states in citing Pucci (1994), that the problem in many schools and communities is that the bookshelves are empty or full of old and out-of-date books, and the libraries' hours are limited. In order to promote reading among children, perhaps money should be devoted to purchasing more books rather than purchasing tangible rewards for the children.

If educators are to create positive attitudes toward reading, it is necessary, in addition to making reading successful, to make reading pleasurable (self-rewarding). The purpose of this study was to investigate whether third grade literacy students who received incentive rewards as part of their instruction would exhibit any more successful reading behaviors or improve their attitudes toward recreational reading. It was hypothesized that incentive rewards would probably not improve motivation towards more recreational reading or average test scores per book read in the Accelerated Reader program. Tangible incentive rewards were certificates, food, books, pencils, bookmarks, or any number of prizes attractive to the recipient.

Method

Participants and Setting

This study took place in a rural elementary school located in central Georgia. Students attending the school come from the surrounding small communities of the rural farming areas in the community. Students also come from the county seat. The town where the school is located has an estimated population of 447 people. The ethnicity of the community is comprised of 85% Caucasian, 14% Black or African American, 0.2% Hispanic or Latino, and 2% one or more races. The per capita income by race or ethnicity for this community according to the 2000 Census was Caucasian - \$21,947, Black or African American \$9,954, Native American \$2,571; with the Asian, Hispanic or Latino, and other races showing zero (U.S. Census 2006).

The school has an average enrollment of approximately 1,000 students in Pre-K through fifth grades. The ethnic composition of the 2005-2006 student enrollment revealed 73% Caucasian, 23% Black or African American, 2% Multiracial, 1% Asian, and 1% Hispanic. One hundred percent of the students qualify for free or reduced lunch (Governor's Office of Student Achievement, 2006).

The school offers a variety of programs designed to meet the needs of the diversity of the student population. These programs include Title I classes. Title I is a federally funded instructional program for children who are academically below average. Tutorial and mentorship services are also provided. These services take place in an after school activity for students identified as needing additional individual assistance for academic improvement.

In the 2004-2005 school year 95.26% of students met and exceeded standards. The Georgia Single Statewide Accountability System (SSAS) provides an Accountability Profile for every public school and school system in the state. SSAS presents awards to schools who

demonstrate excellence in student achievement and progress. This elementary school received the 2005 Bronze Award for the highest percentage of students meeting and exceeding standards. The Bronze Schools must not be in 'Needs Improvement' status and have a minimum of 20% exceeding standards and at least 95% of students meeting and exceeding standards.

The specific children participating in this study were nineteen 3rd- grade students from an intact class. The principal gave permission to conduct the study. The students range in age between eight and nine years old. There are 8 girls and 11 boys in the class. The ethnic composition of the group is 16 Caucasian students, 2 African American students, and 1 Asian student. Their cognitive abilities range from high to gifted.

Procedures and Instrumentation

At the beginning of the 2006-2007 school year a permission slip was sent home to parents asking permission to allow their child to participate in the study (Appendix A). All parents consented to their child participating in the study. The participants completed an Elementary Reading Attitude Survey (ERAS) (Appendix B) (McKenna, Kear, & Ellsworth, 1995). The ERAS consists of 10 items and uses a 4-point Likert-type response scale. The survey assessed their reading attitude and was administered orally by the teacher. The ERAS was given once, the first week of school before the study and again, at the end of the study.

To begin with the students in all third grade classrooms are given the same Accelerated Reader instructions, which states each student should read a minimum of four books per week with each book having an AR point value of .05, thus giving each student two points per week during an assigned period selected by all third grade teachers. Students may, and are encouraged to read higher point value books, which, of course, would give them a higher total of accumulated points for a selected period. By reading a higher point value book, students would

read a fewer number of books but could achieve a greater number of points. Students are given the freedom to choose whether they will select the minimum point value book of .05 and read at least four books, read a higher point value book, which requires fewer books to obtain a twopoints per week average, or if they will choose to read at all.

In addition, students had a minimum of 15 minutes during their school day of sustained silent reading time during which they could read, take AR tests, and/or exchange books at the school media center. Students were also encouraged to read for 30 minutes each evening as part of their homework assignment.

During the first four weeks of school (baseline phase) of the study, the group did not receive any tangible incentive rewards to promote recreational reading from August 7, 2006, through September 1, 2006, the first four weeks of school. Students were told to read Accelerated Reader (AR) books and to keep a Reading Log (Appendix C). Accelerated Reader is a reading management program designed to promote recreational reading at home and in the classroom (Renaissance Learning, Inc., 2006). Teachers monitor students' reading through computerized testing. Accelerated Reader scores were recorded on a weekly basis and test scores and the number of books read recorded.

At the beginning of the second four-week period, September 4, 2006, through September 29, 2006, the group received weekly tangible incentive rewards for the number of books read and points made on their AR scores. Another ERAS was given to the group to assess their attitude toward reading at the end of this four-week period. The students were observed and data collected to determine if they exhibited significantly higher reading habits and attitude toward recreational reading during the second phase of the study.

Design and Data Analysis

This study was a quasi-experimental design using pre and post testing with the same group serving as their own control. A repeated-measures MANOVA was used to determine if there was a significant difference between numbers of AR books read, weekly test averages on these AR books and attitude toward recreational reading after the second phase of the study implementing the incentives. The three outcome variables were the number of books read, average percent correct on AR tests, and attitude survey total scores. The alpha level was set at .05.

Results

It was hypothesized that students who receive incentive rewards as part of their instruction would probably not change the number of AR books read, score better on the AR reading tests, or score higher on an attitude inventory regarding recreational reading than they did when they not receive incentive rewards. During both phases of the study, the average number of books read was slightly over 12 with an average of about 88% correct on the tests. The recreational reading attitude scores averaged 31 at the beginning of the school and dropped to 17 when tested eight weeks later after both phases of the study were complete. The results of a repeated measures MANOVA comparing these three variables, before and after receiving incentives was statistically significant [F(2,17) = 19.25, p < .001, partial Eta squared was .68]and power was 1.0]. Follow up paired t-tests revealed no difference between the total number of books read in each four week period [t(18) = .08, p = .93]; nor was there a difference in the test scores averaged over each four week period [t(18) = .04, p = .97]. See table 1 for means and standard deviations. The difference was in the reading attitude inventory which dropped from a total scores mean of 31 (SD = 5) to 18 (SD = 5). This drop was statistically significant [t (18) =

6.13, p < .001]. Figures 1 and 2 show the average number of books read by week and the average class test scores by week (Appendix D).

Discussion

The results of this research support the assertion that reading incentives do not encourage students to read more books, improve their scores on reading tests, or improve their attitude regarding recreational reading. Over the course of an eight-week period, students' attitude toward reading dropped rather than increased. There was no difference in the test scores average nor was there a difference in the total number of books read in each four-week period. The results of this study and expanded studies of this type could demonstrate the need to improve our awareness of how children acquire the motivation to develop into active, engaged readers. *Implications for Early Childhood Teachers*

By studying the relationship between reading attitudes and reading achievement, the classroom teacher can be better equipped to provide a more holistic approach to instruction, which research indicates is helpful in developing independent interests, which, produces positive attitudes toward learning incorporating questioning techniques, activating background knowledge, and having students imagine personal success (Thames, Reeves-Kazalskis, 1992). In addition, the results of this study and expanded studies of this type could demonstrate the need for teachers not to depend on motivational programs as a sole means to improve students' attitudes and achievement. Fawson and Moore (1999) explain that in studies of this nature, the child is unable to make a connection between the incentive and the behavior he or she is being asked to participate. There is no effort made by teachers or school officials to evaluate the potential short- or long-term effects of children receiving unrelated rewards for reading. Clearly, one of the most discouraging effects of incentive programs lies in the fact that the less able

readers become frustrated with their inability to read, and they might be reminded about how bad they are by tracking methods that make their failure public.

Kazelskis, Thames, Reeves, Flynn, Taylor, Beard, and Turnbo (2005), suggest that score instability regarding students' attitudes toward reading within groups should be noted and addressed by the classroom teachers and reading specialists, even in a short time period. Students' attitudes can change based on how they feel about themselves and their performance in the classroom. If a student has received favorable remarks and grades on a particular literacy assignment or activity, their attitude will reflect this positively. However, if the teacher or a parent has reprimanded the student for their classroom performance, their attitude will be reflected in a negative manner, thus a poor reading attitude.

Limitations

Noticeably, one of the limitations of this study is that the sample was small, 19 students total. The short span of time the treatment was applied (i.e., eight weeks, four controlled and four uncontrolled) can also be another weakness to the study.

Another limitation could be that the sample group studied was a bright, high achieving group of students, and by placing constraints on this group, although they were given free will to choose the point value of their books and the number of books they could read, actually inhibited their productivity. The restriction of allowing students to choose only those books on the AR book list for the study, restricted the students' choices of books they were allowed to read.

Lastly, prior to the study, the researcher was aware of the limitations of using one grade in one school. However, this researcher is confident due the level of significance demonstrated in this study that the findings could be generalized to similar students. This research study could be strengthened as more studies of this nature and even expanded studies (i.e., larger sample

groups and longer treatment periods) are performed. This type of research treatment will strengthen and support the need for intrinsic motivation and learning rather than tangible, unrelated incentive rewards.

It was concluded, as a result of this study that implementing a reading program in which extrinsic rewards are promoted did not have a positive effect on these students' reading ability, achievement, or desire to read. The students' attitudes were adversely affected by the motivation to achieve points and receive tangible rewards for their efforts. They were no longer reading for enjoyment and pleasure but for an inanimate object. The students clearly had a more positive attitude toward reading when no rewards were offered and their desire was to read for enjoyment and information.

It is important that rewards provided for literacy tasks be associated to reading behavior so that children can see the link between the reward and their reading. Rewards should be given to help a child get started reading and then, as soon as they begin to increase their reading competency, the rewards should be made less prominent. Eventually, extrinsic rewards could be eliminated altogether and the reading behavior will support itself. (Fawson and Moore, 1999).

References

- Cameron, J., & Pierce, W. (1994) Reinforcement, reward, and intrinsic motivation: a metaanalysis. *Review of Education Research*, 64(3), 363-423.
- Cole, J. (2003) What motivates students to read? Four literacy personalities. [Electronic Version]. *The Reading Teacher*, 56(4), 326-336.
- Edmunds, K., & Tancock, S. (2003). The effects on the reading motivation of fourth-grade students. [Electronic Version]. *Reading Research and Instruction*, 42(2), 17-38.
- Fawson, P., & Moore, S. (1999). Reading incentive programs: beliefs and practices. [Electronic Version]. *Reading Psychology*. 20(4), 325-340.
- Fitzgibbons, S. (2004). What motivates reading?: How library media specialists can contribute to the development of good readers. [Electronic Version]. *School Library Media Activities Monthly*, 20(10) 21-25.
- Gagne, M. & Deci, E. (2005). Self-determination theory and work motivation. [Electronic Version]. *Journal of Organizational Behavior*, 26,(4) 331-362.
- Gambrell, L., Palmer, B., Codling, R., & Mazzoni, S. (1995). Assessing motivation to read.
 Georgia: National Reading Research Center. (ERIC Document Reproduction Service No. ED 384008).
- Governor's Office of Student Achievement (2006). *Annual report cards on K-12 public schools*. [Electronic Version]. Retrieved July 13, 2006, from http://www.gaosa.org
- Guthrie, J., Wigfield, A, & VonSecker, C. (2000). Effects of Integrated Instruction on Motivation and Strategy Use in Reading. [Electronic Version]. *Journal of Educational Psychology*, 92(2), 331-341.

- Kazelskis, R., Thames, D., Reeves, C., Flynn, R., Taylor, L., Beard, L., & Turnbo, D. (2005). Reliability and stability of elementary reading attitude survey (ERAS) scores across gender, race, and grade level. [Electronic Version]. *Profession Educator*, 27, 29-37.
- McKenna, M., Kear, D., & Ellsworth, R. (1995). Children's attitudes toward reading: a national survey. Reading Research Quarterly, 30(4), 934-954.
- McQuillan, J. (1997). The effects of incentives on reading. [Electronic Version]. Reading Research and Instruction, 36(2), 111-125.
- Miller, S., & Meece, J. (1999). Third graders' motivational preferences for reading and writing tasks. [Electronic Version]. The Elementary School Journal, 100(1), 19-35.
- Ormrod, J. (1995). Cognitive factors in motivation. *Human Learning* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Renaissance Learning, Inc. (2006). [Electronic Version]. Wisconsin Rapids, WC: Retrieved July 8, 2006, from http://www.renlearn.com
- Thames, D., & Reeves-Kazelskis, C. (1992). Effects of individualized, integrated language arts instruction of the attitudes of poor readers. Mississippi: Mid-South Educational Research Association. (ERIC Document Reproduction Service No. ED353570)
- United States census bureau (2006). Laurens County, Georgia. Retrieved July 8, 2006, from http://factfinder.census.gov
- Wojciechowski, L. & Zweig, D. (2003). Motivating student reading through read-alouds and home-school independent reading. Illinois: Saint Xavier University and SkyLight professional Development Field-Based Master's Program. (ERIC Document Reproduction Service No. ED473055)

Results from Control and Experimental Period_____

	Control	<u>Experimental</u>	
Outcome	M SD	M SD	
Number of Books	12.7 4.9	12.6 7.6	
Average % Correct	88.5 6.2	88.4 7.6	
Attitude Survey Total	30.7 5.1	17.7 4.7	

Figure Captions

Figure 1. Average number of books read by week.

Figure 2. Average weekly test scores.

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Note: Many children did not take any tests the first week of school so the scores this week were considered to be invalid

APPENDIX A

August 7, 2006

Sincerely,

Dear Parents and/or Guardian:

I am attending Georgia College and State University in order to complete my Education Specialist degree in early childhood education. As a requirement in my research class, I will be completing a research project this semester and will be including my class in the research process. I would like to include your child in this project on the attitudes and habits of third grade literacy students.

Reading is the very core of our curriculum and I am interested in students' attitudes and habits toward reading. It is my desire to take the information I gain from this project and use the data colleted to plan instructional activities that will support students in their reading development. Your child's name will be removed form any data I collect and participation will be anonymous. No physical, psychological, social, or legal risks exist in this study.

I will be collecting data based on observations, tests, and surveys completed by your child. I will be analyzing the data at the end of the first nine weeks in order to incorporate it into my instruction. The results obtained will be made available to the principal and can be made available to you should you desire to view them. Please let me know if you object to your child being included in this study, if so, I will not include their data in the study. However, I do hope you will consider this as an opportunity for growth for your child and will allow them to participate.

Please sign this form and return the lower portion as soon as possible. Please retain the top portion of this letter should you have any questions. You may call and leave a message for me with the office at 676-3475. I will return your call as quickly as possible. Thank you for your help and support.

Gayle M. Stanfield	
Please check [x] one of the boxes: Reading Research – Motivation and	Attitudes of 3 rd -grade Literacy Students
[] My child has my permission to p [] My child does not have permission	
Child's Name	Parent's Signature

Research at Georgia College & State University that involves human participants is carried out under the oversight of the Institutional Review Board. Questions or problems regarding these activities should be addressed to Mr. Quintus Sibley, Director of Legal Affairs, 212 Chappell Hall, CBX 041, GC&SU, (478) 445-2037.

APPENDIX B Elementary Reading Attitude Survey

Name:	Grade:
1. How	do you feel when you read a book on a rainy Saturday?
	(b) a little upset (c) a little happy (d) very happy
2. How time?	do you feel when you read a book in school during free
	(b) a little upset (c) a little happy (d) very happy
3. How	do you feel about reading for fun at home?
(a) very upset	(b) a little upset (c) a little happy (d) very happy
4. How o	do you feel about getting a book for a present?
(a) very upset	(b) a little upset (c) a little happy (d) very happy
5. How o	do you feel about using your free time for reading instead of
, , ,	(b) a little upset (c) a little happy (d) very happy
6. How a	do you feel about reading during the summer when you are not in
	(b) a little upset (c) a little happy (d) very happy
7 How	do you feel about starting a new book?
	(b) a little upset (c) a little happy (d) very happy
8. How o	do you feel about visiting a bookstore?
(a) very upset	(b) a little upset (c) a little happy (d) very happy
9. How o	do you feel about reading different kinds of books?
(a) very upset	(b) a little upset (c) a little happy (d) very happy
10. How	do you feel about reading outloud in class?
(a) verv upset	(b) a little upset (c) a little happy (d) very happy

Student Reading Log

<u>Title,</u> Author	Book Test Number	Reading Level of book	Total Points of book	% Correct on Quiz	Teacher Initials to Test

Reading Motivation and Habits 22