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Examining and Predicting College Students' Reading Intentions and Behaviors: An Application of the Theory of Reasoned Action

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This study examined the recreational reading attitudes, intentions, and behaviors of college students. The theory of reasoned action provided the framework for the investigation and prediction of the students' intentions and behaviors. Two hundred and one students completed questionnaires developed according to the guidelines for the construction of standard theory of reasoned action questionnaires. The instrument assessed students' attitudes, outcome beliefs, subjective norms, and normative beliefs, as well as intentions and behaviors regarding recreational reading. The constructs of the theory explained 35-38 percent of the variance in students' intentions. Attitudes toward recreational reading provided the strongest and most significant contributions.

INDIVIDUALS READ FOR many reasons: information acquisition, knowledge, self-reflection, practical application, as well as pleasure, enjoyment, and relaxation. The importance of reading contributes to many dimensions in the development of an educated individual. Because reading is fundamental to learning in our schools, it can be assumed that college and university students are skilled readers, and that they enjoy reading. Goodwin (1996), however, claims that aliteracy is an epidemic among college students. Aliteracy refers to the "lack of the reading habit in capable readers" (Harris & Hodges, 1995, p.6). Some researchers and educators (Goodwin, 1996; Sheory & Mokhtari, 1994) claim that students spend minimal time reading required readings, and even less time reading that which is not required.

Goodwin's (1996) interviews with college students indicated that the majority did not read for leisure and rarely read their textbooks. Sardo-Brown and Beeghly (1996) surveyed 238 college students and found that 65 percent of them could not name a book that they had recently read, and 62 percent responded 'no' when asked if there existed a book so important that they could not imagine not having read it.

Gallik (1999) examined the recreational reading habits of 151 college students and found that 63 percent of the students she studied spent two hours or less each week reading for recreation while classes were in session, and 48 percent of them reported spending two hours or less each week reading for recreation during vacation periods. Ducheini and Mealy's 1993 study of 90 college freshmen found that 66 percent of the students reported not enjoying reading and avoiding it when possible.

Attitudes about reading are closely linked with reading behaviors (Greaney & Hegarty, 1987; Smith, 1990). Studies of college students' reading attitudes, however, have yielded inconsistent results. Brooks (1996) found that the college students participating in her study had positive attitudes toward reading, yet Burak (2003) and McCoy (1991) found the majority of participants in their studies had negative or neutral attitudes toward reading.

Reading is a foundation for success, not only in school, but also in life in general (Anderson, Hiebert, Scott, & Wilkinson, 1985). And

recreational reading has been found to improve literacy skills, academic performance, and course grades (Dretzke & Keniston, 1989; Gallik, 1999; Krashen, 1993). The recreational reading of college students thus warrants further exploration.

Examining students' recreational reading using an established theoretical framework could yield important information about the motivational structure of this fundamental activity. The theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) uses a single framework to predict and understand virtually all human behavior. The theory posits that behavior is directly determined by intention; a person's decision to do something is most accurately predicted by his or her intention to do it. Because it seeks to understand as well as predict behavior, the theory of reasoned action identifies the determinants of intention, as well as the antecedents of those determinants. According to the theory, a person's intentions to engage in a behavior are a function of his or her attitudes toward that behavior, as well as his or her subjective norms regarding that behavior. Attitude toward a behavior is a person's judgment that performing that behavior is good or bad and that he or she is in favor or against performing the behavior. Subjective norms refer to an individual's perceptions that persons who are important to him or her believe that he or she should engage in the behavior. The perceptions are subjective because they reflect what a person believes other people think, not necessarily what they do think.

According to the theory of reasoned action, attitudes toward a behavior are determined by salient beliefs about the outcomes of the behavior, and subjective norms are determined by normative beliefs; that is, the perceived beliefs of specific individuals about performing the behavior.

The theory of reasoned action has underpinned numerous studies addressing a wide variety of behaviors including marijuana use (Morrison, Golder, Keller, & Gillmore, 2002), automation technology use (Jones, Sundaram, & Chin, 2002), tooth brushing (Syrjala, Niskanen, & Knuuttila, 2002), seeking help for alcohol abuse (Codd, & Cohen, 2003), science learning activities (Butler, 1999), and environmental

policy implementation (Bright, Manfreda, Fishbein, & Bath, 1993). Meta analyses of research using the theory of reasoned action indicate that the model explains between 40 percent and 50 percent of the variance in intentions, and between 19 percent and 38 percent of the variance in behaviors (Sutton, 1998).

The purpose of the current study was to examine college students' recreational reading within the framework of the theory of reasoned action, and to assess the applicability of the theory in predicting students' intentions to read for pleasure and leisure.

Methods

Participants and Procedures

Participants in this study consisted of a convenience sample of students enrolled in nine upper and lower division classes at a public institution. Professors teaching the nine classes distributed self-administered questionnaires. The professors informed students that their participation was voluntary, and that if they did not wish to participate, the students could return blank surveys. They also informed students that the surveys were anonymous and that they should return them in the envelopes provided.

Instrumentation

I constructed the survey instrument according to the guidelines proposed by Ajzen and Fishbein (1980, pp 260-263) for the construction of a standard theory of reasoned action questionnaire. Thirty-seven items assessed the constructs of the theory of reasoned action:

- students' attitudes
- subjective norms
- beliefs
- intentions and behaviors regarding reading for pleasure and leisure

In addition, five items addressed:

- age
- gender
- ethnicity
- class
- GPA

The major focus of this study was intention to read for leisure and pleasure. Students' intentions to read for pleasure and leisure during the academic semester, during spring break, and during the summer break were assessed with six, five-point Likert-type items (e.g. How likely is it that you will read for pleasure or leisure during the current semester? Responses ranged from (1) very unlikely to (5) very likely. Scores were summed to form the intention scores.

Attitudes toward reading for pleasure and leisure were measured with items assessed with semantic differential-type scales. These items assessed whether the students felt that reading for leisure and pleasure was:

- relaxing/stressful
- very important/ very unimportant
- very beneficial/very worthless
- a lot of fun/ very boring
- very essential/very non-essential

The attitude score consisted of the sum of the five items. I measured subjective norm by asking students their level of agreement that the people important to them wanted the students to read for pleasure and leisure.

The theory of reasoned action posits that the antecedents of attitudes and subjective norms are beliefs and the evaluation of those beliefs. The guidelines for instrument construction suggest conducting interviews with representatives of the population in order to elicit their salient outcome and normative beliefs. Thirty students, representative of, but not included among, the study participants, were therefore asked to list the positive as well as negative outcomes of reading for pleasure and

leisure. They were also asked about the relevant individuals who might approve or disapprove of the students' leisure or pleasure reading. The lists were content analyzed, similar items combined, and the resulting information used to formulate the belief-based items.

The students identified eight possible outcomes of reading for pleasure and leisure:

- improved vocabulary
- increased knowledge
- engaged imagination
- improved communication skills
- being kept from doing more important things
- wasting time
- being worn out
- stress relief

I constructed eight survey items that assessed the students' levels of agreement that reading for pleasure and leisure resulted in the stated outcomes. I also constructed items to assess the relative importance of each of the outcomes. The sum of the products of the outcome beliefs and their evaluations make up the belief-based attitude score. Point order was reversed for negative items.

The students identified three referents that might influence their reading for pleasure and leisure: their families, teachers, and friends. For each of the three referents, I constructed items asking respondents to indicate the likelihood that the referents believed that the students should read for pleasure and leisure; items were also constructed that rated the importance of doing what the referent thinks should be done. The belief-based subjective norm score was derived by summing the products of the beliefs and motivations to comply.

The instrument included two behavior based questions: one asked the students how many books they had read for pleasure and leisure during the previous semester, and the other asked how many books the students would read during the summer vacation.

I field tested the instrument with a group of students representative of the study population for clarity and readability. A panel of educators reviewed the questionnaire for face and content validity. In addition, the validity of the attitude portion of the instrument was assessed by comparing 100 students' scores with their scores on Smith's (1990) Adult Survey of Reading Attitudes, a previously validated instrument (Smith, 1990). The scores of the two tests correlated strongly, ($r = .93$), indicating strong concurrent validity. Coefficient alpha calculations were conducted to assess the reliability of the major measures of the theory of reasoned action. The analyses yielded alpha coefficients of .90 - .94 for the intention measures, .85 for attitude, and .70 for subjective norms.

Results

Characteristics of the Participants

Two hundred and one students attending a mid sized public institution participated in the study. Because the surveys were distributed and completed during class time, the response rate was nearly 100 percent. Forty-eight of the students (24.1 percent) were freshmen, 20 (10.1 percent) were sophomores, 44 (22.1 percent) were juniors, 60 (30.2 percent) were seniors, and 29 (13.3 percent) were fifth year seniors or post baccalaureate students. The students represented 23 different academic majors. One hundred forty four of the students were female (72 percent), and 57 were male (28 percent). More than 89 percent of the students were white-non-Hispanic.

Intentions, Attitudes, and Subjective Norms

As indicated in Table 1, students' scores for intentions, attitudes, and subjective norms were above the midpoints of their potential ranges, indicating slightly positive perceptions regarding reading for pleasure and leisure. Nearly half of the students (47.4 percent) responded that it was somewhat likely or very likely that they would read for pleasure and leisure during the current semester, more than half (50.3 percent) indicated that it was somewhat likely or very likely that they would read for pleasure or leisure over the spring break, and 66.2 percent reported

that it was somewhat likely or very likely that they would read for pleasure or leisure over the summer.

In terms of actual reading, 63 percent of the students had read at least one book for pleasure or leisure during the previous semester; the average number of books read by the study participants was 1.54. Of the more than 85 percent ($n = 173$) of the students who reported that they would read for pleasure and leisure over the summer, more than half (51.2 percent) indicated that they would read one or two books.

Table 1

Mean Scores for Theory of Reasoned Action Variables

Variable	Mean Score	Standard Deviation	Possible Range
Direct Attitude	19.93	3.51	5 – 25
Subjective Norm	3.68	0.88	1 – 5
Indirect Attitude	145.45	23.09	8 – 200
Normative Beliefs	45.47	13.21	3 – 75
Intention (Semester)	9.90	3.33	3 – 15
Intention (Spring Break)	9.50	3.95	3 – 15
Intention (Summer)	3.75	1.15	1 – 5

Most of the students had positive attitudes toward reading for pleasure and leisure, with 32.3 percent responding that it was very important, 50.2 percent responding that reading for pleasure and leisure was very beneficial, and 25.9 percent indicating that it was very essential. Sixteen percent of the students reported that reading for pleasure and leisure was a lot of fun, and 29.5 percent indicated that it was very relaxing.

The majority of the students (58.2 percent) either agreed or strongly agreed that the people who are most important to them believe that the students should read for pleasure and leisure.

Belief based measures

The theory of reasoned action posits that the antecedents of attitudes and subjective norms are beliefs and evaluations of those beliefs. The participants in this study identified eight outcome beliefs related to reading for pleasure and leisure. The majority of students believed that reading for pleasure and leisure results in positive outcomes.

More than 92 percent of the respondents agreed or strongly agreed that reading for pleasure and leisure improves vocabulary, 93.3 percent agreed or strongly agreed that it increases knowledge, 90.5 percent agreed or strongly agreed that reading engages the imagination, and 75.1 percent agreed or strongly agreed that reading improves communication skills. Nearly 17 percent of the study participants agreed or strongly agreed that reading for pleasure or leisure kept them from doing more important things, 5 percent agreed or strongly agreed that reading was a waste of time, 9 percent agreed or strongly agreed that reading for pleasure wears them out, and 70.6 percent agreed or strongly agreed that reading helps to relieve stress.

The antecedents of subjective norms are normative beliefs. These are the beliefs that specific referents would want the study participants to engage in the behavior in question. More than 57 percent of the students agreed or strongly agreed that their families think that the students should read for pleasure and leisure; 79.6 percent agreed or strongly agreed that their teachers wanted them to read for pleasure and leisure, and 25.9 percent agreed or strongly agreed that their friends thought they should read for pleasure and leisure.

Predictions of intentions

The theory of reasoned action postulates that intention to perform a behavior can be predicted by people's attitudes and their subjective norms. To test this theory, multiple regression analysis was used; intention to read was regressed on attitudes and subjective norms. For intention to read during the current semester, the analysis yielded a multiple R of .588, thus explaining 33.9 percent of the variance in the students' intentions to read for pleasure and leisure during the semester.

For intention to read over spring break, the analysis resulted in a multiple R of .617 and explained 38.1 percent of the variance in students' intentions. The analysis of intention to read for pleasure and leisure over the summer yielded a multiple R of .597, and thus explained 35 percent of the variance in intentions to read over the summer. Table 2 shows the regression coefficient tables.

Table 2

Regression Coefficient Tables for Multiple Regression Analysis with Intentions to Read Regressed on Theory of Reasoned Action Variables

Variable	Coefficient	Std. Err.	Std. Coeff.	T-value	Prob.
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A. Intention to Read During Current Semester

Intercept	-1.146				
Attitude	.551	.059	.583	9.288	.0001
Subjective Norm	.049	.234	.013	.209	.835

B. Intention to Read During Spring Break

Intercept	-4.573				
Attitude	.676	.069	.601	9.844	.0001
Subjective Norm	.175	.271	.039	.646	.519

C. Intention to Read During Summer Vacation

Intercept	-.011				
Attitude	.199	.020	.612	9.847	.0001
Subjective Norm	-.053	.080	-.041	-.659	.511

In each of the analyses, attitudes contributed the largest standardized regression coefficients in the prediction of intentions (current semester $\beta = .583$, spring break $\beta = .601$, summer $\beta = .612$) thus indicating the importance of attitude in predicting students' intentions to

read for pleasure and leisure. Pearson correlation coefficients were calculated between the direct measures of attitude and subjective norms and their belief based measures. Significant correlations were found between the direct measures and their belief based measures (attitude – belief based attitude, $r = .61$, $p < .001$ subjective norm – belief based subjective norm, $r = .50$, $p < .001$).

Males' and females' intentions, attitudes, and subjective norms regarding reading for pleasure and leisure were compared. Females were significantly more likely to intend to read during the spring break ($p < .05$) and over the summer ($p < .01$) No significant differences in intentions to read during the current semester were noted. The female students had significantly more positive attitudes toward pleasure and leisure reading ($p < .001$) and subjective norms ($p < .001$) than the males.

Because attitudes toward reading for pleasure and leisure made the strongest contribution to intentions to read, a regression analysis was conducted regressing the direct measure of attitude on the eight outcomes identified by the students. A multiple R of .757 indicated that 57.3 percent of the variance in students' attitudes could be explained by the outcome beliefs. The beliefs with the largest significant beta weights were stress relief ($\beta = .392$, $p < .01$), wasting time ($\beta = .318$, $p < .01$), and engaged imagination ($\beta = .121$, $p = .05$). When intentions to read for pleasure and leisure were directly regressed on the eight outcome beliefs, the same three variables (stress relief, wasting time, and engaged imagination) were the significant contributors (all $ps < .01$).

Discussion

The purposes of this study were to examine college students' leisure reading using the constructs of the theory of reasoned action, and to determine the applicability of the theory of reasoned action in predicting college students' intentions to read for leisure or pleasure. The constructs of the theory of reasoned action were able to explain 33.9 percent of the variance in students' reading intentions for the current semester, 38.1 percent of their intentions to read over the spring break, and 35 percent of the variance in students' intentions to read over the summer. The

students' attitudes made the most substantial contributions to the predictions of the students' intentions.

The behavioral outcomes most strongly related to students' attitudes were stress relief, the belief that reading engages the imagination, and that leisure reading is wasting time. In other words, students who believed that leisure reading reduces their stress, engages their imaginations, and is not a waste of time were the students who had the most positive attitudes toward leisure reading, and who in turn had the greatest intentions to read during the semester, during the spring break, and over the summer.

The lack of significant contributions by subjective norms to the students' intentions may explain why the theory was able to predict only 35 to 38 percent of intentions versus the 40 to 50 percent of variance that is generally explained by the theory. Leisure reading may indeed be a behavior where the perceptions of what others think do not play a role in decisions to engage or not engage in the behavior.

The study's limitations include the relative homogeneity of the rather small convenience sample that prohibits generalizing to the college and university population. In addition, the reliance on self-reported information from the students may have included inaccuracies because of faulty recall or difficulties in remembering if reading that was done was required or recreational.

Despite the lack of strong support for the theory of reasoned action in predicting students' leisure reading intentions, the results of this study provide strong support for the role of attitudes in students' intentions, as well as the role of outcome beliefs in forming attitudes.

The information about students' beliefs and attitudes has implications for educators and other individuals interested in improving the literacy of the younger generations. The more students are exposed to reading that is not perceived as stressful, that does engage the imagination, and that is not considered a waste of time, the more positive attitudes and intentions the students are likely to form. Ramsay (2002) addresses the clear distinctions his senior seminar students made between

the joyful reading of their childhoods and the high-stress, assigned readings of high school and college. Teachers and professors need to develop instructional practices that integrate joyful reading into their courses. Assigning, in addition to or instead of standard course textbooks, books that are engaging, relevant, and interesting to students may be one way to help overcome the barriers that get in the way of the love of reading. Allowing for choice in reading assignments may be another way to improve reading attitudes and behaviors. If students are allowed to read what they most enjoy reading, they may develop more enthusiastic and positive attitudes toward their reading assignments.

In addition, teachers and professors can model a love for reading. They can talk about the books that they read and love; they can recommend books to students based on their personal knowledge of the students' interests and personalities.

Daniel Boorstin (1984), the former Librarian of Congress noted that what we do about reading affects citizens' opportunities for self-improvement as well as their capacity for self-government. A challenge to college faculty, therefore, is to develop interventions and course assignments that include readings that engage students without being stressful, and that foster a love of reading that will enable students to become lifelong readers and meaningful participants in their education and in society.

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