The relationship between social engagement and academic engagement in a group of 3rd, 5th, and 7th grade students

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THE RELATIONSHIP BETWEEN SOCIAL ENGAGEMENT AND ACADEMIC ENGAGEMENT IN A GROUP OF 3\textsuperscript{RD}, 5\textsuperscript{TH}, AND 7\textsuperscript{TH} GRADE STUDENTS

by

Christine Marie Williams

A Thesis

Submitted in partial fulfillment of the requirements of the Master of Arts Degree of The Graduate School at Rowan University May 9, 2006

Approved by

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ABSTRACT

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THE RELATIONSHIP BETWEEN SOCIAL ENGAGEMENT AND ACADEMIC ENGAGEMENT IN A GROUP OF 3RD, 5TH, AND 7TH GRADE STUDENTS
2005/06
Dr. Roberta Dihoff
Master of Arts in School Psychology

The primary purpose of this study is to investigate if there is a relationship between the social engagement and academic engagement of 3rd, 5th, and 7th grade students. The secondary purpose of this study is to examine whether a student's grade level contributes to the strength of this relationship. Sixty-one (31 males and 30 females) 3rd, 5th, and 7th grade students, between the ages of 8 and 13, participated in this study. They were recruited from both elementary and middle schools in a suburban New Jersey school district. Each student was observed for 15 minutes and the student's adaptive and maladaptive behaviors were recorded during this period to generate an academic engagement percentile score for the student. Then, the students completed The Friendship Features Scale to in order to establish a social engagement score for each student. The scores from each of these measures were analyzed using both Pearson correlations and tests of significance (One-way ANOVA). The results suggest that the positive correlation between academic and social engagement is stronger for males than it is for females. The researcher also found that 7th grade students are significantly less engaged in academic activities than 3rd or 5th grade students.
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Chapter 1: Introduction

Statement of Need

There are 6 warning signs that begin to develop in the early elementary school grades, which can help to predict whether a student will drop out of school. One of these signs is unsatisfactory relationships with peers, and another is low achievement. In this study, the researcher will determine if social engagement is related to academic engagement. If there is indeed a positive correlation between social and academic engagement, educators can facilitate positive peer relations in the classroom and, therefore, enhance the achievement of their students. By changing the school environment, educators will be able to influence students’ success.

Relationships with peers seem to become more important as children reach puberty. Friends begin to replace parents as the most important source of guidance in a child’s life. This study will uncover when this shift begins. The results will examine whether social relationships are as influential to the academic lives of 3rd graders as they are to the academic lives of 7th graders. This knowledge will help educators plan age-appropriate, socially-oriented classroom interventions.

Purpose

The primary purpose of this study is to investigate if there is a relationship between the social engagement and academic engagement of 3rd, 5th, and 7th grade
students. The secondary purpose of this study is to examine whether a student’s grade level contributes to the strength of this relationship.

Hypotheses

The primary hypothesis of this study is that there will be a positive correlation between the level of academic engagement and the level of social engagement of the students. In other words, those students who are highly engaged with their peers will also be highly engaged with their schoolwork and vice versa. The two dependent variables that will be measured in this study are social engagement and academic engagement.

A student’s level of social engagement will be measured by his score on The Friendship Features Scale, which determines the student’s level of satisfaction with his peer relationships. A student’s level of academic engagement will be measured by his score on the Behavior Assessment System for Children (BASC-2) Student Observation System (SOS). The SOS is a tool used to assess both the adaptive and maladaptive classroom behavior of children.

The secondary hypothesis of this study is that there will be a stronger correlation between social engagement and academic engagement for the older students (grade 7) than for the younger students (grade 3). In other words, as students get older, peer relationships will have a greater effect on student success. To test this hypothesis, the grade of the students will be used as an independent variable.
Theory/Background

The current research project is a small study within a larger study entitled The Successful Student Study. The Successful Student Study is being carried out in both Nebraska and New Jersey by school administrators, school psychologists, teachers, University faculty, and graduate students. It was designed to “examine the relationships between classroom and school-wide learning environments and students’ academic engagement, social adjustment, and behavioral conduct”. The belief is that by altering certain classroom characteristics, educators can get students more engaged in school.

The current study focuses on the relationship between friendships and academic engagement. The idea is that by fostering peer relationships in the classroom, educators can not only increase students’ social competence but also their academic competence. The theories of Lev Vygotsky and Albert Bandura support this idea.

One of the focal points of Vygotsky’s sociocultural theory is that there are social sources that contribute to an individual’s development. He believes that social interaction leads to higher mental functioning. This aspect of his theory can be summed up with the following excerpt from his 1978 book Mind in Society: “Every function in the child’s cultural development appears twice: first, on the social level, and later, on the individual level; first between people (interpsychological) and then inside the child (intrapsychological). All the higher functions originate as actual relationships between individuals” (p. 57).

This means that, according to Vygotsky, children need to form relationships with others, especially their peers. It is this interaction among children that leads to their
cognitive development. Vygotsky's sociocultural theory supports the current study's hypothesis because it establishes a relationship between social engagement and academic engagement. The two are linked in such a way that without appropriate peer interactions, a child cannot fully develop his cognitive capacities. Vygotsky's theory also supports the idea that by improving peer relationships in school, educators can increase academic success.

Bandura's social learning theory is similar to Vygotsky's sociocultural theory in that it emphasizes that people learn through interacting with and observing the actions of others. Children model the behaviors of others, especially when the behavior results in a positive outcome, and they are more likely to model a behavior performed by someone similar to them (Kearsley, 2005). In the classroom, positive peer relationships will result in children modeling positive behaviors, such as listening to the teacher and doing seat work in a quiet manner. Bandura's theory reinforces the importance of peer relationships to children's development.

All in all, the theories of Vygotsky and Bandura provide support for the motivation of this study. They propose that there is an association between peer relationships and cognitive abilities, and a wide body of research exists that supports their theories. This study will help determine the strength and direction of this relationship as well as whether educators should attempt to alter the social environment of a classroom with the goal of enhancing the academic engagement of their students.
Definitions

Social engagement is defined as a student’s level of satisfaction with his friendship relationships. It will be measured by using The Friendship Features Scale, which contains questions that relate to the friendship processes of companionship, validation, aid, self-disclosure, conflict, and exclusivity.

Academic engagement is defined as positive classroom behavior, including responding to the teacher or lesson, peer interaction, working on school subjects, and transition movement. It will be measured by using the BASC-2 Student Observation System. To conduct the BASC-2 SOS, a researcher observes a child for 15 minutes and records what the child is doing every 30 seconds. The child could be engaging in an adaptive behavior (responding to the teacher or lesson, peer interaction, working on school subjects, or transition movement) or a problem behavior (inappropriate movement, inattention, aggression, etc.). At the end of the 15-minute observation, each student will receive an academic engagement percentile score.

Assumptions

The researcher is aware of a few possible confounds. However, these confounds have been corrected and will not affect the outcome of the study. All students were randomly chosen to participate in the study and were blind to the hypotheses. The researcher also assumed that the students filled out The Friendship Features Scale in an honest manner. Finally, the primary researcher was not the only researcher using the BASC-2 SOS to collect data for the study. Therefore, it is assumed that both researchers
were adequately trained in BASC-2 SOS data collection and that there is inter-rater reliability.

Limitations

Although the major confounds were considered and corrected, the present study has a few remaining limitations. First, the data was collected from one school district in a suburban area of New Jersey. Therefore, the findings have limited applicability to other geographical areas. Similar data was also collected for the Successful Student Study in Lincoln, Nebraska, but that data will not be available to review for the current study. Second, the test administrators were not blind to the study’s purpose. Their assumptions about the outcome of the study could affect the results.

Summary

This first chapter has provided an overview of the present study. It has explained why this research is important, the theory behind the research, and the researcher’s hypotheses. Chapter 2 will review the research on friendships in school and the impact of strong peer relationships on academic success. The research design, including information about the participants, materials, and procedure, will be discussed in Chapter 3, followed by the presentation of the study’s results in Chapter 4. Finally, in Chapter 5, the researcher will discuss the results and their implications as well as give suggestions for future research.
Chapter 2: Literature Review

This chapter will review the existing body of research that is related to both the social and academic engagement of children. It will begin with a description of the characteristics of friendships and will go on to discuss how the importance of peer relationships is related to a child's age. Next, the researcher will cite literature that supports the idea that it is not only the presence of friendships, but also the quality of friendships, that influence a child's attitudes and behavior. Finally, the researcher will move on to discuss the topics that are most relevant to the current study. This literature will illustrate how the presence of peer relationships can promote social competence, academic success, and certain dimensions of academic engagement (a desire to attend school, on-task behavior, and class participation). A discussion of the importance of in-class social skills interventions will also be included. The chapter will close with a summary of the chapter and a description of the unique characteristics of the current study.

Peer Relationships

During their school years, children come in contact with numerous peers. However, it takes more than knowing another child to form a friendship with that child. Many children form friendships with ease, while others struggle with forming
Therefore, Renshaw and Asher (1983) compared the goals and strategies that high-status and low-status children use to form friendships. They found many differences. Low-status children were less friendly and outgoing with peers and were more likely to avoid friendship-making situations. From these findings, it seems that the ability to have fun and frequently interact with peers is critical to forming friendships.

Friendships are mutually beneficial. Berndt and Perry (1986) interviewed children between the ages of seven and fourteen (2nd-8th grades) about the amount and types of social support provided to them by their friends and acquaintances. The researchers found that children characterized their friends as more supportive than their acquaintances. Play, prosocial behavior, intimacy, loyalty, and self-esteem enhancement were also all associated with friendships.

Another characteristic of friendships, rough-and-tumble play, involves running, chasing, fleeing, wrestling, and open hand hitting. This type of interaction allows children to initiate cooperative play and form friendships (Pellegrini, 2002). All in all, childhood friendships are formed through frequent association and are both playful and socially supportive.

Age

Berndt and Perry (1986) found that as children enter into middle childhood and through adolescence, friendships become more intimate. Children begin to value the relationships that they have with their peers for emotional support in addition to companionship. As a result, children begin to turn away from their parents as their sole source of guidance and incorporate their peers into their decision-making processes.
With age, children conform less to the expectations of their parents and more to the expectations of their peers (Berndt, 1979).

Costanzo (1970) found that children as young as 7 years old will conform to the judgments of their peers. However, childhood peer conformity reaches its peak between the ages of 12 and 13 when children are becoming more involved with their peer groups. These findings support the researcher’s second hypothesis that social engagement will be more strongly correlated with academic engagement for the students in 7th grade because their friendships will be of greater value to them than the friendships of the 3rd grade students.

Quality of Friendships

The quality of the friendships that children form affects their school experience. Students who form positive friendships have greater self-esteem. They believe that their peers accept them and that they have positive behavioral and academic characteristics (Keefe & Berndt, 1996). These beliefs are not unfounded. Kindergarten children who feel that they receive assistance, support, and positive feedback from their friends are happier in school and have more positive attitudes toward school (Ladd et al., 1996).

Similarly, Berndt and Keefe (1995) found that adolescents who have positive friendships based on intimate self-disclosure, prosocial behaviors, and support are more involved and, therefore, less disruptive in school. In addition, those students who have friends who have positive attitudes toward school place a high value on education and succeed in the classroom (Clark, 1991). The Friendship Features Scale will help the researcher to measure the level of positive social engagement of the students.
Social Competence

Having friends helps children develop social competence, or “the ability to accomplish appropriate goals in social situations” (Hollinger, 1987). Friendships are a natural and accessible source of peer models, and, upon reviewing the literature; Shunk (1987) found that peer models are beneficial to the development of children. By observing and modeling competent peers, children can enhance their academic and social skills.

Peer models can assist children in learning the skills and rules necessary to cope with the academic demands of the classroom setting (Schunk & Hanson, 1985). Similarly, peer models can make children more aware of normative behavior. Ladd & Oden (1979) found that one difference between children who are lowly accepted and children who are highly accepted is that the lowly accepted children are less aware of the norms regarding helpful social behavior. This may make it difficult for them to both give and receive help from their peers. Consequently, they may also be less socially engaged and enjoy school less. The lack of peer relationships can also lead to more extreme situations such as delinquent behaviors and academic failure (Hollinger, 1987). Therefore, the absence of friendships in childhood can be as detrimental as the presence of friendships can be advantageous.

Academic Success

In addition to assisting with the development of social competence, there are a number of ways that peer relationships help students attain academic success. First,
friendships can foster a love of school and learning by providing emotional security and a desire to achieve (Wentzel, 1991b). Ladd and Price (1987) found that those Kindergarten students who have a larger proportion of familiar peers in their class and more friendships outside of school also have a more positive view of school. Likewise, Ladd and his colleagues (1997) found that those children with a larger circle of friends, higher levels of peer acceptance, and lower levels of peer victimization liked school more. Beginning in Kindergarten, the school experience of children is shaped by their peer relationships.

Second, friends can both unintentionally and intentionally help each other with academic tasks. Without realizing it, more competent students serve as models for struggling students. By attending and asking questions, competent students set an example for the class of how to develop their cognitive abilities and how to handle academic demands (Schunk & Hanson, 1985; Schunk, 1987). Peers also assist each other with classroom assignments. They may clarify instructions, answer each other’s questions, and share school supplies (Wentzel, 1991b). Webb (1982) found that this type of cooperative learning, which involves questions and explanations, results in academic gains. Webb’s research demonstrates the importance of a peer support system to students’ academic success.

Third, peer relationships can promote self-efficacy, or “personal judgments of performance capabilities in a given domain of activity that may contain novel, unpredictable, and possibly stressful features” (Schunk, 1985). By serving as an avenue for social comparison, peer relationships help students learn about their own capabilities from observing the performance of others. If a student sees that his friend can accomplish a specific academic task, he will be more likely to believe that he can also
accomplish that task (Schunk, 1985). In fact, observing a peer complete a mathematical task leads to higher self-efficacy for learning than observing a teacher complete the same task or not observing a model (Schunk & Hanson, 1985).

Finally, positive friendships can serve as motivation for academic success. Social students want to have the opportunity to interact with their friends. In the classroom, this interaction comes in the form of participation in classroom activities and academic collaboration, which are both avenues to success (Wentzel & Watkins, 2002). As children enter into early adolescence, social competence becomes a powerful predictor of academic achievement. Social competence is also related to an increase in cognitive resources, such as the ability to resolve interpersonal problems (Ford, 1982; Wentzel, 1991a). On the whole, there is a positive relationship between prosocial behaviors and achievement (Wentzel, 1993), and, therefore, peer relationships are vital to students’ academic success in the school environment.

Similarly, the absence of peer relationships is quite detrimental to students’ school experience. Being socially rejected by peers can and frequently does result in aggression, rule violations, hyperactivity, and disruptiveness in children (Coie, Dodge, & Kupersmidt, 1990). Other students also believe that rejected children have lower academic ability (Berndt & Das, 1987), and this notion was supported by Dishion (1990). He found that rejected children do not only have more behavioral problems than their peers, but they also have more academic problems.

Finally, by conducting a 4-year longitudinal study with a group of 5th through 9th graders, Barclay (1966) found that a lack of social desirability does not only affect the type of school experience that a child has, but it also affects the number of grades that a
student will complete. Those students who were socially undesirable in elementary school were much more likely to drop out of middle school. These findings regarding the effects of social rejection on students’ academic achievement also serve as support for the importance of peer relationships to academic achievement.

Fostering Prosocial Behavior

Increases in social competence have been linked to greater academic success (Malecki & Elliott, 2002; Wentzel, 1993). Therefore, it would seem logical to propose that interventions, which are aimed at increasing socially desirable behaviors, would also impact academic achievement. The work of Cobb and Hops (1973) and Hops and Cobb (1974) supports this theory.

The researchers trained teachers to teach the academic survival skills of attending, working, and volunteering to their students (Cobb & Hops, 1973; Hops & Cobb, 1974). These skills are considered to be prosocial in nature because they lead to less disruption, more time on-task, and greater social desirability (Coie & Krebeil, 1984). They found that students’ reading achievement could be increased indirectly by reinforcing those students who attend, work, and volunteer. Therefore, teaching children prosocial academic survival skills is one type of intervention that can have a positive effect on academic achievement (Cobb & Hops, 1973; Hops & Cobb, 1974).

Another way that teachers can foster prosocial behavior is through encouraging peer interaction on academic tasks. Cobb (1972) observed the behavior of 4th graders during arithmetic classes. He found that those students who both attended to their work and collaborated with peers about academic tasks had higher standardized test scores than
those students who attended to their work but did not interact with peers. Social interaction is a means by which children can practice their academic skills. Therefore, by encouraging on-task peer interaction, educators can have an impact on the academic achievement of their students.

Classroom Engagement

Research has shown that an effective teacher can shape her students' school experience by fostering a love of learning and an appreciation of academic material (Midgley, Feldlaufer, & Eccles, 1989). Similarly, by serving as a source of support and academic motivation, peers can also influence each other to become more involved in school (Wentzel & Watkins, 2002). For the purposes of the current study, classroom involvement will be referred to as academic engagement. Academic engagement is defined as positive classroom behavior, including responding to the teacher or lesson, peer interaction, working on school subjects, and transition movement.

In 1998, Wentzel examined the link between young adolescents' (6th grade) relationships with peers and their motivation at school. She found that those students who perceive that they have supportive peers are motivated to help and cooperate. They are emotionally stable and are, therefore, able to take a strong interest in school. The presence of supportive peer relationships affects academic engagement in a positive but indirect manner.

Goodenow (1993) used self-report measures to assess students' (6th-8th grade) perception of belonging and support in a specified class as well as teacher reports to assess students' academic effort and grades, and her findings are similar to the findings of
Wentzel (1998). Goodenow found that when students feel as though they have a place in the class and are supported by their peers, they show increased academic effort. Academic effort is another sign of engagement, and, again, the presence of peer relationships motivates students to become involved with academic tasks.

Because Goodenow (1993) used students from 3 different grades in her study, her findings go beyond the findings of Wentzel (1998). Goodenow was able to compare and contrast the effects of perceived peer support as a function of grade level. She found that 6th graders are more highly influenced by their perceived level of peer support than 8th graders. In other words, as students get older, they rely less on peers as an external source of academic motivation and begin to rely on internal sources of motivation. This finding is especially important when considering the current study, which examines children in the 3rd, 5th, and 7th grades. According to the findings of Goodenow, these children will rely on external sources of motivation in order to become engaged academically, and, therefore, social engagement should be related to academic engagement.

Research conducted by Wentzel (1994) illustrates that the link between peer relationships and academic engagement is bidirectional. Just as Wentzel (1998) found that supportive peer relationships can promote academic engagement, she (Wentzel, 1994) also found that students who are engaged with the activities of the classroom become more highly accepted by their peers. This is especially true of those children who engage in academic prosocial behaviors, such as helping peers with academic tasks.

Thus far, the research discussed regarding academic engagement has focused on an indirect relationship between peer support and interaction and academic engagement,
with academic motivation as the mediating factor. Connell and Wellborn (1991) propose a model in which peer engagement is directly related to classroom engagement. They postulate that when an individual perceives that he is supported socially, he is able to pursue socially valued goals. In other words, social engagement helps to fulfill us psychologically and results in positive affect, positive behavior and positive cognition. Therefore, the emotional security, which we receive from engaging socially, directly leads to academic engagement in the classroom.

The theoretical framework proposed by Connell and Wellborn (1991) is supported by the work of Gottman, Gonso, and Rasmussen (1975), Ladd, Birch, and Buhs (1999), and Buhs and Ladd (2001). Gottman et al. (1975) observed children during periods of class lecture, seatwork, small-group work, and play and coded the children’s behavior into many categories. The time that the children spent on the various activities was then compared to their popularity (peer acceptance) scores. The researchers found that those children who were described as popular (high number of friendships) spent less time alone and off-task, which was described as daydreaming, than their less popular peers. These findings illustrate the direct connection between social engagement and academic engagement.

In 1999, Ladd et al. conducted 2 similar studies with a group of Kindergarten students. These studies investigated the impact of peer relationships on classroom participation. In order to measure the students’ level of classroom participation, the researchers had the students’ teachers complete the Cooperative and Independent Participation subscales of the Teacher Rating Scale of School Adjustment (TRSSA). To measure peer acceptance, the students used a picture sorting procedure to identify the
degree to which they enjoyed playing with each of their classmates. The students were also asked to nominate their 5 best friends and were given a friendship score, which depended on the number of peers who reciprocated the friendship nomination.

Complementary to the findings of Gottman et al. (1975), Ladd and his colleagues (1999) found that those students with more positive peer relationships also participated in a positive way in class. In contrast, those students who had problems forming positive peer relationships had trouble participating in class. Thus far, social engagement has been shown to affect 2 different aspects of academic engagement, on-task behavior and class participation.

Buhs and Ladd (2001) found that, in addition to classroom participation, peer relationships also affect a child’s desire to attend school. Again, they used the TRSSA to measure the classroom participation of Kindergarten students. Teachers also used the Excluded by Peers subscale of the Child Behavior Scale to assess the degree to which children are excluded from classroom activities by peers. Finally, the researchers had the students complete a 5-item school avoidance scale to assess the children’s desire to avoid school. When the data was analyzed, Buhs and Ladd (2001) uncovered that those children who are rejected by their peers, participate in class less and wish that they could avoid school. Therefore, the absence of peer relationships has a negative effect on academic engagement.

Summary

The research presented in this chapter serves as a framework of support for the 2 hypotheses of the current study. First, the research illustrates that friendships are
mutually beneficial relationships that become more influential as children reach early adolescence. Next, it has provided evidence that positive friendships have the power to not only increase a child’s level of social competence but also to promote academic success and engagement in classroom activities.

At first glance, it seems that previous researchers have already found that there is a correlation between social engagement and academic engagement. However, they have only shown a link between social engagement and any one dimension of academic engagement (a desire to attend school, on-task behavior, and class participation). By utilizing the Student Observation System, the current study will allow the researcher to gather a comprehensive assessment of academic engagement, which will include responding to the teacher/lesson, peer interaction, working on school subjects, and positive transition movement.

The current study will also deviate from much of the previous research in another sense. This study will utilize The Friendship Features Scale, which measures children’s satisfaction with their friendships rather than the number of friendships they have. In this way, the researcher will be able to determine if it is the quality of children’s friendships that matters. In conclusion, this chapter reviews literature that provides support for the current study. However, the findings of this study will also add unique contributions to the current body of literature.
Chapter 3: Method

Participants

Sixty-one (31 males and 30 females) 3rd, 5th, and 7th grade students, between the ages of eight and thirteen, participated in this study. They were recruited from 3rd, 5th and 7th grade classrooms in a suburban New Jersey school district. The 3rd grade students attended the district’s elementary school, while the 5th and 7th grade students attended the district’s middle school. After both the school district and classroom teachers agreed to take part in the study, a request to participate was sent to the parents of all 3rd, 5th, and 7th grade students. The parents were advised to send the form back or contact the school if they did not want their child to be eligible to participate in the study. Only one student was eliminated from the subject pool for this reason.

Between four and eight students from each 3rd, 5th, and 7th grade homeroom were chosen at random to participate in the study. These students were asked for their assent before completing The Friendship Features Scale. All 61 students were observed with the BASC-SOS, but only 56 students completed The Friendship Features Scale. Of the 5 students who did not complete The Friendship Features Scale, 2 were not fluent in English, 2 were absent on the day that the scale was administered, and 1 chose not to complete the survey.
Materials

The level of social engagement of the students was measured by using The Friendship Features Scale. The Friendship Features Scale was adapted by Ladd, Kochenderfer, and Coleman (1996) from the Friendship Features Interview for Young Children. Reports regarding the reliability and validity of this measure are not yet available.

The Friendship Features Scale contains questions that relate to the friendship processes of companionship, validation, aid, self-disclosure, conflict, and exclusivity. Most items on the Friendship Features Scale can be answered by choosing 1 of 4 response choices. These choices are “No, never”, “Some of the time”, “Most of the time”, and “Always”. However, the response choices for 3 of the items were “A lot”, “Some”, “A little bit”, and “Not at all”. Depending on how a particular question is worded, “Always/A lot” could be the most positive or most negative response choice. The same is true for a response of “No, never/Not at all”. A score of 4 was attached to the most positive response choice for a question, and a score of 1 was attached to the most negative response choice. The scores of 2 and 3 corresponded to “Some of the time/A little bit” and “Most of the time/Some”, but their order depended on the nature of the question. Finally, the last item could only be answered with a response of “Yes” or “No”. A score of 4 was attached to a “Yes” response, while a score of 1 was attached to a “No” response. The scores for each of the 24 questions was added together to generate an overall friendship satisfaction score for each child.

Academic engagement was measured by using the Behavior Assessment System for Children (BASC-2) Student Observation System (SOS). In order to ensure that the
SOS was a valid measure of classroom behavior, Reynolds and Kamphaus (1992) had a panel of 20 clinicians identify both adaptive and maladaptive behaviors that children display in a classroom. Then, they grouped these behaviors into 4 adaptive and 9 maladaptive categories. The item pool was developed by professionals with experience in a school setting, and, therefore, is a valid measure of observable classroom behavior. In contrast, reliability data for the SOS can only be obtained by observing the same child on more than 1 occasion and, preferably, in different classes. However, the reliability and validity of the SOS can be enhanced by familiarizing the researchers with the behaviors used in the SOS and their definitions.

The BASC-2 SOS is divided into 3 parts. Part A consists of the behavior key, which lists all possible behaviors. It also contains a checklist, which is used at the end of the 15-minute observation period to record the frequency of each behavior (never observed, sometimes observed, or frequently observed). Part B consists of the form that is used to document the child’s behavior, and Part C is used to document any important information regarding the teacher’s interactions with the child during the observation period.

To conduct the BASC-2 SOS, a researcher observed a child for 15 minutes during a period of independent work, teacher-directed activity, or group activity (or any combination of the 3 activities) and recorded what the child was doing every 30 seconds. The child could be engaging in an adaptive behavior (responding to the teacher or lesson, peer interaction, working on school subjects, or transition movement) or a problem behavior (inappropriate movement, inattention, aggression, etc.). Each student received an academic engagement score, which was recorded as a percentile. This score was
obtained by dividing the number of adaptive behaviors displayed by a student by the total number of opportunities to behave adaptively (120 = 30 intervals times 4 types of adaptive behaviors).

Procedure

In this correlational study, the relationship between the 2 dependent variables, social engagement and academic engagement, was measured. Social engagement is a student’s level of satisfaction with his friendship relationships. It was measured by a student’s score on The Friendship Features Scale. Academic engagement is positive classroom behavior, including responding to the teacher or lesson, peer interaction, working on school subjects, and transition movement. It was measured by a student’s adaptive behavior score on the BASC-2 SOS. A Pearson correlation was performed to determine the strength and direction of the relationship between social engagement and academic engagement.

In addition to the 2 engagement variables, the grade of the students (3rd, 5th, or 7th) served as a third variable. Separate Pearson correlations were performed to determine the strength and direction of the relationship between social engagement and academic engagement for the 3rd graders, the 5th graders, and the 7th graders. These correlations were followed by 2 One-way Analyses of Variance (ANOVA) to determine if a student’s grade (age) plays a role in determining his level of academic engagement or his level of social engagement.

To correct for possible confounds, all students were randomly chosen to participate in the study and were blind to the hypotheses. In addition, both researchers
were trained in BASC-2 SOS data collection, and it was assumed that there was inter-rater reliability.

The researchers traveled to the school district’s elementary and middle schools to conduct the study. They observed 1 participant at a time using the BASC-2 SOS, and these 15-minute observation sessions occurred over 10 days. After the participants had been observed, the researchers returned to the schools to administer The Friendship Features Scale to the participants. Before completing the scale, the researchers read the assent form to the participants and the participants signed the form. The researchers also answered any questions that the students had.

The scale was administered to the 5th and 7th graders in small groups of 4-7 students, and the scales were completed by these students over a period of 2 days. The 5th and 7th grade students read the scale on their own and answered the questions at their own pace. In contrast, the primary researcher read the scale to the 3rd grade students, who were encouraged to follow along with the rest of the group. All 3rd graders completed The Friendship Features Scale on the same day (one group of 19 students). After the researchers administered The Friendship Features Scale, they did not return to the Edgewater Park schools for any reason.

The primary hypothesis of this study is that there will be a positive correlation between the level of academic engagement and the level of social engagement of the students. In other words, those students who are highly engaged with their peers will also be highly engaged with their schoolwork and vice versa. The secondary hypothesis is that there will be a stronger correlation between social engagement and academic
engagement for the older students (grade 7) than the younger students (grade 3). As students get older, peer relationships will have a greater effect on student success.
Chapter 4: Results

Hypotheses

The primary purpose of this study is to determine whether students who are more academically engaged in the classroom are also more engaged with their peers. The researcher hypothesized that there would be a positive correlation between the level of academic engagement and the level of social engagement of the students. The secondary purpose of the study is to determine whether a student’s grade in school affects the strength of this relationship. The researcher believed that there would be a stronger correlation between the social engagement and academic engagement for the older students (grade 7) than for the younger students (grade 3).

Findings

The researcher’s primary hypothesis was not supported. A Pearson’s correlation found the relationship between academic engagement and social engagement to be nonsignificant, \( r = +.21, n=56, p>.05, \) two tails (Figure 4.1). However, the small positive correlation illustrates a trend in the data that will be explored in Chapter 5.
Although there was not a significant relationship between academic and social engagement for the entire sample, there was a significant relationship between these 2 dependent variables when gender was used as a grouping variable. Two separate Pearson's correlations were performed, 1 for males and 1 for females. The relationship between academic engagement and social engagement for females was nonsignificant, \( r = -.01, n=27, p>.05, \) two tails (Figure 4.2). In contrast, there was a significant medium positive correlation between academic engagement and social engagement for males, \( r = +.46, n=29, p<.05, \) two tails (Figure 4.2). Males who were engaged in the classroom were more likely to be satisfied with their peer relationships than males who were not engaged in the classroom.
In reference to the second hypothesis, a significant correlation between academic engagement and social engagement was not found for 3rd grade students, $r = +.22$, $n=19$, $p>.05$, two tails, 5th grade students, $r = - .10$, $n=17$, $p>.05$, two tails, or 7th grade students, $r = + .38$, $n=20$, $p>.05$, two tails. However, the strongest correlation between these two variables (medium) was found for the students in 7th grade, indicating a trend in the data.

It is also important to note that 2 separate One-way Analyses of Variance were used to determine whether grade level had a significant effect on either academic engagement or social engagement. There was no significant effect between grade level and social engagement, $F(2, )=2.02$, $p>.05$. However, there was a significant effect between grade level and academic engagement, $F(2, )=4.64$, $p>.05$ (Figure 4.3). A Tukey
HSD post hoc test was used to determine which groups were significantly different. There was a significant difference between the academic engagement scores of 7th grade students and 5th grade students as well as between 7th grade students and 3rd grade students. However, there was no significant difference between the academic engagement and social engagement of 3rd grade students and 5th grade students. In sum, the 7th grade students were significantly less engaged in the classroom than 3rd and 5th grade students.

Figure 4.3: The Relationship between Grade in School and Academic Engagement

Summary

All in all, the researcher's first hypothesis was partially supported. The relationship between academic engagement and social engagement was not significant, but it was positive. However, the researcher did find a significant relationship between
academic and social engagement for the male subjects. This correlation was both medium in strength and positive in direction.

The researcher’s second hypothesis was also partially supported. The strongest correlation between academic engagement and social engagement was found for the group of 7th grade students. This correlation was a medium positive correlation in comparison to a small positive correlation for the 3rd grade students and a small negative correlation for the 5th grade students. However, just as the correlations for the 3rd and 5th grade students did not reach statistical significance, neither did the correlation for the 7th grade students.

In addition to the results that were directly related to the hypotheses, the researcher also found a significant effect between grade level and academic engagement. The 3rd and 5th grade students were significantly more engaged in classroom activities and lessons than the 7th grade students. The relevance of this finding as well as the study’s other findings, both insignificant and significant, will be discussed in Chapter 5.
Chapter 5: Discussion
Findings and Implications

This study generated a number of remarkable findings. Some were anticipated, while others were not. The primary finding was that, in this sample of 3rd, 5th, and 7th grade students, there was not a significant relationship between academic engagement and social engagement. That is, those students who were observed and rated as being highly involved in the activities of the classroom were not necessarily also highly involved with their peers.

This finding stands in contrast to the work of Gottman et al. (1975), who found that those children who are more highly accepted by their peers spend less time alone and off-task in the classroom. Similarly, the current finding does not support the theory that students who perceive that they have supportive peer relationships become more interested in school and more involved in academics (Goodenow, 1993; Wentzel, 1998). However, the subjects in the studies conducted by Goodenow (1993) and Wentzel (1998) were in grades 6 through 8. It is possible that the same relationship was not found in the current study because the students in the 3rd and 5th grades have not reached the age where their peers have a strong influence on their academics. These students may be looking more to their parents for support than to their peers. However, one would expect this dynamic to change as the children reach early adolescence (Berndt & Perry, 1986).

It is also important to note that although the correlation between academic engagement
and social engagement did not reach statistical significance, it was positive in direction. With a larger sample of students, this positive trend may have reached statistical significance.

The next finding was not anticipated in the researcher’s hypotheses. Male subjects who were highly engaged in the classroom were also highly engaged with their peers, and vice versa. The literature review provided in this study does not sort out the differences between academic engagement and social engagement when analyzed in terms of gender. This phenomenon could be explained in a number of ways. First, the presence or absence of peer relationships may be more salient for males, and, therefore, the positive and negative effects of these relationships may have more influence over their lives. Second, males may have personality traits that lead them to look to an external source of academic motivation (peers), while girls may have internal sources of motivation. Finally, males are known to have a greater incidence of attention problems and could be looking to their peers to keep them on-task. It would be beneficial to explore this curious finding in future research.

Next, there were no significant correlations between academic engagement and social engagement when examined by grade. However, there was a medium and positive correlation between academic engagement and social engagement for 7th graders. Although this correlation was not significant, it was moderate in size and would have, most likely, reached statistical significance with a larger sample size. The same is not true for the 3rd grade students and the 5th grade students. According to Costanzo (1970), this could be because childhood peer conformity reaches its peak between the ages of 12 and 13 (7th grade). Again, it may be that the 3rd and 5th grade students were still in the
process of becoming involved with peer groups, and the effect of academic engagement on social engagement could not yet be seen.

Finally, 7th grade students were significantly less involved in the activities of the classroom than both 3rd grade students and 5th grade students. Early adolescence is the time when children begin to incorporate their peers in the decision-making process. If a student's friend(s) is not engaged in the classroom experience, it is more likely that the student will also not be engaged. The older the student, the more likely it is that the student will be swayed by the actions of peers (Berndt & Perry, 1986). This chain reaction explains why the 7th grade students were less academically engaged. Overall, the findings suggest that both age and gender should be taken into account when examining the effects of social relationships on academic engagement.

Limitations

Although this study produced a number of interesting findings, there were also a number of factors that limited the results of the study. Two of these limitations occurred because of the sample of students that was used in the study. First, the sample size was too small. Only 56 students were both observed and completed The Friendship Features Scale. If more students had been involved in the study, more significant results would have been generated. Specifically, one would have predicted a stronger overall relationship between academic engagement and social engagement and a significant difference in the strength of this correlation when examined by grade level. Second, because this study was conducted in 1 suburban school district, it has limited applicability to other geographical areas and to students with different socioeconomic backgrounds.
The second group of limitations surfaced during data collection. Due to time constraints, the researcher was not able to collect the data in a manner that would have been most conducive to the integrity of the results of the study. The students were observed during a number of different situations. Some students were observed when they were working independently, others were observed while the teacher was giving a lesson, and some students were observed while they were doing group work with other students. In addition, the students were observed during different subjects, which were taught by different teachers. Therefore, the differences in learning environments may have affected the results.

Next, although the 5th and 7th grade students completed The Friendship Features Scale in groups of 4-7 students, all 3rd grade students completed the scale in one group (19 students). The survey was also read to the 3rd grade students, while the 5th and 7th grade students read the survey themselves. Again, non-standardized testing conditions may have led to increased variability in the results.

Also, the researchers were not blind to the purpose of the study. Their hypotheses may have affected how they recorded a student’s behavior during the 15-minute observation period. Finally, the inter-rater reliability of the 2 researchers was not established. Although the 2 researchers were trained by the same individual on data collection procedures, there may have been discrepancies in how they coded behaviors, and these possible discrepancies were left undetected. Although this study added unique insights to the body of literature on the relationship between academic and social engagement, the limitations described previously must be considered when interpreting the results.
Future Research

This study illustrated a combination of both distinct limitations and thought-provoking findings, therefore, future research should both address the limitations and build upon the significant findings. To address the limitations associated with test conditions, it would be interesting to group the students by the type of class activity being conducted (independent work, teacher-directed lesson, or group activity). In this way, one would be able to distinguish which type of class activity results in the greatest amount of academic engagement. This type of research would provide educators with information that would enable them to get students more involved in the classroom. It would also be important to conduct this research in more than one school by researchers who have high inter-rater reliability.

Then, to build upon the finding that academic engagement and social engagement were moderately correlated for males only, future research should attempt to uncover why this happened. What makes the peer relationships that males have more influential over their behavior than the peer relationships of females? It would also be interesting to uncover how administrators, educators, and parents can enhance the social engagement of male students in an attempt to increase their academic engagement.

Because the effects of gender on the relationship between academic and social engagement were significant in this heterogeneous school population, examining this relationship in gender segregated schools may also be of value. Future research should address whether being grouped according to gender affects both the influence of peer
relationships and the level of academic engagement in students. These findings would generate a whole new set of questions regarding gender and engagement.

Finally, research that follows this study should focus on how we can get all students, especially adolescents, to become more engaged in the classroom. Educators and parents want school to be a place that their students and children want to attend. As advocates for children, we must challenge ourselves to assist students in building positive peer relationships. This should be done early in the educational process so that when students reach adolescence, they have the peer support necessary to become a success. We cannot allow peer rejection to be the reason that students disengage from their academic endeavors.
References


