

**Dimensions of Principal Support Behaviors and their Relationship to Organizational
Citizenship Behaviors and Student Achievement in High Schools**

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**Dimensions of Principal Support Behaviors and their Relationship to Organizational
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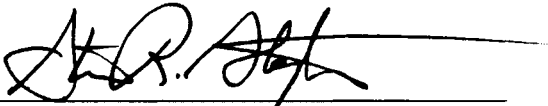
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Dedication

Without a doubt, I dedicate this dissertation to the family and friends who have stood beside me on this journey. I want to thank my parents for teaching me the value of education and always being there to support me and give me a gentle push if needed. To my daughter, Laurel, I hope you understand the times I had to be working on this program and that this is proof that you can achieve anything you set your mind to. Special thanks to my best friend for encouraging me and always standing by me when things were hard. Thanks to my colleagues who covered classes, acted as sounding boards, and supported me like family. I also appreciate all my students who inspired me to always do my best. I truly appreciate the support of those who have helped me.

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Dimensions of Principal Support Behaviors and their Relationship to Organizational Citizenship Behaviors and Student Achievement in High Schools

Abstract

This research was designed with the primary purpose of identifying the dimensions of principal support perceived by public high school teachers in Virginia and identifying the relationship between principal support and organizational citizenship behaviors. In addition, this study also examined the relationship between principal support and student achievement; organizational citizenship and student achievement, as well as the interaction of Principal Support, Organizational Citizenship Behaviors and Student Achievement when controlling for SES. Participants in the study were self-selected after being contacted by a member of a team of researchers from The College of William & Mary. Thirty-four schools elected to participate in the survey which required teachers in the selected high schools to complete one of the two forms of the School Social Variables Survey. For this study, data were collected using the Organizational Citizenship Behaviors in Schools Survey, the Principal Support Survey, and Standard of Learning Test results for the areas of Algebra II, Biology, English 11 Reading, and World History I. SES was accounted for by calculating the percentage of free and reduced price lunch students served in each building.

This study found that principal support has two dimensions; expressive support and instrumental support. Only expressive support was found to have a significant positive relationship with organizational citizenship behavior. In addition, this study found that there was a significant and positive correlation between SES and all measures of student achievement. It also found that there was a significant positive correlation between Organizational Citizenship Behaviors and the measures of student achievement for Biology and English 11.

No significant correlation was found between instrumental support and organizational citizenship, either dimension of principal support and student achievement, or organizational citizenship and the student achievement measures of Algebra II or World History I.

**Dimensions of Principal Support Behaviors and their Relationship to Organizational
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Chapter 1: Introduction

With an increase in the accountability movement in schools, student achievement on standardized assessments has become increasingly important. The reauthorization of the Elementary and Secondary Schools Act in 2002, known as No Child Left Behind, introduced explicit regulations for school accountability (United States Department of Education, 2004), requiring accountability of student achievement for all students educated in the public schools. In Virginia, student achievement is measured primarily by performance on the Standards of Learning Tests (United States Department of Education, 2004). Because of these high stakes, educators are relying on research-based strategies at the classroom and school building levels to increase student achievement. Many factors have been shown to effect student achievement; however, the Coleman report (Coleman et al., 1966) asserted that student achievement is directly related to a student's socioeconomic status and that there is little that can be done by the schools to make a difference. McGuigan and Hoy (2006) agreed that socioeconomic factors are undoubtedly related to student achievement; however, they claimed that with more sophisticated tools and data, researchers have been able to identify other dimensions that are just as important as socioeconomic status in accounting for student achievement. Other researchers have identified factors such as classroom instruction and principal support that they believe can help schools increase student achievement regardless of the students' SES. Leithwood, Seashore Louis, Anderson, and Wahlstrom (2004) conducted a review of current research on principal leadership and student achievement and made two claims based on that research. That, "leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school"

and the effects of strong leadership are seen when and where they are most needed (Leithwood, et. al., 2004, p. 5).

Principal support is a factor that has been identified by teachers that is critical to their success (Andrews & Soder, 1987; Leithwood, et. al., 2004; O'Donnell & White, 2005). Teachers who feel supported by the administration in their school are more likely to go above and beyond to help improve the school and help students be successful. Teachers who are not supported are more likely to leave the profession (Dagenhart, O'Connor, & Petty, 2005; Rothschild, 2006; National Commission on Teaching and America's Future [NCTAF], 2002; Ingersoll & Smith, 2003; Mihans, 2008). The resulting high teacher turnover creates higher recruiting and hiring costs and a significant decrease in student performance. It also may indicate an underlying problem and disrupt the effectiveness of the school (Croasmun, Hampton, & Hermann, 1999).

Teachers need to feel that they are being supported by the administration, however, too often that support falls short of their expectations. House's (1981) theory of social support encompasses all the dimensions of support that teachers need to be successful. He describes social support as: "An interpersonal transaction involving one or more of the following: (1) emotional concern (liking, love, empathy), (2) instrumental aid (goods or services), (3) information (about the environment), or (4) appraisal (information relevant to self-evaluation)". (House, 1981, p. 39).

Teachers who feel more supported are more likely to voluntarily help students and colleagues when requested by an administrator. Previous research (DiPaola & Hoy, 2005a, DiPaola & Tschannen-Moran, 2001) demonstrated a positive correlation between organizational citizenship behaviors and student achievement. Organizational citizenship

behaviors in schools manifest themselves in one bi-modal dimension encompassing behaviors that help the organization to be successful, as well as behaviors that help individuals.

Conceptual Framework

Principal support, defined through the frame of social support, and organizational citizenship behaviors are both constructs that have been previously studied in schools to determine their impact on student learning.

Principal support. Principals have the power to influence the work experiences and the learning experiences of teachers by creating supportive working and learning environments. Principal support is a construct that has been studied and correlated with many variables of the work experience such as: teacher commitment, burnout, student achievement and the culture and climate of the school (Littrell, Billingsley, & Cross, 1994). Follow-up information from the Schools and Staffing Survey reports that more than three-fourths of the teachers responding indicated that they were leaving because of one or more factors of their working condition (as cited in Ingersoll & Smith, 2004). All teachers who left named one or more of the following: lack of support from the school administration, poor student motivation, lack of teacher influence over decision making, and student discipline problems (Ingersoll & Smith, 2004).

A commonly given reason for leaving the field of teaching is lack of support, both from administrators and from peer teachers. It is vital that school administrators create an environment of positive support (Mihans, 2008). This can be done through several structures, including integrated professional development, time for the new teachers to interact with each other and with veteran teachers, and feedback from the administration

(Mihans, 2008). In a study conducted of 50 new teachers across grade levels, regular feedback given by administrators about their classroom teaching was the overwhelming reason given by new teachers as the reason they remained in the teaching field (Mihans, 2008). The National Staff Development Council recognizes that teachers, even those in the most demanding areas, are more likely to stay with teaching if they are supported in their efforts. This support needs to come from a strong bond with their colleagues, support from their administrators, and a shared vision for student learning (Sparks, 2002). They also suggest that teachers feel more connected to their profession when they have the necessary content knowledge, technological tools, and instructional skills to meet the challenges they face (Sparks, 2002).

Teachers who perceive their administrators as supportive are more likely to have a positive attitude about work-related tasks and be committed to their jobs (Singh & Billingsley, 2001). Teachers who feel they are not being supported report more stress, higher absenteeism, and less motivation for work-related tasks (Singh & Billingsley, 2001). Most research about principal support tends to focus on the type of leadership style or skills that the principal utilizes. However, there have been some studies of the actual behaviors of the administrators and how those behaviors affect the teachers and the achievement of the students (O'Donnell & White, 2005). That study included teachers and principals from 75 schools in Pennsylvania. The researchers used the Principal Instructional Management Rating Scale (PIMRS) to assess the perceptions of principal leadership behaviors from both the teachers and the principals. Student achievement data were gathered from the eighth grade mathematics and reading components of the state assessment (O'Donnell & White, 2005). Data revealed that there was a positive correlation between teacher perceptions of

principal instructional leadership and student achievement, as well as a positive correlation when identifying the SES of the school (O'Donnell & White, 2005). Andrews and Soder (1987) have also done similar research in which they identified the dimensions of principal support and the correlation with student achievement. Andrews and Soder (1987) identified four areas of support that principals provide for their teachers: resource provider, instructional support, communicator, and a visible presence in the schools; these areas directly correlate with House's dimensions of instrumental, informational, emotional, and appraisal support (House, 1981).

Social support is a difficult concept to define, although it is generally perceived. Through the framework first established by J.S. House (House, 1981), and later developed and applied to education through Littrell's (1992) research, we have a better understanding of what support for teachers means. Research done by those in the human relations field have shown that, in order to be effective, supervisors must be seen as supportive (House, 1981).

Organizational citizenship behaviors. Organizational citizenship behaviors play an important role in organizations, especially in schools where so much of teachers' work is undefined. These behaviors are the voluntary behaviors that exceed the requirements of the particular job without expectation of reward or recognition (DiPaola & Tschannen-Moran, 2001). Teachers with high organizational citizenship go above and beyond what is required of them to help the students and the school (DiPaola & Tschannen-Moran, 2001). Because teachers are professionals, their commitment is to serve the students; however this often requires actions above and beyond the scope of their specified duties. Organizational citizenship behaviors are important in the school environment because much of what teachers do is not delineated in their written contracts or job descriptions. In order for schools to

function efficiently and effectively, principals need teachers who exhibit OCB and recognize that their work as principals is to work to increase their teachers' organizational citizenship behaviors (DiPaola & Tschannen-Moran, 2001).

Statement of the Problem

Working in a supportive environment is important for encouraging people to do their best work. Several studies have supported the importance of support for teachers from parents, colleagues, and especially principals (Andrews & Soder, 1987; Leithwood, et. al., 2004; O'Donnell & White, 2005). While it is simple to say that principals need to be supportive of their teachers, it is a challenge to carry out. Few research studies examine the exact nature of supportive behaviors. House (1981) proposed a framework that operationalized support and identified four dimensions of social support behaviors: emotional support, instrumental support, informational support, and appraisal support. These dimensions were further examined and applied to principal behaviors by Littrell with the guidance of House (Littrell, et. al., 1994).

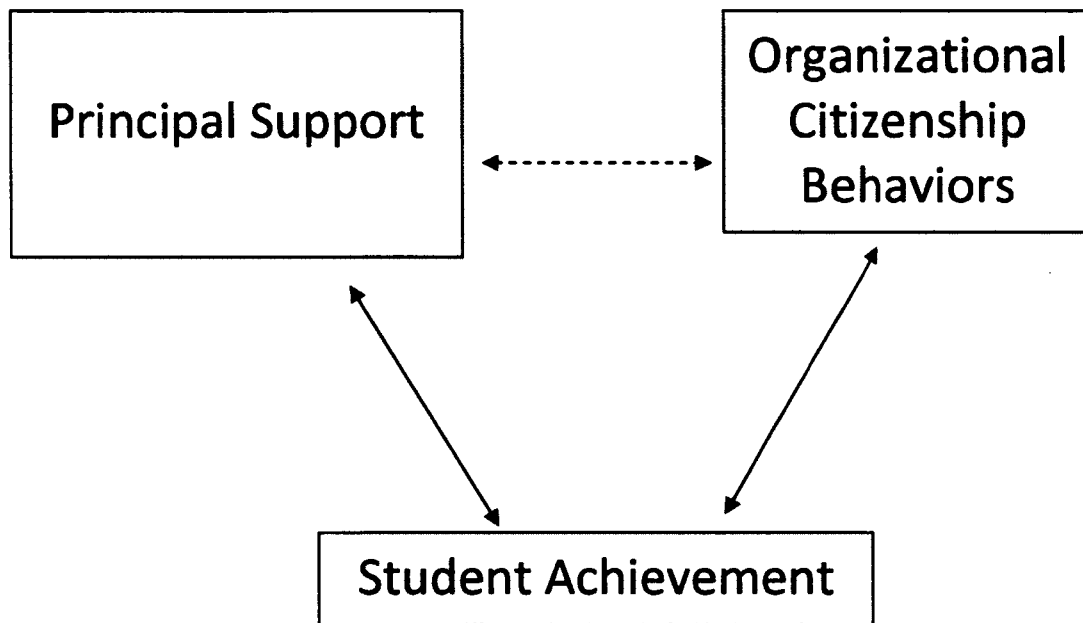
This study will investigate the dimensions of administrative support that are perceived by teachers and their relationships to teachers' organizational citizenship behaviors and student achievement. Identifying specific dimensions of support that teachers prefer will provide a better understanding of how principals truly can demonstrate support of their teachers. Supportive behaviors from principals should lead to greater student achievement and should also lead to greater organizational citizenship behaviors, which have been shown to have a positive correlation with student achievement.

While many studies have been conducted using two these variables individually, there has been little research about the relationship between administrative support and OCBs.

This study will help principals by providing data about teachers' perceptions of dimensions of support and their relationships to the organizational citizenship behaviors of teachers and determine connections to student achievement (see Figure 1 below).

Figure 1

Relationships among Organizational Citizenship Behaviors, Principal Support and Student Achievement



←————→ Previously Established Positive Correlation

←- - - - -> Predicted Positive Correlation

Research Questions

The research questions that guided this study were:

1. What overall level of principal support do high school teachers receive?
 - a. What is the perceived level for each dimension of principal support?
2. What are the relationships between the dimensions of principal support and organizational citizenship behavior?
3. What is the relationship between principal support and student achievement when controlling for SES?
4. What is the relationship between OCB and student achievement when controlling for SES?
5. What are the combined and relative contributions of principal support and OCB on student achievement when controlling for SES?

Limitations and Delimitations of the Study

1. Participants in this study were asked to self-report their perceptions of principal support and individual organizational citizenship in their schools. Because of this dynamic, there may be discrepancies based on the interactions between the teachers and the administration, especially if there is a positive or negative interaction on the day of the survey. There may also be other factors, such as a change of administration or job responsibilities, which will affect the responses.
2. The sample used for this study was a convenience sample. Efforts were made to ensure a diverse selection of teachers, representing high schools from across the

Commonwealth of Virginia. Because of this factor, population validity was weakened and affected the ability to generalize to other high schools not included in the study.

3. This study is about principal support and organizational citizenship. There are other variables, such as trust, school climate, and teacher self-efficacy, not being studied that could affect the results of this study.
4. Data for this study was collected over two academic school years, 2010-2011 and 2011-2012. However test data were only reported for the 2010-2011 academic year.
5. No information was gathered if differences in staff or principals occurred between the two academic years surveyed, nor was any information reported about the experience of the principal.

Definitions of Terms

- **Principal Support:** for the purpose of this study, the term principal support refers to the social support that the principal provides to the teachers.
- **Social Support:** “An interpersonal transaction involving one or more of the following: (1) emotional concern (liking, love, empathy), (2) instrumental aid (goods or services), (3) information (about the environment), or (4) appraisal (information relevant to self-evaluation)” (House, 1981, p. 39).

Littrell (1992) worked closely with House to further define these four variables and apply them to the area of education:

Appraisal Support- As instructional leaders, administrators are charged with providing ongoing personnel appraisal, such as frequent and constructive feedback about their work, information about what constitutes effective teaching, and clear guidelines regarding job responsibilities (Littrell, et. al, 1994).

Emotional Support- Administrators show teachers that they are esteemed, trusted professionals and worthy of concern by such practices as maintaining open communication, showing appreciation, taking an interest in teachers' work, and considering teachers' ideas (Littrell, et. al, 1994).

Professional Support- (originally called informational support) Administrators provide teachers with useful information that they can use to improve classroom practices. For example, principals provide informational support by providing teachers' professional development opportunities, offering practical information about effective teaching practices and providing suggestions to improve instruction and classroom management (Littrell, et. al, 1994).

Instrumental Support- Administrators directly help teachers with work-related tasks, such as providing necessary materials, space, and resources, ensuring adequate time for teaching and nonteaching duties, and helping with managerial-type concerns (Littrell, et. al, 1994).

● **Organizational Citizenship Behaviors:** (OCBs) teachers' perception of voluntary teacher behaviors that go the "extra mile" to help students and colleagues succeed; such behavior exceeds the formal or official role requirements of the job (DiPaola, Tarter, & Hoy, 2007, p. 227). "Individual behavior that is discretionary, not directly or explicitly recognized by the formal rewards system...that in the aggregate promotes effective functions of the organization" (Organ, 1988, p. 4).

● **Student Achievement:** Mean scaled scores on the Virginia Standards of Learning test for the 2010-2011 school year. This study will examine scores only in the following areas; English 11 Reading, World History I, Algebra II, and Biology.

- **Socioeconomic Status (SES):** In this study, socioeconomic status will be represented by the percentage of students receiving free or reduced price lunch. This information will be attained from the Virginia Department of Education.

Summary

With the increase of accountability standards comes an increase in efforts to raise student achievement. In many cases there are factors that cannot be controlled, such as socioeconomic status. Principals then need to do what they can to influence the factors that they can influence. Organizational citizenship behaviors have been shown to positively influence student achievement. In addition, teachers report that they feel they can do a better job when they feel supported by their principals. Principals need to work to make sure that they are properly supporting their teachers, so it is important to identify the behaviors that teachers value most. By supporting their teachers, principals can have an impact on their performance.

Chapter 2: Literature Review

Principal Support

Teachers who are not supported leave the profession (Dagenhart, et. al., 2005; Rothschild, 2006; National Commission on Teaching and America's Future [NCTAF], 2002; Ingersoll & Smith, 2003; Mihans, 2008). Significant teacher turnover leads to a decrease of student performance (Croasmun et. al., 1999). "Substantial research evidence suggests that well-prepared, capable teachers have the largest impact on student learning" (Darling-Hammond, 2003, p. 7). Teachers need to feel that they are being supported by the administration, but too often that support falls short of their expectations. Teacher who feel more supported are more likely to voluntarily help when the administration asks.

The principal is the most important individual in affecting the climate and meeting the social needs of the faculty (Hoy, Tarter, & Kottkamp, 1991; Yukl, 2002). House indicated that social support from *one* significant individual can be quite beneficial, especially from supervisors in an organization where much of the work is done in isolation such as schools (House, 1981). In a study conducted by the Kansas-National Education Association, the most significant factor in teacher retention was leadership (Rothschild, 2006). Principal support is essential to retaining teachers and research has shown that teachers who feel supported by their principal are much more likely to remain in the field than those teachers who are not receiving support (Billingsley & Cross, 1992; Dagenhart, et. al., 2005; Rothschild, 2006; NCTAF, 2002; Ingersoll & Smith, 2003; Mihans, 2008). Teachers who are having their needs met and are being supported by the principal find work more rewarding, are less likely to leave the teaching field, and are more motivated about their work (Dworkin, 1987; Rosenholtz, 1989; Wise, Darling-Hammond, McLaughlin,

&Bernstein, 1985). Having a supportive principal can be a source of reward for a teacher, whereas non-supportive behaviors from the principal lead teachers to feel frustrated (Dworkin, 1987; Rosenholtz, 1989).

When a principal offers feedback, acknowledgement, collaboration opportunities, and collective decision making, teachers are more committed (Rosenholtz, 1989). Evidence has shown that teachers who work for collegial leaders are more committed to their students and their school, and they go above and beyond the prescribed requirements of their job (Hoy & Sabo, 1998; Hoy, et. al., 1991, DiPaola, et. al., 2007). A collegial leader is one who supports the social needs of the teachers and treats the teachers as professionals, being open and friendly (DiPaola, et. al., 2007). These principals are genuinely concerned about the welfare of the teachers but ensure that the faculty understands what is expected of them and maintains standards of performance (DiPaola & Hoy, 2005a). Principals who model these types of behavior encourage teachers to help each other and be supportive through leading by example (DiPaola & Hoy, 2005b). According to Smith, et. al. (1983), having a model provides cues to the individual for appropriate behavior. They suggest that since much of a principal's job is encompassed by organizational citizenship behaviors, they become the model for behavior in the school. They also state that individuals may perform organizational citizenship behaviors as a way of reciprocating to principals, or that the individual is choosing to display citizenship behaviors to compensate for decreased performance or skill (Smith, et. al., 1983). Teachers value support from the principal for several reasons. Individuals want to feel that their supervisor is genuinely interested in their well being and that they appreciate the contributions being made to the organization (Somech & Ron, 2007). The amount of support that teachers perceive is also important because it serves as assurance

that the principal will be supportive when the teacher is dealing with a stressful situation or needs assistance. It is beneficial for the principal then to be supportive of the teachers because an individual will attempt to reciprocate positive behaviors from others (Somech& Ron, 2007). “According to Organ (1988), employees interpret fairness to mean that their supervisors can be trusted to protect their interests; this in turn engenders an obligation to repay their supervisors through ‘positive,’ beneficial actions” (Somech& Ron, 2007, p. 42). Rhodes and Eisenberger (2002) point out that organizational citizenship behaviors are excellent examples of behaviors completed for reciprocity because the individual has discretion over performing them. House (1981) explains that for supportive acts to take place there has to be interaction between two people: interaction that is usually in the context of a stable social relationship. Most people do not give or receive support without cause because support generally requires some cost, of time, money, or effort. “Giving or receiving social support usually involves expectations of reciprocity” (House, 1981, p. 29).

A supportive administrator is one that will provide teachers with assistance in all aspects of their needs at work, for example: providing staff development, dealing with discipline issues, talking with parents, obtaining resources, offering emotional support, and giving feedback (Billingsley, Gersten, Gilman, & Morvant, 1995). There are many dimensions of social support that manifest themselves as principal support for teachers.

In schools, this means that instead of worrying constantly about setting the direction and then engaging teachers and other in a successful march.... the leader can focus more on removing obstacles, providing material and emotional support, taking care of the management details that make any journey easier, sharing in the comradeship of

the march and in the celebration when the journey is completed.... (Edgerson, Kritsonis, & Herrington, 2006, para 7)

In their research about principal leadership and student achievement, Andrews and Soder(1987), completed a two-year study examining the relationship of 12 organizational characteristics that related to improving student achievement. They administered a survey with questions designed to measure the interactions between teachers and principals and how that relates to student achievement (Andrews and Soder, 1987). Similar to House's model of support (1981), Andrews &Soder, identified four dimensions of support that principals provide; (1) as a resource provider the principal is responsible for provide materials, opportunities, and information for teachers, (2) as an instructional resource the principal engages the staff in professional development and sets expectations for improving the instructional program, (3) as a communicator the principal serves as a model for commitment to the goals and expectations of the school, and articulates a clear vision and set of performance standards, and (4) as a visible presence the principal spends time out in the school building, attending department meetings, and talking with students and staff (1987). Andrews & Soder used the California Achievement Test as a marker for student achievement and examined individual student's scores (1987). Valid and reliable information was gathered from 33 elementary schools and the principals were divided into three categories based on the responses from the survey and their interaction with teachers; the top 11 were categorized as strong leaders, the next 11 as average leaders, and the final 11 as weak leaders (Andrews &Soder, 1987). Tests of significance were run and the researchers found that the greatest improvement in scores came from students who had a strong principal, showing a positive correlation between strong principal support and student achievement. They also

found that students classified with low SES, based on receiving free lunch, made the greatest improvement with a strong principal (Andrews & Soder, 1987).

Starting as early as 1970, researchers have been examining principal support as a factor effecting student achievement. Waters, Marzano, and McNulty (2003) conducted a meta-analysis, starting with over 5,000 studies, and narrowing it to 70 using strict criteria for design, data analysis, controls, and rigor. Their findings demonstrated a clear and significant correlation between principal support and student achievement, with an effect size of .25 (Waters, et. al., 2003).

Social Support

Principal support is a difficult construct to define because of the multiple dimensions of behaviors that it encompasses (Littrell & Billingsley, 1994). Social support is not a new concept in research, although it has been studied under many topics in the past. It is one of the concepts that is understood by most humans, yet difficult to define. We experience our first social support from our families, but soon receive it from various other people including clergy members, neighbors, and teachers. As adults our two main sources of support are from our families and from our co-workers, both colleagues and supervisors (House, 1981). In order to be able to study social support, we must have a conceptual understanding of the term and a technique for measuring it. Some researchers define social support in relatively simple terms; "Social support may be defined as support accessible to an individual through social ties to other individuals, groups, and the larger community" (House, 1981, p. 15). Others provide a more detailed description of the term. Through their research Cobb, Kahn and Antonucci further refined the term by breaking social support down into several types. Cobb defines the term as information leading the subject to believe that he is cared for and loved,

esteemed and valued, and that he belongs to a network of communication and mutual obligation, later identified as emotional support, esteem support, and network support (House, 1981). Kahn and Antonucci's definition is, "interpersonal transactions that include one or more of the following key elements: affect, affirmation, and aid" (as cited in House, 1981, p. 16).

Using the work of these scholars and many others, House has refined the types of support we receive into four categories. He argues that when studying social support it is important to include all the types and sources of support because just as all individuals are different, so are their support needs (House, 1981). The four types of support identified by House are emotional, instrumental, informational, and appraisal. Emotional support includes caring, love and trust. According to House, this is the most important type of support for individuals. This type was the common factor that he found in the research done by others and is what is most often thought of when people refer to supportive behaviors (House, 1981). Instrumental support requires an act to help a person in need. Paying bills for someone, covering job responsibilities, or physically taking care of another are all examples of instrumental support (House, 1981). Informational support means providing needed information to another so that they may better cope with a situation. The distinction between informational and instrumental support is that instrumental support is actually doing something for someone, whereas informational support is providing information that helps the individuals to help themselves (House, 1981). The final type, appraisal support, also does not involve any actions, just the giving of information. The information in the case of appraisal support helps people to evaluate themselves socially (House, 1981). For example,

if a friend describes their idea of an ideal friend, that allows an individual to compare themselves to the ideal and decide if they would rate as a good friend for that person.

Littrell et. al. (1994) adapted House's dimensions, with guidance from Dr. House, so that they more accurately pertained to teachers. The four dimensions as they apply to school principals can be defined as follows:

- *Emotional Support* – “Principals show teachers that they are esteemed, trusted professionals and worthy of concern by such practices as maintaining open communication, showing appreciation, taking interest in teachers; work, and considering teachers’ ideas.” (p. 297)
- *Instrumental Support* – “Principals directly help teachers with work-related tasks, such as providing necessary materials, space, and resources, ensuring adequate time for teaching and nonteaching duties, and helping with managerial-type concerns.” (p. 298)
- *Professional Support- (originally labeled as Informational Support)-* “Principals provide teachers with useful information that they can use to improve classroom practices. For example, principals provide informational support by authorizing teachers’ attendance at in-service workshops, offering practical information about effective teaching practices, and providing suggestions to improve instruction and classroom management.” (p. 298)
- *Appraisal Support* – “As instructional leaders, principals are charged with providing ongoing personnel appraisal, such as frequent and constructive feedback about their work, information about what constitutes effective teaching, and clear guidelines regarding job responsibilities.” (p. 298)

The easiest, and most commonly used, method for studying social support is to ask participants what type or how much support they are receiving. The results are then reported as perceived or subjectively (House, 1981). It is most effective to study social support through this method because support is, in reality, only as effective as it is perceived. In other words it does not matter how much the supervisor feels supportive, if the individual does not feel that they are being supported (House, 1981). Littrell, et. al. (1994), used a measure based upon the four dimensions of support to study the relationship between principal support and a variety of factors, including: school commitment, job satisfaction, stress, personal health, and intent to stay in teaching. Like support research done previously, the researchers found that principal support was important to teachers. According to their findings, principals who were supportive had more teachers report a high incidence of job satisfaction and that support was an important predictor for organizational support (Littrell, et. al., 1994). Their findings also supported House's theories of the four dimensions of support and that emotional support was the most valued (Littrell, et. al., 1994).

Social support has also been defined by some as the "actions of others that are either helpful or intended to be helpful" (Deelstra, Peeters, Schaufeli, Stroebe, Zijlstra, & van Dooren, 2003, p 324; Harris, Winskowski, & Engdahl, 2007).

Organizational Citizenship Behaviors

Organizational Citizenship Behavior (OCB) has been defined in many ways to describe the behaviors of individuals within an organization. One of the earliest definitions is "Individual behavior that is discretionary, not directly or explicitly recognized by the formal rewards system...that in the aggregate promotes effective functions of the organization" (Organ, 1988, p. 4). In schools, that definition has been refined to more adequately represent

the role of school staff. OCB is defined as “teachers’ perception of voluntary teacher behaviors that go the “extra mile” to help students and colleagues succeed; such behavior exceeds the formal or official role requirements of the job” (DiPaola, et al. 2007, p. 227). Organizational citizenship behaviors are particularly important to school systems because teaching is a service organization. Teachers are professionals providing a service, however, that service is directly for the clients, the students. Because of the nature of the work teachers do there is a strong similarity between the goals of the individual and the goals of the organization (DiPaola & Hoy, 2005b). Teachers’ contracts do not include the extra work that needs to be done for the organization to run smoothly. “Every factory, office, or bureau depends daily on a myriad of acts of cooperation, helpfulness, suggestions, gestures of goodwill, altruism, and other instances of what we might call citizenship behavior” (Smith, et. al., 1983, p. 653).

When teachers voluntarily go beyond the prescribed tasks required of them and perform superfluous tasks overall effectiveness of the school increases (DiPaola & Hoy, 2005a). In addition these extra tasks help to reduce tension and alleviate some of the management roles of the principals (DiPaola & Tschannen-Moran, 2001). Bateman and Organ (1983), theorize that supervisors appreciate individuals who display these behaviors because they cannot be mandated but they free up the supervisors time to concentrate on more important tasks. It was recognized almost 100 years ago “that the willingness of individuals to contribute cooperative efforts to the organization was indispensable to effective attainment of organizational goals” (as cited in DiPaola & Hoy, 2005a, p. 36). There are several ways that organizational citizenship behaviors benefit the school system. First, the school is able to run more smoothly, with teachers taking care of the maintenance activities

of the organization, the administration is able to concentrate on more important tasks such as instructional leadership and goal-related activities (DiPaola & Hoy, 2005b). Just as important, teachers who exhibit higher organizational citizenship are less likely to leave the organization, so the cost of teacher turnover is greatly reduced in schools with greater organizational citizenship (Chen, Hui, & Segó, 1998; Koberg, Boss, Bursten, & Goodman, 1999).

Teachers who exemplify organizational citizenship behaviors are the teachers who stay after school to help students, mentor new teachers, offer suggestions that are new and innovative, sponsor afterschool activities and plan quality assignments instead of busywork (DiPaola, et. al., 2007). While organizational citizenship behaviors are important to a successful school (Organ, 1997), they are not enforceable as a role requirement (DiPaola, et. al., 2007). There is no expectation of recognition or compensation related to OCB, instead the behaviors are discretionary and the rewards are indirect (DiPaola, et. al., 2007). Research has shown that individual's personal characteristics and reactions to events in the workplace will influence their level of organizational citizenship, however more research needs to be done to continue to determine the antecedents of organizational citizenship (Somech& Ron, 2007).

Organizational Citizenship Behaviors were first defined by Bateman and Organ (1983) as "beneficial behavior of workers that was not prescribed but occurred freely to help others achieve the task at hand" (as cited in DiPaola, et. al., 2007, p. 228). An operational measure was later created by Smith, Organ, and Neal that defined two dimensions of citizenship behaviors: altruism and general compliance (DiPaola & Tschannen-Moran, 2001). Altruism describes behaviors that are specific to helping a particular person. An altruistic

person willingly gives help to anyone in need, not only to someone who is seeking help (DiPaola, et. al., 2007). General compliance refers to a person's sense of doing things right for the sake of the overall organization (DiPaola & Tschannen-Moran, 2001). General compliance has also been described as an individual's impersonal conscientiousness: "doing things right and proper to help achieve organizational goals rather than for any specific person" (DiPaola & Hoy, 2005b, p. 388). In 1988, Organ worked to further define the categories of behavior related to organizational citizenship behaviors and identified five types of discretionary behaviors. He further explained these types by describing how each of them contributes to the overall well being of the organization.

- Altruism that enhances an individual's performance through helping other individuals through such actions as helping new colleagues and providing assistance to others.
- Courtesy helps maximize time and prevents problems through actions such as giving advance notice and passing along information.
- Civic virtue behaviors such as serving on committees help to serve the overall interests of the organization.
- Sportsmanship creates an environment where little time is lost on destructive activities and includes behaviors such as avoiding disagreements and petty complaining.
- Conscientiousness contributes to the well being of the group and the individual through behaviors such as using time efficiently and reporting to work on time (DiPaola & Tschannen-Moran, 2001).

Further research has been done with varying results. Some researchers have found supporting evidence of up to four behavior categories, while many others have found support of the two original categories, altruism and general compliance (DiPaola & Tschannen-

Moran, 2001). In schools, all the dimensions of organizational citizenship behaviors fold into one bi-polar construct, which includes the altruistic and general compliance behaviors.

DiPaola and Tschannen-Moran (2001), theorized this was because schools are a special kind of organization.

Prior to 2001 little research had been done on organizational citizenship behaviors in schools (DiPaola & Tschannen-Moran, 2001). DiPaola and Tschannen-Moran published a study in which the variables were OCB and school climate (2001). The pair hypothesized a positive relationship between the two variables, the more positive the school climate, the higher the occurrence of organizational citizenship behaviors. In order to complete this study a new measure for OCB in schools was developed, in part because of the confusion over the dimensions of the construct (DiPaola & Tschannen-Moran, 2001). Organ originally identified five dimensions, however most other studies have found through factor analysis only two dimensions, behaviors benefiting an individual and behaviors benefiting the organization as a whole (DiPaola & Tschannen-Moran, 2001). In addition, there was a need to adapt the measure to fit the school environment. Previous research had been conducted in the private sector and Starlicki and Latham (1995) found that organizational citizenship behaviors vary depending on the nature of the work done by the organization.

Therefore DiPaola and Tschannen-Moran (2001) adapted a measure used by Smith et al in 1983. Three panels of educators examined the individual items of the original measure and created corresponding statements that would apply to a school setting (DiPaola & Tschannen-Moran, 2001). Those statements were then submitted to three different panels of educators who examined whether the new items and the original items corresponded to each other. The resulting 16 items created the Organizational Citizenship Behavior in

Schools Scale (OCBSS), which was then field-tested in 18 public schools (DiPaola & Tschannen-Moran, 2001). After analysis of the field-test data, several of the items were changed or removed and four new items were added. The final measure consisted of 15 items. Teachers were asked to rate their schools, based on their own perceptions, on a 4-point Likert scale (DiPaola & Tschannen-Moran, 2001). The alpha coefficient of reliability for the OCBSS was .87 with the items defining a dimension explaining 36% of the variance (DiPaola, et. al., 2007). In both studies that were conducted with this new measure Organizational Citizenship Behaviors were found to have a positive correlation with teacher professionalism ($r=.92, p<.01$ & $r=.83, p<.01$), academic press in the building ($r=.81, p<.01$ & $r=.63, p<.01$) and collegial leadership of the principal ($r=.67, p<.01$ & $r=.23, P<.05$) (DiPaola & Tschannen-Moran, 2001). One of the most significant findings of their study was that there was only dimension of OCB in the public school setting, primarily because even when teachers are being helpful to an individual, they are still working toward the greater good of the organization (DiPaola & Tschannen-Moran, 2001). Because a school is a service organization, the line between helping an individual and helping the organization is blurred, creating only one dimension of OCB in schools (DiPaola & Tschannen-Moran, 2001). In both samples the more collegial the leadership style of the principal, the higher the incidence of organizational citizenship behaviors; they also found that climate was strongly related to the organizational citizenship behaviors (DiPaola & Tschannen-Moran, 2001).

Following the research done by DiPaola and Tschannen-Moran (2001), DiPaola and Hoy (2005a) conducted a study concerning the achievement of high school students and the organizational citizenship of the faculty. The purpose of the study was to build on the previous research that had been done by reviewing the concept of organizational citizenship,

applying it to schools and then testing a set of hypotheses concerning student achievement with consideration taken for student socioeconomic status. The pair hypothesized that faculty organizational citizenship behaviors were positively associated with student achievement in math and reading, but they also believed that the association was reciprocal, that higher student achievement would reinforce greater organizational citizenship (DiPaola & Hoy, 2005a). The sample for this study was 97 high schools in Ohio, representing rural, urban, and suburban districts from diverse areas of the state and including the entire range of socioeconomic status (DiPaola & Hoy, 2005a). The participants were administered the Organizational Citizenship Behavior scale (OCBSS) which had a strong reliability coefficient ($\alpha=.87$) for this sample. The researchers also collected data about the student achievement of the students based on the 12th-grade proficiency tests in mathematics and reading administered by the Ohio Department of Education and the SES from the state's index (DiPaola & Hoy, 2005a). A significant positive correlation was found between organizational citizenship behaviors and student achievement in reading ($r=.30, p<.01$) and in mathematics ($r=.34, p<.01$) during this study. Even when the data were controlled for socioeconomic status, which has been the best predictor of student achievement, the correlation remained significant for reading (partial $r=.28, p<.01$) and for mathematics (partial $r=.30, p<.01$) (DiPaola & Hoy, 2005a). The conclusion the researchers reached, similar to other studies (DiPaola & Tschannen-Moran, 2001; DiPaola et. al, 2007) was that faculty organizational citizenship is an important factor in increasing student achievement in the schools (DiPaola & Hoy, 2005a).

DiPaola and Hoy (2005b) also conducted a study with middle school faculty in a mid-western state. A sample of 75 schools was chosen and the staffs completed 1,300 usable

surveys (DiPaola & Hoy, 2005b). The sample represented the state's population in terms of average size of the faculty, student enrollment, and salary and experience of the teachers, with the unit of analysis being the school rather than the individual (DiPaola & Hoy, 2005b). Their attempt was to identify the characteristics that foster organizational citizenship: to that end, they gathered data about organizational citizenship, collegial leadership of the principal, teacher trust in their colleagues, and academic press, with socioeconomic status as a control variable (DiPaola & Hoy, 2005b). A relationship was supported by this study for the interaction between organizational citizenship and collegial leadership and the interaction between organizational citizenship and trust in colleagues. No relationship was found between the socioeconomic status of the students and the organizational citizenship of the faculty (DiPaola & Hoy, 2005b).

Somech and Ron (2007) were believed to be the first to study perceived supervisor support along with affectivity or mood as they relate to organizational citizenship behaviors. To their knowledge no other researchers had studied that combination of factors in schools. Their position was that if teachers had high amounts of perceived support from the principals that would produce an obligation to the school's welfare and help to attain the school's objectives by exhibiting more organizational citizenship behaviors (Somech & Ron, 2007). After surveying teachers, the researchers found that there was a positive correlation between perceived supervisor support and organizational citizenship behavior [$t(95) = 2.05, p < .05$]. They also found significant positive correlations between perceived supervisor support and each of the dimensions of organizational citizenship: altruism, conscientiousness, sportsmanship, and civic virtue (Somech & Ron, 2007).

Other research has been done to examine the relationship between leaders and the individuals they supervise as it relates to organizational citizenship behavior. Based on Organ's theory (1988), which states that citizenship behaviors are used as reciprocal discretionary behaviors to "pay back" leaders for supporting individuals, a meta-analysis was conducted based on leader-member exchanges and organizational citizenship (Ilies, Nahrgang, & Morgeson, 2007). Their belief was that organizational citizenship needed to be examined on an individual level because people in the organization will have a different relationship with the supervisor, so each relationship needs to be examined individually. Similar to other studies done Ilies, et. al. (2007), claim that relationships between leaders and members of an organization include exchanges of material and nonmaterial goods that are above and beyond the normal role behaviors. "Thus, to reciprocate high [leader-member exchange] relationships, it is likely that subordinates will go beyond required in-role behavior and engage in citizenship behaviors in order to maintain a balanced or equitable social exchange" (Ilies, et. al., 2007; Wayne, Shore, Bommer, & Tetrick, 2002, p. 592). They believed, however, that there would be a stronger correlation between supportive leaders and the altruistic behaviors of organizational citizenship, than the general compliance behaviors, despite the mixed results reported in the literature (Ilies, et. al., 2007). Results of this meta-analysis confirmed both an overall relationship between organizational citizenship and leader-member exchanges ($r = .32$) and a stronger correlation with the altruistic behaviors than general compliance behaviors ($r = .33$ vs. $r = .27$) (Ilies, et. al., 2007).

In a study published in 2007, DiPaola, Tarter, and Hoy reexamined the factor structure of the organizational citizenship measure created by DiPaola and Tschannen-Moran, to refine that measure, and to extend the use of the measure from high schools to

middle and elementary schools (DiPaola, et. al., 2007). In a sample of 97 Ohio schools the researchers collected data from teachers at faculty meetings and through factor analysis were able to shorten the 15 items of the OCBSS to 12 items that had a similar alpha coefficient of reliability. The new scale was called the Organizational Citizenship Behavior scale. The correlation between the two measures is .97 (DiPaola, et. al., 2007). One of the variables that the researchers were looking to correlate with OCB was collegial leadership. A collegial leader is one who addresses the social needs of the teachers and treats them as professionals (DiPaola, et. al., 2007). OCB was measured using the new 12-item OCB scale and collegial leadership was measured using a seven-item sub-scale of the Organizational Climate Inventory (OCI) relating to the teachers' perceptions of principal behavior. The reliability coefficient for the sub-scale was .96 (DiPaola, et. al., 2007). They found, just as DiPaola &Tschannen-Moran (2001) had that there was a strong positive correlation between organizational citizenship behaviors and collegial leadership ($r = .66, p < .01$) (DiPaola, et. al., 2007).

Summary

With an increase in accountability for public schools, student achievement has become increasingly important. Research has shown a correlation between teacher commitment and student achievement (Firestone & Pennell, 1993), as well as a correlation between organizational citizenship and student achievement (DiPaola & Hoy, 2005a; DiPaola &Tschannen-Moran, 2001). Several studies have been done concerning teacher commitment to stay in education and they have shown that regular feedback from the administration is one of the most important factors to teachers (Mihans, 2008). Additionally, Sparks (2002) found that support for teachers come most frequently from a bond with

colleagues, administrators and a shared vision for the school. This social support exhibits itself through four dimensions: emotional, professional, appraisal, and instrumental (Littrell, et. al., 1994; House, 1981). Because of this support, it is believed that teachers feel a need to reciprocate, which manifests as organizational citizenship behavior (Smith, et. al., 1983;Somech & Ron, 2007; House, 1981). Organizational citizenship has been studied in correlation with many factors; job satisfaction, intent to stay in teaching, health, school climate, student achievement, collegial leadership, trust, and academic press (Littrell, et. al., 1994; DiPaola &Tschannen-Moran, 2001; DiPaola & Hoy, 2005a, DiPaola & Hoy, 2005b).

Chapter 3: Methodology

Strong organizational citizenship behaviors have already been shown to have a strong correlation to positive student achievement results (DiPaola & Hoy, 2005a, DiPaola & Tschannen-Moran, 2001). The primary purpose of this study was to identify the relationship between the dimensions of principal support and organizational citizenship behaviors perceived by teachers, and student achievement by using a survey instrument combining the Organizational Citizenship Behaviors scale (OCBS) and a modified version of the Principal Support Questionnaire used by Littrell, Billingsley, and Cross (Littrell, et. al, 1994). Student achievement data were obtained from the Virginia Department of Education. Using the conceptual framework of social support to examine the types of behaviors exhibited by principals that teachers perceive as most supportive, this study examined their relationships with organizational citizenship behaviors and student achievement. The data will help administrators identify behaviors that were perceived as supportive by teachers and promote organizational citizenship among them, and ultimately improve their performance and student achievement.

Research Questions

The research questions that guided this study were:

1. What overall level of principal support do high school teachers receive?
 - a) What is the perceived level for each dimension of principal support?
2. What are the relationships between the dimensions of principal support and organizational citizenship behavior?
3. What is the relationship between principal support and student achievement when controlling for SES?

4. What is the relationship between OCB and student achievement when controlling for SES?
5. What are the combined and relative contributions of principal support and OCB on student achievement when controlling for SES?

Research Design

This was a quantitative correlation research study. The relationships between principal support and organizational citizenship were examined as well as the relationship between principal support and student achievement. More specifically, the individual dimensions of principal support; appraisal, emotional, informational, and professional, were examined to identify which dimensions are most highly perceived by teachers. Additionally, the study examined the relationship between organizational citizenship and student achievement.

Sample Population

A convenience sample of full-time teachers from 34 high schools in Virginia was used in this study. High school principals across the Commonwealth of Virginia were contacted via electronic mail soliciting participation in the study. The contact information of the respective school principals was obtained from a listserv maintained by the Virginia Department of Education website as a well as personal knowledge of colleagues working in high schools. Participation in the study was voluntary. The sample population was a diverse sample of schools representative of Virginia with respect to geography, size, ethnicity and socio-economic status of students and seven of the eight state regions were represented. The percentage of students eligible for free or reduced-priced lunches served as a proxy for socioeconomic status of the schools. A detailed summary of the demographic characteristics

of the participating schools in the sample, compared to the averages statewide are shown in Table 1.

Table 1

Student Population of Sample Schools and Virginia Public High Schools

Student Population	Schools in Sample		Virginia Public High Schools	
	Total	Percentage	Total	Percentage
Economically Disadvantaged # Students	8,496	24.52%	110,898	29.22%
Ethnicity				
American Indian	80	< 1%	1,304	< 1%
Asian	1,072	3.09%	21,751	5.73%
Black	7,125	30.57%	92,768	24.45%
Hawaiian	42	< 1%	486	< 1%
Hispanic	2,082	6.01%	37,724	9.94%
White	23,233	67.07%	212,307	55.95%
2 or More	968	2.79%	13,121	3.46%

Virginia Department of Education. (2011). *Fall membership 2010-2011*.

Data Collection

Doctoral students at the College of William & Mary either administered the survey during regularly scheduled faculty meetings at high schools or a member of the faculty were designated to administer the survey and return them to the researcher. Half of the staff members at each school were asked to take Form A of the survey included questions about Principal Support Behaviors. The other half of the staff members completed Form B of the

survey, which included questions about Organizational Citizenship Behaviors. A total of 1281 useable surveys were collected representing 34 individual schools. An identifying number was assigned to each survey that linked individual participants with their respective schools and enabled school level analysis.

Instrumentation

Sixteen survey items were used to measure principal support (PSS) and 12 items to measure organizational citizenship behaviors (OCBS). The survey items are derived from two reliable and valid survey instruments, specifically the Principal Support Questionnaire (2010) and the Organizational Citizenship Behavior Scale of DiPaola, Tarter and Hoy (2007).

Principal Support. The instrument used to measure the dimension of support given by the administration was adapted from the Principal Support Questionnaire created and used by Littrell (1992). The original measure consisted of 40 questions designed to measure each of the four types of social support (Littrell, 1992). This survey was developed and field-tested before it was used in Littrell's study. Cronbach's alpha reliability coefficients were calculated for each of the four dimensions and for support as a total. Alpha levels ranged from .48 to .93 (Littrell, 1992).

In order to improve the psychometric properties and reduce the number of items on the survey, a pilot study was conducted with 119 public school teachers in Virginia. Factor analysis verified four strong factors yielding the following results: emotional support, Cronbach's Alpha .94; appraisal support, .93; instrumental support, .88; and professional support, .87. Overall, the instrument had a Cronbach's Alpha of .86, which shows it has adequate internal reliability. After analyzing the data collected during the pilot study, item

loadings on each factor were used to reduce the survey into a 16 item Principal Support Scale (PSS), four for each dimension of administrative support (DiPaola, in press). Teachers were asked to rate statements on a six-point scale from strongly disagree to strongly agree in order to determine how much support they perceived from their administration.

Sample items include:

- Is honest and straightforward with the staff. (professional support)
- Supports my decisions. (emotional support)
- Provides frequent feedback about my performance. (appraisal support)
- Equally distributes resources and unpopular chores (instrumental support)

Organizational Citizenship Behaviors.The instrument that was used to measure the organizational citizenship behaviors of the teachers is the Organizational Citizenship Behavior Scale.The Organizational Citizenship Behavior Scale (OCB) was adapted by DiPaola, Tarter, and Hoy (2007) from the original 15 question Organizational Citizenship Behaviors in Schools Survey (DiPaola &Tschannen-Moran, 2001). The new measure has 12 items and the correlation between the two measures was .97. The measure has an alpha coefficient of reliability of .87 (DiPaola, et. al., 2007). Participants were asked to indicate the degree to which they agree or disagree with statements concerning organizational citizenship behaviors on a six-point Likert scale from strongly disagree to strongly agree. Sample items include:

- Teachers volunteer to serve on new committees.
- Teachers arrive to work and meetings on time.
- Teachers take the initiative to introduce themselves to substitutes and assist them.

Student Achievement.In Virginia students take Standard of Learning tests (SOLs), annually to assess mastery of a subject. In high schools these tests are given at the end of each course. Scores for the Virginia Standards of Learning tests range between 200 and 600. In order to receive a passing score, a student must receive a score of at least 400. A score of 500 or better is considered pass advanced. Scaled SOL school scores were collected from the Virginia Department of Education. Student achievement was measured based on four Virginia Standards of Learning assessments: World History I, Algebra II, Biology, and English 11 Reading. These standards were chosen to give a good representation of grade levels and content areas. This study utilized the mean scaled scores for the 2010-2011 school year.

Socioeconomic Status.Socioeconomic status has been shown to have a significant impact on student achievement (Coleman, et. al., 1996 and McGuigan and Hoy, 2006). In order to ensure that the most accurate relationship between the factors being examined in this study, it is important to control for socioeconomic status. The percentage of students receiving free and/or reduced price lunch was used as a proxy for the socioeconomic status. This information was obtained from the Virginia Department of Education.

Experimental Design

The data collection phase of this study was conducted in cooperation with three other doctoral candidates from The College of William & Mary. From May 2011 until February 2012 surveys were administered to staff at the high school level to assess their perceptions about a variety of school social variables, including principal support and organizational citizenship behaviors. Once the appropriate permission was granted from the prevailing authority of the school district, a researcher personally visited the school or designated a

teacher, who was a faculty member in that school, to read the instructions, administer the survey to the teachers and collect them. Cover letters accompanied the survey reminding teachers that their participation was voluntary and that all responses were kept anonymous. A copy of the final results of the study was available to principals of all participating schools upon request.

Data Analysis

The data for this research were collected from surveys and analyzed using Statistical Package for Social Sciences, SPSS. First, negatively worded items were reverse scored and descriptive statistics were given for principal support, including specifics for each of the four dimensions, organizational citizenship behaviors and student achievement including measures of central tendency, amount of variability and standard deviation. Second, a correlation coefficient (Pearson's r) was calculated to determine the size and direction of the relationships among: principal support and organizational citizenship behaviors, principal support and student achievement, and organizational citizenship behaviors and student achievement. Finally, a multiple regression analysis was conducted to determine the combined and relative contributions of principal support and organizational citizenship on student achievement when controlling for SES.

The schools responding to the survey served as the unit of analysis for this study. The data were entered into the statistical software SPSS. Table 2 describes the data sources and data analysis for each research question.

Table 2

Research Questions and Data Analysis

Research Question	Data Analysis
1. What overall level of principal support do high school teachers receive?	Descriptive Statistics
a. What is the perceived level for each dimensions of principal support?	Descriptive Statistics
2. What are the relationships between the dimensions of principal support and organizational citizenship behavior?	Correlation
3. What is the relationship between principal support and student achievement when controlling for SES?	Correlation and Regression
4. What is the relationship between OCB and student achievement when controlling for SES?	Correlation and Regression
5. What are the combined and relative contributions of principal support and OCB on student achievement when controlling for SES?	Multiple Regression

Ethical Safeguards and Considerations

The researchers complied with all ethical standards and permission was requested from the Protection of Human Subjects Committee at William & Mary before research began. This student was found to be exempt from a formal review of the Human Subjects Committee at William & Mary. The cover letter provided to all teachers explained that participation is optional and that they may opt out at anytime. In addition no individual school or teacher was identified in published results. Study results will be made available to school principals upon request.

Chapter 4: Analysis of Data

This study investigated principal support and whether the four dimensions of support created by House and refined by Littrell (professional support, emotional support, instrumental support, and appraisal support) would hold together as four individual dimensions of support in a sample of contemporary high schools. In addition, this study identified the relationships between those dimensions of principal support and organizational citizenship behaviors. Further investigation was conducted to replicate previous findings concerning the relationship between organizational citizenship and student achievement and the relationship between principal support and student achievement.

The 16-item Principal Support Scale was combined with the 12-item Organizational Citizenship Behavior in School Scale (OCBS), along with measures for Organizational Justice, Faculty Openness to Change, and Job Satisfaction to form two versions of the School Social Variables Survey. Each of the items from the Principal Support Questionnaire was rated by the participants on a 6-point Likert-style scale from “strongly disagree” to “strongly agree”. Scores for negatively worded items were reversed. Each item from the Organizational Citizenship Behaviors in Schools Scale was rated by participants on a 6-point Likert-style scale from “strongly disagree” to “strongly agree”. Scores for negatively worded items were reversed. In order to eliminate common methods bias, Principal Support was measured on one form, and Organizational Citizenship was measured on the other.

The surveys were completed by a total of 1281 participants, from 34 public high schools in the Commonwealth of Virginia. Surveys were administered by researchers from The College of William and Mary, or trained staff members at the respective schools between April 2011 and March 2012. Student achievement data were collected from the Virginia Department of

Education and reported as the mean scale score for four Virginia Standard of Learning end-of-course tests from the 2010-2011 academic year: Algebra II, Biology, English 11 Reading, World History I. Socioeconomic status was determined by the percentage of students receiving free or reduced price lunch as reported by the Virginia Department of Education for the 2010-2011 academic year.

Results

The five research questions for this study were answered by analyzing the collected data using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics, presented in Table 3, were computed for all four dimensions of principal support as well as organizational citizenship behaviors and student achievement in Algebra II, Biology, English 11 Reading, and World History I. For the purposes of this study all data were disaggregated to the school level.

Table 3

Descriptive Data for Dimensions of Principal Support, Organizational Citizenship, and Student Achievement (N=34)

Variables	Mean	S.D.	Min	Max
Overall Principal Support	4.43	.47	2.88	5.28
Expressive Support	4.74	.48	3.26	5.63
Instrumental Support	4.12	.52	2.51	4.94
Organizational Citizenship Behaviors	4.47	.25	4.01	5.13
Student Achievement Algebra II	453.71	21.48	405	509
Student Achievement Biology	456.44	17.04	423	492
Student Achievement English 11 Reading	494.76	20.45	462	530
Student Achievement World History I	440.57	18.08	397	470

Mean scores was calculated and analyzed for each item of the PSS. In addition a principal axis factor analysis was performed using the criterion of eigenvalue greater than one for the factors. Originally there were four dimensions identified by House; however factor analysis of the data revealed two more general factors. The items that were originally identified representing emotional support and the professional support loaded strongly on Factor I, which was labeled as expressive support. The items representing appraisal support and instrumental support both loaded on Factor II, which was labeled instrumental support (DiPaola, in press). Both of these factors have high reliability, each having a reliability of .95. Combined they explained 79.94% of the variance. The results for the factor analysis are summarized in Table 4.

Table 4

A Two-Factor Varimax Solution for the 16-item PSS

	Factor I	Factor II
EXPRESSIVE SUPPORT		
Emotional Items		
Gives me a sense of importance that I make a difference.	.822	
Supports my decisions.	.825	
Trusts my judgment in making classroom decisions.	.694	
Shows confidence in my actions.	.735	
Professional Items		
Gives me undivided attention when I am talking.	.774	
Is honest and straightforward with the staff.	.848	
Provides opportunities for me to grow professionally.	.700	
Encourages professional growth.	.893	
INSTRUMENTAL SUPPORT		
Instrumental Items		
Provides adequate planning time.		.811
Provides time for various nonteaching responsibilities.		.809
Provides extra assistance with I become overloaded.		.720
Equally distributes resources and unpopular chores.		.683
Appraisal Items		
Provides data for me to reflect on following classroom observations.		.652
Provides frequent feedback about my performance.		.735
Helps me evaluate my needs.		.755
Provides suggestions for me to improve instruction.		.574
Eigenvalue	11.312	1.478
Cumulative Variance	70.701	79.937
Alpha Coefficient of Reliability	.954	.955

Research Question 1

The first research question asked: What overall level of principal support do high school teachers receive? The data presented in Table 5 reveal that the mean score for overall principal support was a 4.43 on a scale of 1 to 6, with a standard deviation of .47. This shows that teachers generally agreed that they were receiving support from their administration. The second part of this research question asked: What is the perceived level for each dimension of principal support? Originally House (1981) believed that there were four dimensions of social support. Research in schools by Littrell (1994) and others in a school setting supported that framework. However, in this study, there were found to be two more general dimensions of principal support: expressive support and instrumental support. The dimension of expressive support is a combination of emotional support and professional support identified previously. Descriptive statistics, presented in Table 5, show that the mean score for expressive support was 4.7 with a standard deviation of .48. Instrumental support is a combination of the instrumental and appraisal support previously identified. Descriptive statistics in Table 5 show that the mean score for instrumental support was 4.1 with a standard deviation of .52. While overall that would mean that teachers agreed that they were receiving general support from their administration, those teachers also identified that they felt they were receiving more expressive support than instrumental support.

Table 5

Descriptive Statistics for Overall Principal Support and the Dimensions of Principal Support

Variable	Mean	Minimum	Maximum	S.D.
Overall Principal Support	4.43	2.88	5.28	.47
Expressive Support	4.74	3.26	5.63	.48
Instrumental Support	4.12	2.51	4.94	.52

Research Question 2

The second research question asked: What are the relationships between the dimensions of principal support and organizational citizenship behavior? The data in Table 6 reveal that there is a significant correlation between Expressive Support and Organizational Citizenship Behaviors ($r = .47, p < .01$). There was also a significant correlation between Expressive Support and Instrumental Support ($r = .80, p < .01$). There was not, however, a significant correlation between Instrumental Support and Organizational Citizenship Behaviors ($r = .31$).

Table 6

Correlational Analysis for Dimensions of Principal Support and Organizational Citizenship Behaviors (N=34)

	2.	3.
1. Organizational Citizenship Behaviors	.47**	.31
2. Expressive Support		.80**
3. Instrumental Support		

**Correlation is significant at the 0.01 level

*Correlation is significant at the 0.05 level

Research Question 3

The third question asked: What is the relationship between principal support and student achievement when controlling for SES? The data collected indicate that there is not a significant correlation between principal support and student achievement, either when controlling for socioeconomic status or when analyzing the data with simple correlations. Data for these correlations are shown in Table 7.

Table 7

Correlational Analysis for Principal Support and Student Achievement Measures

	Expressive Support	Instrumental Support
Algebra II	.17	.03
Biology	.19	-.06
English 11 Reading	.15	-.12
World History I	-.08	-.31

**Correlation is significant at the 0.01 level

*Correlation is significant at the 0.05 level

Similar results for support were found when a regression was computed that controlled for SES, as shown in Table 8. The relationships for expressive support and the measures of achievement were all positive, however none were significant: Algebra II ($\beta=.10$, ns); Biology ($\beta= .33$, ns); English 11 Reading ($\beta=.32$, ns) and World History I ($\beta= .15$, ns). The measures of student achievement and instrumental support revealed similar findings in the regression analysis as in the correlation. When controlling for SES in the regression, only one measure had a positive relationship: Algebra II ($\beta=.11$). Each of the other three measures had a negative, but not significant, relationship: Biology ($\beta= -.17$);

English 11 Reading ($\beta=-.20$) and World History I ($\beta= -.27$). SES however, had a strong negative correlation to all achievement measures.

Table 8

Summary of Regression Analysis for Principal Support Predicting Student Achievement (N=34)

Predictor Variable	Dependent Variable	B	Beta(β)	t-value	Sig.	SE(β)
Algebra II						
	SES	-71.79	-.64	-4.22	.00**	17.03
	Expressive Support	4.24	.10	.39	.70	10.91
	Instrumental Support	4.55	.11	.44	.67	10.42
Biology						
	SES	-57.16	-.64	-4.62	.00**	12.38
	Expressive Support	11.80	.33	1.49	.15	7.93
	Instrumental Support	-5.64	-.17	-7.4	.46	7.60
English 11 Reading						
	SES	-78.89	-.74	-6.29	.00**	12.54
	Expressive Support	13.78	.32	1.72	.096	8.03
	Instrumental Support	-7.90	-.20	-1.03	.31	7.68
World History I						
	SES	-60.37	-.64	-4.67	.00**	12.93
	Expressive Support	5.47	.15	.66	.51	8.28
	Instrumental Support	-9.60	-.27	-1.21	.24	7.92

**Correlation is significant at the 0.01 level

*Correlation is significant at the 0.05 level

Research Question 4

The fourth question asked: What is the relationship between OCB and student achievement when controlling for SES? Initially a correlation was run to determine the size and relationship between organizational citizenship behaviors and the measures of student achievement without controlling for SES. These results, reported in Table 9, showed a positive relationship between OCB and all four measures, however, only two were significant: Algebra II ($r = .30$, ns); Biology ($r = .57$, $p < .01$); English 11 Reading ($r = .48$, $p < .01$); and World History I ($r = .27$, ns). The strongest correlation was between OCB and Biology, accounting for 32 percent of the variance.

Table 9

Correlational Analysis for Organizational Citizenship and Student Achievement Measures

	Organizational Citizenship Behaviors
Algebra II	.30
Biology	.57**
English 11 Reading	.48**
World History I	.27

**Correlation is significant at the 0.01 level

*Correlation is significant at the 0.05 level

Regression analysis revealed in Table 10 that OCB only showed a significantly positive relationship with two of the measures of student achievement when controlling for SES: Biology ($\beta = .002$, $p < .01$) and English 11 Reading ($\beta = .013$, $p < .01$). Again, Biology has the strongest relationship. The remaining two measures of student achievement showed a

positive relationship, but not a significant one: Algebra II ($\beta=.55$) and World History I ($\beta=.22$).

Table 10

Summary of Regression Analysis for Organizational Citizenship Predicting Student Achievement (N=34)

Predictor Variable	Dependent Variable	B	Beta(β)	R ²	Adjusted R ²	SE(β)
Algebra II				.40	.36	17.19
	SES	-64.31	-.57**			
	OCB	14.26	.17			
Biology				.64	.61	10.63
	SES	-51.28	-.57**			
	OCB	29.44	.43**			
English 11 Reading				.70	.69	11.48
	SES	-75.44	10.77**			
	OCB	26.03	.32**			
World History I				.50	.47	13.17
	SES	-63.95	12.35**			
	OCB	7.80	.11			

**Correlation is significant at the 0.01 level

*Correlation is significant at the 0.05 level

Research Question 5

The fifth question asked: What are the combined and relative contributions of principal support and OCB on student achievement when controlling for SES? The data

presented in Table 11 show results from the multiple regression analysis. Combined, the factors of SES, Expressive Support, Instrumental Support, and OCB explained 34 percent of the variance for Algebra II, 59 percent of the variance for Biology, 68 percent of the variance for English 11 Reading, and 48 percent of the variance for World History I.

Socioeconomic Status, as determined by the percentage of students eligible for free and reduced-price lunch reported for each school, showed a significant negative relationship with each of the measures of student achievement: Algebra II ($\beta = -.61$, $p < .01$), Biology ($\beta = -.54$, $p > .01$), English 11 Reading ($\beta = -.66$, $p > .01$), and World History I ($\beta = -.59$, $p < .01$).

When all of the factors were considered Organizational Citizenship Behaviors only showed an independent significant positive relationship with student achievement on the Biology ($\beta = .44$, $p > .01$) and English 11 ($\beta = .31$, $p < .01$) measures. Expressive support and instrumental support did not show an independent significant relationship with any of the student measures. Table 11 displays the regression analysis for Principal Support, Organizational Citizenship and student achievement measures.

Table 11
Regression Analysis for Principal Support, Organizational Citizenship Behaviors and Student Achievement Measures (N=34)

Dependent Variables		Beta	R ²	Adjusted R ²	S.E.
Predictor Variables					
Algebra II			.42	.34	17.51
SES		-.61**			
OCB		.10			
Expressive Support		.05			
Instrumental Support		.11			
Biology			.64	.59	10.86
SES		-.54**			
OCB		.44**			
Expressive Support		.12			
Instrumental Support		-.16			
English 11 Reading			.72	.68	11.63
SES		-.66**			
OCB		.31**			
Expressive Support		.17			
Instrumental Support		-.19			
World History I			.55	.48	13.01
SES		-.59**			
OCB		.19			
Expressive Support		.05			
Instrumental Support		-.27			

**Correlation is significant at the 0.01 level

*Correlation is significant at the 0.05 level

Summary

Significant relationships were found between some of the variables in this study. Pearson correlations revealed a positive significant relationship between Expressive Support and Organizational Citizenship Behavior. In addition Organizational Citizenship Behavior was significantly correlated with Biology and English 11 Reading achievement. Expressive Support was not found to be significantly correlated to three of the measures of student achievement, Algebra II, Biology, and English 11 Reading. Instrumental support was not significantly correlated with any of the measures of student achievement.

Similar results were found when analyzing the data using regression analysis and controlling for SES. Biology and English 11 Reading achievement was found to have a significant positive relationship with OCB. All four measures of student achievement were significantly negatively correlated with SES, as measured by the number of free and reduced price lunch students reported to the Virginia Department of Education.

Chapter 5: Summary of the Findings

The reauthorization of the Elementary and Secondary Schools Act in 2002, known as No Child Left Behind, established regulations for states that required them to set forth regulations for student achievement for students in public schools (United States Department of Education, 2004). In Virginia, student achievement is measured primarily through the administration of the Standards of Learning tests, which has placed high stakes on the outcomes of these tests (United States Department of Education, 2004). Utilizing research-based strategies in the classroom has become increasingly important in an effort to increase student achievement.

Studies have revealed many variables that could have an effect on student achievement, such as instruction and principal support. Principal support was found to be the second most important school-related factor behind instruction (Leithwood, Seashore Louis, Anderson, and Wahlstrom, 2004). Principal support is a factor that has been identified by teachers that is critical to their success (Andrews & Soder, 1987; Leithwood, et. al., 2004; O'Donnell & White, 2005). Teachers that feel supported by the administration in their school are more likely to go above and beyond to help improve the school and help students be successful. Teachers who are not supported are more likely to leave the profession (Dagenhart, O'Connor, & Petty, 2005; Rothschild, 2006; National Commission on Teaching and America's Future [NCTAF], 2002; Ingersoll & Smith, 2003; Mihans, 2008).

Organizational Citizenship Behaviors have also been shown to have a positive impact on student achievement. Previous research (DiPaola & Hoy, 2005a, DiPaola & Tschannen-Moran, 2001) demonstrated a positive correlation between organizational citizenship behaviors and student achievement. Organizational citizenship behaviors in schools manifest

themselves in one bi-modal dimension encompassing behaviors that help the organization to be successful, as well as behaviors that help students succeed.

While these factors and others have been shown to have an effect on student achievement, the Coleman report (Coleman, et. al., 1966) claimed that there is little that schools can do to overcome the negative impact that socioeconomic status has on student achievement. McGuigan and Hoy (2006) agree that socioeconomic status directly relates to student achievement; however they asserted that researchers have been able to identify other variables that are equally as important in accounting for student achievement.

This study was designed to replicate the findings of other researchers in regards to the positive correlation between organizational citizenship and student achievement, as well as principal support and student achievement. In addition this study was also designed to show a positive correlation between principal support and organizational citizenship. The framework used to study principal support was adapted from House (1981) and Littrell (1994) and contained four dimensions of principal support: appraisal, emotional, instrumental, and professional. This study was also intended to replicate the findings of Littrell and show that, in schools, principal support has four distinct dimensions.

Discussion

In order to address the questions concerning principal support, analyses were run to determine if the four original dimensions of the construct were upheld by the current data. Instead of finding four dimensions, the factor analysis that was performed found that there were only two factors. The dimensions of emotional support and professional support combined to form a dimension labeled expressive support. The dimensions of instrumental support and appraisal support combined to form a dimension labeled instrumental support

(DiPaola, in press). This was not an expected result –both the results of a pilot study using a variation of the 40-item measure developed by Littrell and Littrell’s 1994 study revealed four dimensions. However, theorists have conceptualized leader behavior as two-dimensional: task oriented and people oriented. For example, both Bales and Etzioni labeled support tasks in two dimensions (DiPaola, in press). Bales labeled the dimensions as task leaders and social leaders, while Etzioni labeled the functions in any group as either expressive or instrumental (DiPaola, in press).

Overall teachers rated their level of principal support as moderate, with a mean score of 4.43, placing the average between “somewhat agree” and “agree” on the Likert-style scale used for the measure. Although that is a positive result, there is room for improvement. The expressive dimension of principal support was rated higher by teachers than instrumental support. The mean score for expressive support was 4.74, which is closer to agree, while the mean for instrumental support was only 4.12, which is closer to somewhat agree. In addition, the minimum and maximum were lower for instrumental support (2.51-4.94) as compared to expressive support (3.26-5.63). This finding is congruent with other researcher who found that teachers are more committed to their students and school when they work for a collegial leader, who meets the social needs of teachers, and are open and friendly (Hoy & Sabo, 1998; Hoy, et. al., 1991; DiPaola, et. al., 2007).

The second question addressed the relationship between principal support and organizational citizenship behaviors. This relationship was one that had not been investigated previously and there was a somewhat surprising result. In this sample, principal support factored out into two dimensions, expressive and instrumental, but only expressive support was significantly related. A larger sample may reveal a stronger relationship between

organizational citizenship behaviors and instrumental support. To examine the cause for this relationship it is imperative to scrutinize the behaviors that comprise these two different dimensions of principal support, as well as the behaviors that comprise Organizational Citizenship. Through factor analysis, it was confirmed that there were indeed two separate dimensions of principal support in schools surveyed for this study. Expressive support is a factor that contains emotional and professional support -- behaviors such as giving teachers a sense of importance, supporting decisions, provides professional growth opportunities and shows confidence in the teachers. These behaviors, when modeled by the administration, carry over into the teachers' actions in the classroom and increase organizational citizenship behaviors. Similar research has shown that teachers exhibit higher organizational citizenship when working for a collegial leader, someone who exhibits those behaviors included in the expressive support realm. (Hoy & Sabo, 1998; Hoy, et. al., 1991; DiPaola, et. al., 2007). Instrumental support, however, encompasses behaviors that have little to do with the way teachers interact with their students and feel about the job they are doing as teachers. Instrumental support has more to do with the day-to-day operations and business of teaching -- such as the amount of planning time, providing time for nonteaching responsibilities, and distributing resources and unpopular chores equally. It would therefore make sense that expressive support behaviors would be more strongly correlated to organizational citizenship behaviors than instrumental support behaviors. In addition, it is important for scholars to look at the differences in the items of the measures of principal support and organizational citizenship when examining the results from this survey. Principal support items asked the teachers to rate their own personal experiences about support from their principals, while the organizational citizenship items asked the participants to rate their opinion about the staff of

the school as a whole. There is possible, therefore, that the findings of this study were a result of that disconnect.

The third and fourth questions related to the relationships of student achievement to principal support and organizational citizenship behaviors when controlling for SES. In this sample, principal support was not significantly correlated to any of the measures of student achievement. Again, a larger sample might have produced different results. The World History I measure was actually negatively correlated with both expressive support and instrumental support. Instrumental support was also negatively correlated with Biology and English 11 Reading. Conversely, organizational citizenship behaviors had a significantly positive relationship with student achievement, with the measures of Biology and English 11 Reading. It could be explained that organizational citizenship had a greater effect on student achievement because that construct directly relates to teachers' relationship to students and the amount and quality of work that teachers are willing to do as part of teaching. Organizational citizenship does have a direct relationship to the practice of teaching and so is positively correlated to student achievement.

However, organizational citizenship behaviors were only found to have significant correlations to two of the measures identified in this study. Originally the four end-of-course assessments were chosen because they represented a variety of grade levels and subjects taught at the high school level and it was believed that this would broaden the study and create more robust results. After more investigation it is plausible to explain that organizational citizenship was only significantly correlated with Biology and English 11 Reading. Many of the subjects taught at the high school level rely on previous knowledge from earlier grades and therefore other teachers. Biology and English 11 are two subjects that

involve mastery of information taught in only those classes. Because of this factor, measures of student achievement in these two subjects would be more dependable than other classes, since their content is not taught in previous classes Algebra II and World History I, however, both rely on cumulative content from previous years, making them less a reflection of the teaching during the year the survey was administered. At some of the schools Algebra I is taught at the middle school, not high school, where the data were collected and so that brings into account variables from an entirely different school. Additionally, using World History I as a measure of student achievement presented a problem because that course is not taught at all high schools in Virginia. In some areas it is taught as a course in the eighth grade, resulting in missing data for several schools in the sample.

The final question related to how the measures of principal support and organizational citizenship behaviors related to student achievement when controlling for SES. In order to determine the level of SES, the percentage of free and reduced price lunches were reported for each school participating in the survey. Despite the fact that organizational citizenship still showed a positive relationship with student achievement, the greatest predictor of student achievement remained socioeconomic status. This finding is similar to that of other researchers. The Coleman (1966) report identified socioeconomic status as the greatest predictor of student achievement and researchers ever since have been searching for variables that were powerful enough to overcome the negative impact it has. For example, research done by Leithwood, Seashore Louis, Anderson, and Wahlstrom (2004), concurred that socioeconomic status was strongly related to student achievement, but that there were other factors that predicted the success of students.

Recommendations for Practice

Due to ever increasing pressures from the state and federal level in regards to improving student achievement, school districts should be using research-based strategies to find solutions. Other studies have identified many variables that have an effect on student achievement, such as principal support, organizational citizenship, trust, teacher self-efficacy, and academic optimism (Andrews & Soder, 1987; DiPaola & Hoy, 2005a; DiPaola & Tschannen-Moran, 2001; Leithwood, et. al., 2004;; Leithwood, et. al., 2004; O'Donnell & White, 2005). Despite this research many continue to find, as with The Coleman Report that SES is the greatest factor in predicting student achievement (Coleman, 1966; Leithwood, et. al., 2004). Unfortunately school districts are generally unable to make significant changes to the socioeconomic status of their students. Therefore, school districts must look elsewhere to find strategies for increasing student achievement, regardless of the socioeconomic status of the students they serve. This study did confirm the relationship between students' socioeconomic status and student achievement; however, it also showed a relationship between organizational citizenship and student achievement. This significant relationship should be an encouraging factor for administrators attempting to improve the achievement of their students, as well as the overall climate in their building. Principals need to work to model organizational citizenship behaviors for their staffs and encourage those behaviors in their teachers. This study also showed a positive relationship between organizational citizenship and one of the dimensions of principal support – expressive support. Because of the design of the principal support measure, identifying the dimension of support correlated to other variables that increase student achievement provide real identified behaviors for principals to improve upon. For example, the expressive form of support is positively

correlated to organizational citizenship behaviors, which are in turn positively correlated to student achievement. Therefore, principals can use the behaviors listed under the expressive support dimension to improve their practice. Some of these behaviors include: encouraging professional growth, showing confidence the actions of the teachers, supporting teachers' decisions, being honest and straightforward with the staff, and giving undivided attention to teachers. In addition, the relationship between the instrumental dimension of principal support and organizational citizenship behaviors should be further investigated. The sample size of this study may have affected the results. Principals need to be encouraged to model and improve supportive behaviors including: providing feedback and data from evaluations in order to improve practice. An increase in the organizational citizenship behaviors of the staff and more appropriate support from the principal could have a significant impact on the achievement of students, despite their socioeconomic status.

Recommendations for Further Research

While some of the findings in this study were comparable to those of previous research, some were unexpected and lend themselves to further research to better relationships of these variables to achievement and each other. One of the most interesting findings was that of the negative correlations between instrumental support and student achievement and the lack of any significant correlations between either dimension of principal support and student achievement. The principal support survey (DiPaola, in press) is a new measure that demonstrates high validity and reliability. It is a powerful tool to continue research to either replicate the design of this study with a larger high school sample or sample of elementary or middle schools.

Additional research also needs to be done in order to better explain the relationship of organizational citizenship to student achievement. Organizational citizenship has been positively correlated to student achievement in several other studies (DiPaola & Hoy, 2005a, DiPaola & Tschannen-Moran, 2001). If the assumption about the sample of this study are correct and the best indicators of a correlation between organizational citizenship and student achievement are subjects where the Standard of Learning Test, or similar measure, evaluate only mastery of information taught during that year and with that individual teacher, further research should be done to explain the discrepancies. In particular, research done at the elementary school level might reveal valuable information concerning student achievement in classes where the Standard of Learning test measures mastery from only that academic year.

Despite the fact that this study did not find a significant relationship between principal support and student achievement it is a relationship that deserves further scrutiny. Previous research has shown the importance of principal support and the newly created Principal Support Survey is a valuable tool for identifying the support behaviors that teachers feel are important (Andrews & Soder, 1987; DiPaola, in press; Leithwood, et. al., 2004; O'Donnell & White, 2005).

Conclusion

Previous research has shown a positive correlation between organizational citizenship and student achievement (DiPaola & Hoy, 2005a, DiPaola & Tschannen-Moran, 2001). This study has likewise confirmed that there is a positive correlation between these two constructs, however only for some of the student achievement measures identified. In addition previous research has shown the importance of principal support as it relates to student achievement.

This study however, did not reveal the same relationship, finding no significant relationship between either dimension of principal support and student achievement. However, the research on principal support has been scant. The finding of a significant relationship principal support and organizational citizenship behaviors should also be confirmed by future studies. This study found that there was a positive correlation between the two constructs, however only the relationship between expressive support and organizational citizenship was significant. Further research is necessary to investigate the two dimensions of principal support identified through this study and their relationship to organizational citizenship behaviors, and other variables that may have a significant impact on student achievement.

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APPENDIX A
Request to Perform Dissertation Study Letter Sample
DATE
RE: Request to Perform Dissertation Study

Dear Assistant Superintendent X & Principal X,

Doctoral candidates in the Educational Policy Planning and Leadership (EPPL) program at the College of William & Mary are conducting separate research studies examining the relationships between school social variables and student achievement. The researchers are in need of a sample representative of Virginia high school teachers. Participation in the study is voluntary and involves classroom teachers at Sample VA High School (SHS) completing a 73-item survey. The researchers will collect data either in person or through a designated faculty member. Completing the survey should take no longer than 15 minutes. Teacher responses to the questions on the survey will be kept confidential. Teachers will not place any identifying information on the survey other than a number that will be used by the researchers to identify your school and perform unit level analysis related to student achievement. All data collected from SHS will be kept confidential. No data will be reported in the final study or any future reports linking SHS to aggregated responses on the survey instrument. Upon request the researchers will provide Principal X with a summary report of data collected.

If Sample VA High School and/or the S school district agrees to participate in this study, please notify Jennifer Tindle, EPPL Doctoral Student at either xxx-xxx-xxxx or jtedwa@email.wm.edu.

Attached is a copy of the 73-item questionnaire, that will be divided into a Form A and Form B and administered to separate halves of instructional staff, for your review and consideration. If you have any questions regarding this study and/or with participation in this study, please contact Dr. Michael DiPaola, project manager and dissertation chairperson, at 757-221-2334 or mfdipa@wm.edu. Problems and/or grievances associated with this study and/or your school's participation in the study may be reported to Dr. Thomas Ward, Chairperson of the School of Education Internal Review Committee, at 757-221-2358 or tjward@wm.edu or Dr. Michael Deshenes, Chairperson of the Protection of Human Subjects Committee at the College of William & Mary at 757-221-2778 or mrdesc@wm.edu.

THIS PROJECT WAS FOUND TO COMPLY WITH APPROPRIATE ETHICAL STANDARDS AND WAS EXEMPTED FROM THE NEED FOR FORMAL REVIEW BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3966) ON 2011-04-15 AND EXPIRES ON 2012-04-15.

Sincerely,

Travis Burns, tburns@gc.k12.va.us

Jennifer Tindle, jtedwa@wm.edu

Kathleen Bressler, kmolea@wm.edu

Karen Cagle, kecagl@wm.edu

APPENDIX B

SURVEY DIRECTIONS

Thank you for your time this afternoon. My name is _____ and I am a researcher from the College of William & Mary. Your principal _____ has been kind enough to invite me to your campus to conduct a 1 page survey. This instrument amounts to a general survey of social variables in public high schools. No data will be reported by school and no schools will be identified. The survey is completely confidential, anonymous, and concerns the collective faculty perceptions on a number of variables. Please bubble in your responses. Your responses are voluntary if you feel uncomfortable answering any item, feel free to leave it blank or you may stop at any time. When you are finished with the survey, please place it in the manila folder located in the front. This should take no longer than 10 minutes. I know there are many demand on teachers, and I sincerely appreciate your time in completing this survey.

APPENDIX C
Principal Support Scale (PSS)

Six Point Scale (Strongly Disagree - 1 to Strongly Agree – 6)

- 1. The principal gives me undivided attention when I am talking.**
- 2. The principal is honest and straightforward with the staff.**
- 3. The principal gives me a sense of importance- that I make a difference.**
- 4. The principal supports my decisions.**
- 5. The principal provides data for me to reflect on following classroom observations of my teaching.**
- 6. The principal provides frequent feedback about my performance.**
- 7. The principal helps me evaluate my needs.**
- 8. The principal trusts my judgment in making classroom decisions.**
- 9. The principal shows confidence in my actions.**
- 10. The principal provides opportunities for me to grow professionally.**
- 11. The principal encourages professional growth.**
- 12. The principal provides suggestions for me to improve my instruction.**
- 13. The principal provides time for various non-teaching responsibilities (e.g. IEPs, conferences, test students).**
- 14. The principal provides adequate planning time.**
- 15. The principal provides extra assistance when I become overloaded.**
- 16. The principal equally distributes resources and unpopular chores.**

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APPENDIX D
Organizational Citizenship in Schools Scale (OCBSS)

1. Teachers help students on their own time.
2. Teachers waste a lot of class time.
3. Teachers voluntarily help new teachers.
4. Teachers volunteer to serve on new committees.
5. Teachers volunteer to sponsor on extracurricular activities.
6. Teachers arrive to work and meetings on time.
7. Teachers take the initiative to introduce themselves to substitutes and to assist them.
8. Teachers begin class promptly and use class time effectively.
9. Teachers give colleagues advance notice of changes in schedule or routine.
10. Teachers give an excessive amount of busy work.
11. Teacher committees in this school work productively.
12. Teachers make innovative suggestions to improve the overall quality of our school.

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