THE POWER OF THE PRINCIPAL

THE IMPACT OF PRINCIPAL SUPPORT ON SCHOOL CLIMATE INITIATIVES

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ABSTRACT

Although school climate improvement requires collaboration among many members of the school, support from a principal is essential. The present study examined the relationship between school personnel's perceived principal support and (a) their confidence in their ability, as a team, to improve school climate and (b) ratings of school climate by staff and by students. Finally, the study assessed the extent to which instrumental and expressive principal support predicted positive ratings of school climate by staff and students. Results indicated that there was a significant relationship between school personnel's perception of principal support and their confidence in their ability to impact school climate. Instrumental support predicted higher school climate scores in the areas of Quality of Relationships and Emotional Environment, while expressive support was not found to make a significant contribution. This study suggests that principal support, specifically instrumental support, may play an important role in influencing school climate.

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Chapter I

Introduction

A positive school climate is essential for the academic success of students and the overall success of a school (American Institutes for Research, 2012). School climate is defined as the "social and environmental factors that contribute to someone's subjective experience of a school: the tone in, and attitudes toward, a school" (p.1) (American Institutes for Research, 2012). School climate can impact students academically, behaviorally, and emotionally. A positive school climate has been associated with fewer behavioral and emotional problems for students (Marshall, 2004). Furthermore, McEvoy and Welker (2000) highlight that positive relationships between members of the school community and quality learning opportunities for students in all demographic environments can increase student achievement levels and reduce problematic behavior. Along with student impacts, school climate has also been shown to impact school personnel. More positive school climates are associated with increased job satisfaction (Marshall, 2004). While the connection between school success and positive school climate is well researched, actual school climate improvement efforts can be complex and challenging in practice. School climate initiatives should include all members of a school. Each key stakeholder involved in the school has a unique perspective and therefore an important role in the school environment.

As the leader of the school, the school principal has an opportunity to make a large impact. Blackwell (2009) highlights that the school administration sets the tone of the school. Although the principal sets the tone, he cannot make change independently. The principal holds a unique position that enables him to empower and support other members within the school to collaborate on school climate improvement efforts. A principal who does not organize and utilize

his staff in school climate improvement efforts will be unsuccessful (Halawah, 2005). Collaboration is essential for school climate improvement success and it requires trust in other key stakeholders abilities (Hughes and Pickeral, 2013). Hughes and Pickeral (2013) point out, "just as we have high expectations that all students can learn, principals must have high expectations that students, parents, teachers and staff can lead" (p. 4). Furthermore, along with trust in others' capabilities the principal must create opportunities for stakeholders to take on leadership roles in school climate initiatives. Hughes and Pickeral (2013) discussing the potential for shared leadership on school climate initiatives point out that if all members within the school community are not empowered to become leaders, than everyone is missing out on the opportunity to improve the school community.

Many studies report on the importance of principal leadership and collaboration between school leadership and teachers in school climate improvement efforts (Cardillo, 2013: Cohen, McCabe, Michelli, & Pickeral, 2009: Cohen and Brown, 2013: Hughes and Pickeral, 2013; Rhodes et at., 2009), but less have examined the relationship between teacher perceptions of principal support and teacher confidence in their collaborative effort to create change (Habegger, 2007). The purpose of this study is to examine, more closely, the supportive role that the principal plays in the school climate improvement process. Specifically, the goal is to better understand the relationship between school personnel perception of principal support and school personnel confidence that, as a team, they can make an impact on the school climate. This finding would be unique in that it will examine not only how principal support impacts school climate, but also how principal support impacts other key stakeholders in the school climate improvement process. If school personnel are more confident in their efforts, they will be more willing to participate in school climate improvement efforts. This finding would highlight the

powerful impact that a principal can have on increasing school personnel buy-in in school climate improvement efforts. Furthermore, perceived principal support by school personnel will be examined alongside school climate ratings by students and staff to identify the relationship between supportive principals and the overall school climate. Finally, to better understand how principals can best support school personnel, specific dimensions of expressive and instrumental principal support will be examined to determine impact on school climate.

Literature Review

The Definition of School Climate

"Every school setting has a set of psychological and institution attributes that give it a distinctive interpersonal climate" (p.712) (Rhodes, Camic, Milburn & Lowe, 2009). In recent years, it has become increasingly more recognized that school climate is an essential component of student success. School climate is defined as the quality and character of a school (Cohen, McCabe, Michelli, & Pickeral, 2009). More specifically, school climate is based on community members' experiences of school life, and it reflects the norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures within the school. (Cohen et al., 2009). School climate has been described as representing the psychological environment and as the personality of a school (Hoy & Miskel 1987; Turhan & Akgul, 2017). Freiberg and Stein (1999), describe school climate as the heart and soul of a school.

There is a reciprocal relationship between school climate and the members of a school. School climate is described as the norms, beliefs and attitudes that impact the practices and conditions of the school environment (Dumarsq, 1981). The school climate also concerns how the organization as a whole, works towards goals. (Dumarsq, 1981). School climate is considered a critical ingredient for explaining the behavior of an organization (Hoy & Miskel, 1987).

Understanding the complexity of school climate is essential for creating or maintaining a positive school climate. There are many factors that impact school climate. Cohen & Geier (2010) highlight four school climate areas of focus that have been widely agreed upon in school climate literature. These four essential areas include: Safety, Relationships, Teaching and Learning, and Instructional Environment (Cohen & Geier, 2010). These key areas of school climate are important factors that contribute to the school climate of an individual school.

The Distinction Between School Culture and School Climate

While there has been an increased focus on school climate initiatives, it is important to understand the distinction between school climate and school culture. The school culture is defined as the feel and character of an organization (Hoy, 1990). Hoy (1990) highlights the difference between climate and culture is that culture consists of the shared assumptions and ideologies between members of the school community, while climate is the shared perceptions of behavior within the school environment. School climate is often viewed as a narrower concept than culture. Stolp and Smith (1995) highlight that the culture of a school is a product of the relationship history within the school environment, while the school climate is considered a function of how people within that environment perceive those relationships. In order to effectively create change within a school environment, it is important to understand both the difference and the interaction between the school culture and climate.

The Impact of School Climate

School climate has become a topic of interest due to the growing body of research which points out that students perform better in schools that have healthy and more positive school climate. American Institutes for Research (2012), surveying 31,711 students and 6,484 school staff in 298 schools across Alaska in 2011, found that schools with more positive ratings of

school climate were associated with higher levels of proficiency in core academic subject areas as compared to schools were lower or more negative ratings. It was found that schools with healthier school environments, as measured by school safety, expectations for students, parent involvement, and respect between staff and students, had students with significantly higher proficiency in the three core subject areas of math, reading, and writing as compared to schools that did not demonstrate a more positive school climate. (American Institutes for Research, 2012) Therefore, school climate can have a powerful impact on student achievement.

Along with academic outcomes, many studies have found impacts of school climate on students' psychosocial outcomes. Turhan & Akgul (2017) examined the impact of school climate on student humanitarian values among 1094 students across 21 secondary schools. These humanitarian values include friendship, peace, tolerance, and responsibility. This study found significantly, positive relationships between all dimensions of school climate and humanitarian values as well as a significant relationship between students' perception of school climate and adherence to humanitarian values (Turhan & Akgul, 2017). The climate of a school has the potential to impact student values. Along with academic goals for students all schools should be concerned with impacting students prosocial values as members of society. More positive ratings by students of school climate have also been found to decrease chronic absenteeism, a chronic problem in many schools. Van Eck, Johnson, Bettencourt, and Lindstrom Johnson (2016) examined student ratings of school climate and rates of absenteeism among approximately 25,776 students across 121 schools within a large urban public school district. It was found that chronic absence was significantly lower in schools that were rated as having more positive climates as compared to schools that were rated as having moderate or negative climates (Van

Eck et al., 2016). Chronic absenteeism can be attributed, in some part, to the climate of a school and therefore school climate improvement can be viewed as preventative.

School climate can also impact the educators in the school environment. "School climate influences how educators feel about being in school and how they teach" (p.5) (Cohen & Geier, 2010). School climate not only impacts how teachers teach, but their beliefs about the impact they can have on student learning (Cohen & Geier, 2010). Teachers manifest a unique set of skills as critical members of the school environment. Their relationships with students and their relationships with their peers impact the climate of the school. When teachers are supportive and interact positively with students, students are more likely to be engaged in the classroom and behave appropriately (Cohen and Geier, 2010).

Healthy school environments and teacher morale are related; school climate tends to be better in schools where teachers have more positive attitudes about the school (Lumsden, 1998). Furthermore, utilizing qualitative analysis Blackwell (2009), examining the responses of 27 teachers in an elementary school in Georgia, found that teachers felt that teacher moral contributed to the school climate. Based on these findings, Blackwell (2009) concluded that school climate tends to be affected when teachers are not happy and that the ultimate impact of this will be seen in student achievement. School climate has also been found to impact teacher retention and burnout (Cohen and Geier, 2010). Teachers' impact school climate and student success, and as members of the school community they are also directly impacted by school climate.

Stakeholder Involvement in the School Climate Improvement Process

Although there has been some agreement on the important dimensions of a school that impact school climate, school climate improvement or reform in practice can be complex. Cohen and Brown (2013) state,

"The school climate improvement process – by definition – is an intentional, strategic, collaborative, transparent process of educations (and other school personnel), students, parents/guardians, and even community members learning and working together to promote prosocial and democratically informed schools" (p.2).

One person, in isolation, cannot impact the climate of a school. Hughes and Pickeral (2013), highlight the importance of "shared leadership" which they define as all members of a school (teachers, staff parents, students and the principal) working together and sharing responsibility to create an engaging and positive school climate. Successful schools require the engagement of the people that make it a community (Hughes and Pickeral, 2013). School climate improvement must involve a collaborative effort between all members of the community working towards a common goal.

In a multi-year study, Bryk, Sebring, Allensworth, Luppescu, and Easton (2010) discuss many important elements of school improvement efforts. Elements such as professional capacity, order, safety, and norms, parent ties to the school community, and instructional guidance were all empathized as important factors of the school climate and school improvement efforts (Bryk et al., 2010). While these elements are important, Bryk et al. (2010) also highlights that the quality of relational trust, or the relationships between members of the school community, is the essential element of any school climate improvement effort as it is required in order for these

other factors to be successful. In order for school climate improvement to occur, trust between members of the school community is essential.

The school climate improvement process is complex and requires mutual collaboration and trust between all members of the school environment (Cohen and Brown, 2013; Bryk et al., 2010). The unique contribution of key stakeholders, teachers and principals, is described below in more detail.

The Role of Teachers

Teachers hold a pivotal role in school climate improvement. Goddard, Goddard, and Tschanen-Moran (2007) highlighting the importance of teacher involvement point out that teachers are the school personnel most frequently and directly in contact with student. Teachers have been described as a school system's primary source of organizational knowledge (Schmidle, & Shedd (1998). Teachers are in a unique position to create meaningful change within schools. Teachers also have extraordinary leadership capabilities, and their ability to be leaders is often an underutilized resource for improving schools (Hughes & Pickeral, 2013). Teachers are a key player in terms of school climate improvement, yet their skills are often underutilized in school climate improvement efforts. Involving teachers in school climate improvement efforts has been shown to increase effectiveness. It has been found that when teachers are included in the decision-making process, they are more likely to implement and sustain change with fidelity (Hughes & Pickeral, 2013). Involving teachers creates greater commitment to climate change efforts.

Teacher buy-in is just one benefit of including teachers in the school climate improvement process. Goddard et al. (2007) examining 2,536 students across 47 schools, found that collaboration among teachers on school improvement efforts lead to greater success of

initiatives. Specifically, schools in which teachers collaboratively worked on a larger school improvement effort targeting instruction in the areas of math and reading were significantly more successful at increasing student performance as compared to schools with less teacher collaboration (Goddard et al., 2007). When teachers utilize their leadership capabilities and collaborate as a group, efforts to make improvements within a school are more successful.

Rhodes et al. (2009) found a similar positive impact of teacher collaborative efforts on school climate improvement. Examining five Midwestern American schools, Rhodes et al. (2009) found that teacher driven school climate efforts were more successful and resulted in more positive outcomes as compared to control schools where teacher collaboration was not present. The results of this study suggest that encouraging teacher-led interventions, and providing the necessary supports for these types of interventions, can lead to improvements in school climate as well as improvements in the interactions between individuals within the school setting (Rhodes et al., 2009). Although only five schools were included in this study, these findings highlight the potential impact of teacher involvement. Teacher involvement and leadership in school climate improvement efforts can increase the success of these initiatives and can lead to more positive relationships between the members of the school community and better outcomes for students. Thus, teachers are an integral part of the school climate improvement process.

The Role of the Principal

As Cohen and colleagues note, the school principal is possibly the most significant member of a school in relation to school climate improvement (Cohen, McCabe, Michelli, & Pickeral, 2009). They highlight that, while the role of a principal is critical for reform, the principal of a school should not work in isolation on school climate improvement efforts

(Hughes and Pickeral, 2013). School climate improvement is not a factor of how much, individually, the principal is working to improve school climate, but rather how he is able to engage key stakeholders within the school to work together on school climate improvement efforts.

Elias, O'Brian, and Weissberg (2006) highlight the importance of transformative leadership, or the type of leader that is willing to realign structures and relationships to achieve sustainable change. The authors point out that the integration of social emotional learning programs requires the leader to recognize the role that key stakeholders have in making meaningful change (Elias et al., 2006). As Elias and colleagues note, "Principals have special roles in setting the agenda for leadership and inspiring others to share and elaborate their vision" (p.13).

The principal's main role in school climate improvement is to empower others within the community and to provide them with the necessary resources to be successful. As Hughes and Pickeral (2013) state, "shared leadership can be established by principals who empower teachers to become leaders and from teachers who collectively take responsibly for the wellbeing of the school" (p.3). Cardillo (2013) highlights that a skilled principal is one who fosters and capitalizes on the leadership of other members of the school community. A key role of the principal in school improvement efforts is empowering all members of the school community to collaborate towards a common goal (Cardillo, 2013). This requires a shift from the traditional top-down leadership model, and instead principals must lead from the center (Cohen & Brown, 2013). Top-down leadership by principals often reduces the types of ideas and activities that might produce more authentic change (Rhodes et al., 2009). When the principal shifts the focus to shared leadership, change can be made that is more sustainable. Rhodes et at. (2009) points out

"Collaborative approaches that draw on teacher participation and encourage critical analysis can foster a sense of ownership among the various constituents and long-term engagement and investment from key stakeholders which is crucial to successful implementation" (pg. 712).

Rhodes et at. (2009) highlights that teachers who perceive the school principal as more supportive report a greater willingness to participate in decision-making regarding school policies. They note that principals should focus on fostering collaborative approaches, removing obstacles, and providing the necessary support and resources to reach goals (Rhodes et al., 2009). Accordingly, it is not enough to simple encourage collaboration among teachers on school climate improvement efforts; it is the role of the principal to work together with teachers in problem solving and fostering a productive collaborative effort to improve school climate.

In a single-case study utilizing an autoethnographical approach, Pepper and Thomas (2001) discuss multiple changes made by a principal positively impacting the overall school climate. The principal involved in the autoethnographical study recognized that a major turning point in the school climate improvement process was in the involvement of teachers and staff in the identification of problems and problem solving (Thomas & Peppers, 2001). Thomas and Peppers (2001) also point out that the principal allowed time for teachers to work together and celebrated successes of teacher collaboration throughout the process. While this is an individual case study, the findings are consistent with current research in areas relating to the effect of school climate on learning and the role of leadership styles on school climate, and these findings highlight the powerful impact a principal can have when collaborating with and empowering other members of the school community in school climate improvement efforts.

Schools in which the principal enhances the confidence of others within the school community are likely to be more successful (Habegger, 2007). Harbergger (2007), examining three principals of high achieving schools of low socioeconomic status, found that not only did these principals recognize the importance of the school climate; they also empowered and fostered confidence in teachers within the school. Principals helped increase teachers' confidence by encouraging them to provide advice, valuing their suggestions, and creating action steps that were implemented based on teacher input (Habegger, 2007)... It was also found that teachers with empowering principals were more willing to take risks and try new methods in the classroom (Habegger, 2007). Habegger (2007) concluded that principals and teachers in successful schools where principals valued school climate were more confident in their abilities to work collaboratively toward common goals. Thus, the principal's ability to increase teacher confidence is a key role in the school climate improvement process.

Moller and Pankake (2006) highlight strategies that principals can utilize to best support teachers involved in school wide initiatives. Such strategies include developing a shared vision and working with teachers to develop a plan, identify goals, and discuss timelines to reach goals (Moller & Pankake, 2006). Moller and Pankake (2006) discuss the importance of principals' accessibility and provision of access to human and financial resources. They also discuss the importance of not relying on the teacher too heavily, modeling delegation of workload, and helping teachers set parameters.

Types of Support

In order for a principal to be effective, it is important to understand the types of support school personnel need. House (1981) hypothesized that there are four type of support through his theory of social support. These types of support include: emotional, instrumental, informational,

and appraisal (House, 1981). Emotional support involves providing empathy, care, and trust. House (1981) cites this as the most important type of support. Instrumental support includes behaviors that directly help a person in need (House, 1981). Informational support involves providing another person with information that they can use to perform in their environment (House, 1981). Appraisal support is similar to informational support in that it involves the transmission of information; however, it differs in that it is the communication of information about individual performance or evaluation (House, 1981).

DiPaola (2012) examined support specifically provided by principals. Through administering questionnaires to 1,276 teachers across 34 different high schools, DiPaola (2012) developed an operational measure of principal support based on the House (1981) theory of social support. The Principal Support Scale (PSS) refined the concept of principal support into two dimensions: expressive and instrumental support. Using this framework of principal support, instrumental support is comprised of both instrumental and appraisal support and expressive support represents emotional and informational support (Dipaola, 2012). Through this framework, Dipola (2012) defines instrumental support as the extent to which teachers perceive their principal as providing support in the areas of time, resources, and constructive feedback. Expressive support is defined as the extent to which teachers perceive their principal as providing emotional and professional support.

Using the PSS, Trace (2016), examined the responses of 188 teachers from schools in Pennsylvania and Virginia to assess the relationship between three variables: teacher perception of principal support, teacher job satisfaction, and teacher trust in their principal. There was a moderately positive correlation found between teacher trust in their principal and teachers' job satisfaction (Trace, 2016). There was also a moderately positive correlation found between

teacher ratings of instrumental and expressive principal support and job satisfaction (Trace, 2016). There was a strong, positive correlation found between teacher perceptions of principal support and trust they have in their principal (Trace, 2016). Based on these findings, Trace (2016) concluded that principals might be able to increase teachers' trust by providing expressive and instrumental support.

In summary, school climate improvement is complex and requires collaboration between all members of the school community. A positive school climate has been associated with positive outcomes for both students as well as school personnel. Principal support of school climate initiatives in essential for success, and principals can provide support in many different ways. Expressive and instrumental principal support have been examined in the literature. Less research has focused on school personnel's perceptions of principal support and confidence in their ability to impact school climate. Also, less research has examined school personnel's perceptions of the different types of principal support and its impact on school climate ratings by members of the school community. This study aims to address such questions.

Chapter II

The Current Study

As previously indicated, principals' behaviors and attitudes can influence school stakeholders; however, the principal cannot operate alone. Empirical evidence suggests it is common practice that school personnel are called upon to support school climate initiatives (Goddard et al., 2007; Habegger, 2007; Hughes & Pickeral, 2013; Rhodes et al., 2009). While there has been research on the importance of both the principal and teachers as key stakeholders in school climate improvement efforts, (Cohen, McCabe, Michelli, & Pickeral, 2009; Conley, Schmidle, & Shedd, 1998; Rhodes et al., 2009), there have been few investigations focused on the relationship between school personnel feelings of support by the school principal and school personnel confidence in their ability to make an impact on the school climate (Habegger, 2007). It would be assumed that, with the demanding schedule of teachers and other school personnel, perceived principal support would be essential in school climate improvement efforts. The following research questions aim to address this gap in research and to highlight the powerful impact of principal support on school personnel driven school climate efforts, as well as examine which types of principal support that may be most influential.

1. What is the relationship between school personnel's perception of school administration support and their confidence in team efforts to improve school climate?

Based on findings by Habegger (2007) indicating that the principal's ability to foster confidence in teachers increased willingness to try new methods and take risks, it is hypothesized that there will be a positive correlation between school personnel

perception of school administration support and their confidence in team efforts to improve school climate.

- 2a. What is the relationship between school personnel's perception of school administration support and ratings of school climate by students and by staff? Based on findings by Moller and Pankake (2006) indicating that principal support of teacher leaders can lead to greater success in implementing initiatives, as well as findings by Pepper and Thomas (2001) indicating a principal support of teacher collaboration lead to more positive school climate, it is hypothesized that school personnel's perception of school administration support will be positively correlated with school climate ratings by students and by staff. The relationship between school personnel's perception of administration support and ratings of school climate by students is exploratory in nature.
- 2b. How do expressive and instrumental principal support predict ratings of school climate by students and school personnel?

This question is exploratory in an effort to increase understanding of, specifically, how principals can be most supportive of school personnel and types of support that are most predictive of success.

Chapter III

Methodology

Design

This study involved a correlational research design examining the relationship between (a) school personnel perception of school administration support and school personnel confidence in team efforts to improve school climate and (b) school personnel perception of school administration support and student and staff ratings of school climate. Pearson correlation coefficients were calculated to examine the potential for positive or negative relationships between the study constructs. "Correlational research allows researchers to determine not only whether a relationship between variables exists, but also the extent of the relationship between them" (Gall, Gall, and Borg, 2005). Multiple linear regression was used to examine whether instrumental and expressive principal support predicted more positive ratings of school climate (Allen, 1997).

Participants

The participants in this study were school personnel from 26 schools across 23 school districts in New Jersey. School grade levels ranged from elementary to high school. Student demographics include White (46.2%), Hispanic (23.6%), Black (22.4%), Asian/Pacific Islander (6.3%) and Alaskan/American Indian (1.5%). Grades levels included: eight elementary schools, seven middle schools, and five high schools, and five schools that included multiple grade levels. This study utilized extant data from the School Climate Transformation Project, a three-year project at Rutgers University involving schools in New Jersey. The project assists schools by providing training and support in utilizing the New Jersey School Climate Survey (NJSCS) to create and implement a School Climate Improvement Plan (SCIP). School Safety/School Climate

Teams (SS/SCT) were created at the start of the project and these teams are responsible for measuring school climate and implementing and sustaining efforts to create a more positive school climate. SS/SCT's are comprised of teachers, the school's anti-bullying specialist (ABS), school counselors, a parent, school psychologists and other school personnel. Members of each school's SS/SCT, including principals, completed a School Climate Transformation Project Evaluation Survey. All participants in the present study are members of their schools' SS/SCT and completed the School Climate Transformation Project Survey as part of their schools' participation in the project. The roles of these participants are shown in Table 1.

Data Collection

The primary data collection tool for this study was the School Climate Transformation Project Evaluation Survey. The survey in total is a 47-item, four-point Likert scale that assesses key areas of SS/SCT functioning and the school climate improvement process. The Likert scale for the items used for this study was as follows: 1= Strongly Agree, 2 = Agree, 3 = Disagree, and 4 = Strongly Disagree. This scale was later reverse coded for analysis. As part of their participation in the School Climate Transformation Project, 93 school personnel completed the survey. This study utilized extant data through examining responses of these school personnel on certain items of the survey. Items from the survey were utilized for this study to measure two constructs: school personnel's perception of principal support and confidence in efforts to improve school climate.

Perceived principal support. Two subscales, aligned with the conceptualization of support afforded by DiPaola (2012), House (1981) and Trace (2016), measured school personnel's perception of (a) expressive and (b) instrumental principal support. *Expressive support* assessed how well stakeholders felt the school administration supported them in the

following areas: (a) by celebrating and recognizing team success in school climate improvement efforts, (b) by recognizing staff members who are dedicated to school climate improvement in professional reviews, (c) by attending events and activities, and (d) by providing professional development related to school climate. *Instrumental support* assessed how well stakeholders felt the school administration supported them in the following areas: (a) by providing planning time for school climate efforts, (b) by providing necessary resources for school climate efforts, (c) by promoting collaboration among key stakeholders, and (d) in reflecting on areas of improvement for school climate efforts. In addition to the two subscales, an overall score for perceived support was calculated by summing all item responses.

Confidence in team efforts. A single item was utilized to measure school personnel's confidence in team efforts to impact climate includes: "I feel confident that the activities and programs we implemented this school year helped improve the climate in my school."

School climate perceptions. The New Jersey School Climate Survey (NJSCS) was utilized to examine student and staff ratings of school climate. The NJSCS was designed to collect and analyze information about the school climate from students, staff, and parents. For the purposes of this study, school staff and student responses were examined. The survey is a 57-item, five-point Likert scale inventory assessing information about school climate relating to eight core areas of school climate. The eight domains of school climate include: Physical Environment, Teaching and Learning, Morale in the School Community, Quality of Relationships, Level of Parental Support and Engagement, Safely, Emotional Environment, and Perceptions of Administration Support. Respondents utilize the following Likert scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree. Responses to individual questions of each domain are combined to create a summative domain score.

For the purpose of this study, domain scores for core areas of Quality of Relationships, Morale in the School Community, and Emotional Environment were utilized to measure ratings of school climate. The Quality of Relationships domain assesses the degree to which the lines of communication are open between members in the school community as well as relationships between students. The Morale in School Community domain assesses pride and ownership in the school and stakeholders sense of belongingness. Finally, the Emotional Environment domain assesses attitudes towards the social environment as well as perceptions of general fairness in the school community.

The NJSCS has demonstrated good explanatory validity. Explanatory validity is defined as "the proportion of variation in the latent variable explained by the equation of a model and the higher it is, the better the fit, with 1.0 representing the 'perfect model'" (New Jersey Department of Education, 2013). Explanatory validity for most domains of the survey were above .70. The Safety domain demonstrated lower explanatory validity (.58). The predictive validity of the measure was strong. Predictive validity is defined as the ability of scores on a measure to predict future behavior (Mertens, 2010). All domains (excluding Physical Environment and Parental Support) demonstrated a standardized root mean squared residual (SRMR) of .05 or below. SRMR is a measurement of error with 0.0 representing the smallest amount of error and therefore a perfect fit (New Jersey Department of Education, 2013). The internal consistency reliability of the survey was determined using Cronbach's alpha. Internal consistency reliability is used to compare responses within one administration of an instrument (Mertens, 2010).

Internal consistency for domains the survey varied (Cronbach's alpha of .50 to .76).

Data Analysis

The data analytic approach used to address each question is outlined below.

Research Question 1 - What is the relationship between school personnel's perception of school administration support and their confidence in team efforts to improve school climate? A Pearson correlation (Gall, Gall, and Borg, 2005) was utilized to assess the relationship between school personnel's perceptions of principal support and their confidence in team efforts to improve school climate. A Pearson correlation is calculated to determine the strength and direction of the relationship (e.g., negative, positive, or no correlation) between variables.

Research Question 2a - What is the relationship between school personnel's perception of school administration support and ratings of school climate by students and by staff? A Pearson correlation was also utilized to assess the relationship between school personnel's perception of principal support and ratings of school climate by students and staff.

Research Question 2b - How do expressive and instrumental principal support predict ratings of school climate by students and school personnel? Multiple linear regression (Allen, 1997) was utilized to assess whether expressive and instrumental principal support were predictive of a positive school climate.

Chapter IV

Results

Descriptive Statistics

Table 1

Overall, 93 subjects completed the School Climate Transformation Project Evaluation Survey. Administrators were included in the survey administration. For this study, administrator responses were removed from the data to examine only school personnel perceptions. A total of 21 administrator responses were removed from the initial data set. Before proceeding with data analysis, the data were screened for missing values. There was minimal missing data found. One subject had complete missing data (i.e. no responses to the survey) and therefore this subject was removed before analysis. After screening the data, 71 subjects remained (N=71), and the responses of these subjects on the survey were used in the data analysis. As shown in Table 1, descriptive analysis of school personnel role in school and ethnicity were analyzed.

Descriptive Analysis of School Personnel Characteristics School Personnel Demographic Variable % n Role in School Teacher 40 56.3 **Guidance Counselor** 23.9 17 Other 4 5.6 School Psychologist 4 5.6 Social Worker 4 5.6 Support Staff 2 2.8

Reliability of Principal Support Summary Scores

Internal reliability was investigated for the scale that measured overall principal support, as well as the subscales that measured instrumental and expressive principal support. Cronbach's alpha demonstrated acceptable internal consistency α = .88 for the principal support scale.

Internal reliability was also investigated for the instrumental support scale. Cronbach's alpha demonstrated acceptable internal consistency, α = .87. As shown in Table 2, the correlations among items ranged from .60 to .71.

Table 2

Correlation Matrix for Items of the Instrumental Support Summary Score

	1	2	3	4
Our administration supported our				
team by:				
1. By providing planning time				
for school climate				
2. By providing necessary				
resources for school climate	.71			
efforts				
3. By promoting collaboration	.67	.64		
among key stakeholders	.07	.04		
4. In reflecting on areas of				
improvement for school	.60	.65	.62	
climate efforts				

Internal reliability was also conducted for the expressive support scale. Cronbach's alpha demonstrated acceptable internal consistency, α = .72. As shown in Table 3, the correlations among items ranged from .20 to .69.

Table 3

Correlation Matrix for Items of the Expressive Support Summary Score

	1	2	3	4
Our administration supported our				
team by:				
1. By celebrating and				
recognizing team success in				
school climate improvement				
efforts				
2. By recognizing staff				
members who are dedicated to	60			
school climate improvement in	.60			
professional reviews				
3. By attending events and	<i>5</i> 2	21		
activities	.53	.21		
4. By proving professional				
development related to school	.44	.20	.69	
climate				

Correlational Analyses

Relationship between principal support and school personnel confidence. A Pearson correlation was utilized to examine the relationship between perceived principal support and school personnel's confidence in their ability to impact school climate. The correlation between perceived principal support and school personnel's confidence did not reach significance (r= .06, p=.618).

Relationship between principal support and school climate ratings. A Pearson correlation was also utilized to examine the relationship between perceived principal support and school climate ratings by staff and students on the school climate domains of Quality of Relationships, Emotional Environment, and Morale in the School Community. There was a statistically significant and positive correlation found between perceived principal support and the staff ratings on the Quality of Relationships school climate domain (r=.40, p=.000). There was also a statistically significant positive correlation found between perceived principal support

and ratings by staff on the Emotional Environment domain (r=.43, p=.000). The correlation between perceived principal support and the staff ratings for Morale in School Community was also found to be statistically significant (r=.30, p=.012).

For student school climate ratings, there was a statistically significant and positive correlation found between perceived principal support and the student ratings on the Quality of Relationships school climate domain (r=.30, p=.010) and on the Emotional Environment domain (r=.27, p=.023). There was not a statistically significant relationship found between school personnel's perception of principal support and student ratings for Morale in School Community (r=.23, p=.051).

Predictive Value of Instrumental and Expressive Principal Support on School Climate

Multiple linear regression analyses were preformed to investigate the extent to which expressive and instrumental principal support predict staff and student ratings of school climate in the areas of Quality of Relationships, Emotional Environment, and Morale in the School Community.

Staff ratings. Table 4 includes information about the statistical significance of individual predictors for staff ratings of school climate. For ratings of school climate in the Quality of Relationships domain, the multiple regression model included both the expressive and instrumental support predictors and was found to be significant F(2, 68)=7.34, p=.001. The model explained 15.3% of variance in staff ratings of school climate on the Quality of Relationships domain. Instrumental support was a statistically significant predictor of ratings of school climate on this domain ($\beta=1.25$, p=.021). Therefore, for every increase of one in the Quality of Relationships domain score, a 1.25 increase in the instrumental support score would

be expected. Individually, expressive support was not found to make a statistically significant contribution.

The multiple regression model examining expressive and instrument support as predictors of Morale in the School community was significant F(2, 68)=3.77, p=.028. The model explained 7.3% of variance in staff ratings of school climate on the Morale in School Community domain. After controlling for other variables in the model, there were no statistically significant contributions found by any individual type of principal support on the ratings of school climate in the Morale in School Community domain.

For the Emotional Environment domain, the multiple regression model included both predictors. This model was statistically significant F(2, 68)=8.57, p=.001. The model explained 17.8% of variance in staff ratings of school climate on the Emotional Environment domain. Instrumental support was a statistically significant predictor of ratings of school climate on this domain (β =1.25, p=.019). Therefore, for every increase of one in the Emotional Environment domain score, a 1.25 increase in the instrumental support score would be expected. Individually, expressive support was not found to make a statistically significant contribution.

Student ratings. Table 5 includes information about the statistical significance of individual predictors for student ratings of school climate. When examining the predictive value of instrumental and expressive types of principal support on school climate ratings by students in the area of Quality of Relationships, the multiple regression model was statistically significant F(2, 68) = 4.44, p=.015. The model explained 8.9% of variance in student ratings of school

Table 4

Instrumental and Expressive Support as Predictors of Staff School Climate Domain Scores

Predictors	β	Standard Error	t	p-value
Quality of Relationships				
Constant	51.03	3.86	13.21	.000
Instrumental Support	1.25	.53	2.36	.021*
Expressive Support	16.	.55	295	.769
Morale in School Community				
Constant	52.01	4.17	12.48	.000
Instrumental Support	1.03	.57	1.81	.074
Expressive Support	22	.59	37	.716
Emotional Environment				
Constant	45.56	3.81	11.95	.000
Instrumental Support	1.25	.52	2.40	.019*
Expressive Support	07	.54	13	.895

^{*} *p* < .05; ** *p* < .01; *** *p* < .001

climate on the Quality of Relationships domain. Instrumental support was a statistically significantly predictor of ratings of school climate on this domain (β =1.66, p=.012). Therefore, for every increase of one in the Quality of Relationships domain score, a 1.66 increase in the instrumental support score would be expected. Expressive support was not found to make a statistically significant contribution.

For ratings of school climate by students in the Morale in School Community domain, the multiple regression model was not statistically significant F(2, 68)=2.37, p=.101. The model explained 3.8% of variance in student ratings of school climate on the Morale in School Community domain. There were no statistically significant individual contributions found by the types of support on school climate ratings in this domain.

The multiple regression model examining the predictors on ratings of school climate by students in the Emotional Environment domain was not statistically significant F(2, 68)=3.10, p=.051. The model explained 5.7% of variance in student ratings of school climate on the Emotional Environment domain. There were no statistically significant contributions found by individual types of support on school climate ratings in this domain.

Table 5

Instrumental and Expressive Support as Predictors of Student School Climate Domain Scores

Predictors	β	Standard Error	t	p-value
Quality of Relationships				
Constant	46.46	4.74	9.80	.000
Instrumental Support	1.66	.65	2.57	.010*
Expressive Support	87	.67	-1.31	.196
Morale in School Community				
Constant	54.29	5.07	10.70	.000
Instrumental Support	.78	.69	1.13	.263
Expressive Support	.06	.71	.09	.929
Emotional Environment				
Constant	48.71	4.40	11.08	.000
Instrumental Support	.721	.60	1.20	.234
Expressive Support	.13	.62	.21	.836

^{*} *p* < .05; ** *p* < .01; *** *p* < .001

Chapter V

Discussion

As highlighted in the literature review, principal support of school personnel driven school climate initiatives is essential for success. This study assessed the specific impact of principal support on school personnel confidence in their efforts to impact school climate as well as the relationship between principal support and ratings of school climate by staff and students. It was found that there was not a statistically significant correlation between school personnel ratings of principal support and school personnel ratings of their confidence in their ability as a team to impact school climate. This finding is in contrast with the existing literature. Habegger (2007) highlighted that a principal's ability to enhance confidence in teachers led to teacher willingness to take risks and try new methods. This finding could be impacted by many factors. There was only one item utilized to measure the construct of school personnel confidence, and this may have impacted results in this area.

A statistically significant and positive relationship was found between school personnel's perception of principal support and staff ratings on all three domains of school climate: Quality of Relationships, Emotional Environment, and Morale in the School Community. This finding is consistent with the literature, which found that principal support leads to greater successfulness of initiatives as well as more a positive school climate (Moller and Pankake, 2006; Pepper and Thomas, 2001).

There were statistically significant positive relationships found between school personnel's perception of principal support and student ratings on the Quality of Relationships and Emotional Environment domains of school climate. The relationship between school personnel perception of principal support and student ratings on the Morale in the School

Community school climate domain did not reach significance. This research question was exploratory in nature and therefore predictions were not made on the quality of the relationships. The non-significant relationship found in the area Morale in the School Community for students could highlight that principal support impacts feelings of morale differently for staff and students; however, the lack of significant findings on this domain may also be impacted by the validity of the Morale in School Community domain of the New Jersey School Climate Survey for students. A different result may have been found if students' perceptions (as well as staff perceptions) of principal support could be examined, but an item measuring students' perceptions of principal support was not available in the extant data set.

The present study also assessed whether instrumental and expressive principal support predicted school climate ratings by staff and students. This research question was also exploratory in nature. This study demonstrated that instrumental support made a statistically significant contribution on ratings of school climate by staff in the Quality of Relationships and Emotional Environment domains. It appears that, in this study, instrumental support was a stronger predictor of ratings of school climate. There was no statistically significant contribution found by the expressive support predictor on any domain for staff and student ratings of school climate. This finding was in contradiction with House's (1981) conclusion that emotional support (an element of the expressive support domain) is the most important type of support. It is also interesting to note that there was no statistically significant contribution found by either predictor on the Morale in the School Community school climate domain. This finding is consistent with the findings from the correlational analysis between perceived principal support and staff ratings of school climate on this domain. The finding related to Morale in the School Community domain may highlight that principal support does not impact school morale;

however, this result might also be impacted by the validity of this domain in the New Jersey School Climate Survey.

For school climate ratings by students, school personnel's perceptions of instrumental support was found to make a statistically significant contribution on ratings of school climate by students on the Quality of Relationships domain. Individually, the predictors of expressive and instrumental support were not found to make statistically significant contributions on any other domains of school climate for student ratings.

It is interesting to note that instrumental support was the only predictor found to make a statistically significant contribution on ratings of school climate by staff and students on certain domains. It is clear for this particular study, that instrumental support was more strongly related to certain domains of school climate than expressive support.

There are many potential causes of this difference in findings between instrumental and expressive support. It is possible that instrumental support by a school principal has a stronger impact on certain areas of school climate. The practical and logistical support provided by instrumental support might have a greater impact or be more noticeable to school personnel and this might influence their ratings of school climate in the areas of Quality of Relationships and Emotional Environment. In the busy environment of many schools, expressive support might be less important to staff than the type of support that instrumental support provides. Furthermore, this result may be impacted by the measures utilized in this study. The Quality of Relationship and Emotional Environment school climate domains may have better validity than the Morale in the School Community domain for staff ratings.

Limitations of Findings

There has been a lack of published research on the specific perceptions of school stakeholders' involved in the school improvement process. This is surprising given the large amount of research supporting the inclusion of all stakeholders in school climate initiatives. In considering the contributions of this study, it is also important to reflect on the possible limitations. This study was a correlational research design, as with any type of correlational research, it is impossible to determine a causal relationship between the constructs as well as the direction of the relationship. For example, in using this design it is not possible to determine if principal support caused school personnel to feel more confident. It can only be determined that there is a significant relationship between these two variables.

An additional limitation of the study is the lack of survey items utilized to examine the variable of school personnel confidence in their ability to impact school climate. It would have been ideal to utilize more specific items to examine this variable in the study.

A final limitation of the study is the timing of the collection of the data. The survey data was collected during both the spring and fall of 2017. If there were any administrative changes between school years, it may have impacted ratings of principal support by school personnel.

Implications for Research and Practice

This study raises questions about the impact of certain types of principal support on school personnel confidence and overall ratings of school climate. The lack of significant findings between school personnel's perception of principal support and their confidence in their ability to impact school climate was in contrast to findings in the literature. More research is needed in the area of school stakeholder perceptions of self-efficacy in the school climate improvement process as well as perceptions of support. Future research should utilize multiple

measures of school personnel confidence in order to gain a better understanding of school personnel perceptions. Furthermore, it might be beneficial to observe school personnel confidence in school climate improvement efforts over time. For example, it might be advantageous to examine school personnel confidence before, during, and after school climate improvement implementation.

While instrumental support was found to be significantly related to some domains of school climate, expressive support was not found to be significantly related to any area of school climate in this study. More research is needed to understand the impact of principal expressive support on school stakeholders involved in the school climate improvement process and on school climate, as well as the different impact of both expressive and instrumental support on school stakeholders and school climate. Additional research should be designed to collect information about school climate and principal support before and after intervention to examine the specific impact of the principal throughout the school climate improvement process.

Furthermore, it would be helpful to more comprehensively assess the expressive and instrumental principal support constructs by utilizing an empirically supported measure, such as the Principal Support Scale (Dipaola, 2012).

More research is also needed to further explore the relationship between school personnel perceptions of principal support and student perceptions of school climate. In future research, it would be beneficial to have additional measures of principal support to assess for student as well as school personnel perspectives. It would also be important to examine school climate ratings post-intervention in order to get a better understanding of the impact of the school climate improvement process on student perspective of school climate as well as principal support.

There are multiple implications for practice based on the findings in this study. First, it is important for school principals to recognize that the level of support they provide may impact school personnel confidence in their ability to make an impact in school climate initiatives. While the findings in this study did not reach significance, due to the limitations discussed previously, it is important to interpret this result with caution. Many other research findings highlight the importance of principal support of school personnel driven school climate change efforts. If school personnel are more confident in their efforts, they may be more willing to participate in and take ownership of school climate initiatives. As discussed in the literature review, participation of stakeholders can lead to greater successfulness of initiatives (Goddard et al., 2007; Hughes & Pickeral, 2013; Rhodes et al., 2009).

While overall perceptions of principal support by school personnel were found to be related to more positive ratings of school climate by staff, based on the findings, it is clear that providing instrumental support to school personnel may be related to more positive school climate in some areas. Instrumental support was related to more positive ratings of school climate in the Quality of Relationships school climate domain for both staff and students. This type of principal support may somehow contribute to the quality of relationships within the school. In attempting to provide support, there is research to support the use of both instrumental and expressive support (House, 1981; Trace, 2016); however a principal's ability to provide instrumental support to school stakeholder may potentially lead to greater success of school climate initiatives.

References

- Allen, M. (1997) The multiple regression model. In: Understanding Regression Analysis.

 Springer, Boston, MA
- American Institutes for Research (2012). School Climate and Conectedness Report 2012:

 Student and Staff Results. American Institutes for Research. The Association of Alaska School Boards.
- Blackwell, S. (2009) "Relationship Between Teacher Morale and School Climate" *The Corinthian:* Vol. 10, Article 6.
- Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago, IL: University of Chicago Press.
- Cardillo, R. (2013). School climate and youth development. School Climate Practices for Implementation and Sustainability. A School Climate Practice Brief, Number 1, New York, NY: National School Climate Center.
- Cohen, J. & Brown, P. (2013). School climate and adult learning. In Dary, T. & Pickeral, T. (ed) (2013). School Climate: Practices for Implementation and Sustainability. A School Climate Practice Brief, Number 1, New York, NY: National School Climate Center.
- Cohen, J. & Geier, V. K. (2010). *School Climate Research Summary: January 2010*. New York, NY. (www.schoolclimate.org/climate/research.php).
- Cohen, J., McCabe, E., Michelli, N., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, *111*(1), 180-213.
- Conley, S. C., Schmidle, T., & Shedd, J. B. (1988). Teacher participation in the management of school systems. *Teachers College Record*, *90*, 259–280.

- Cotton, K. (2001). *New small learning communities: Findings from recent literature*. Northwest Regional Education Laboratory.
- DiPaola, M. F. (2012) *Contemporary challenges confronting school leaders*. Charlotte, NC: Information Age Pub., 115-124.
- Dumaresq, R. & Blust, R. (1981). School climate improvement; A model for effective school change. Paper for Pennsylvania Department of Education, Harrisburg, PA.
- Elias, M. J., O'Brien, M. U., & Weissberg, R. P. (2006). Transformative leadership for social emotional learning. *Prinipal Leadership*, 7(4), 10-13.
- Eck, K. V., Johnson, S. R., Bettencourt, A., & Johnson, S. L. (2017). How school climate related to chronic absence: A multi-level latent profile analysis. *Journal of School Psychology*, 61, 89-102.
- Freiberg, H., & Stein, T. (1999). Measuring, improving and sustaining healthy learning environments. In *School Climate: Measuring, Improving and Sustaining Healthy Learning Environments* (pp. 11-29). London: Falmer Press.
- Gall, J. P., Gall, M. D., & Borg, W. M. (2005). *Applying educational research: A practical guide*. Boston: Pearson.
- Goddard, Y. L., Goddard, R,D., Tschannen-Moran, M. (2007). A Theoretical and Empirical Investigation of Teacher Collaboration for School Improvement and Student Achievement in Public Elementary Schools. *Teachers College Record*, 109(4), 877-896.
- Gottfredson, G. D., Gottfredson, D. C., Payne, A., & Gottfredson, N. C. (2005). School climate predictors of school disorder: Results from national delinquency prevention in school.

 *Journal of Research in Crime and Delinquency, 42(4), 421-444.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of

- children's school outcomes through eighth-grade. *Child Development*, 72(2), 625-638. [Digested in *Clinician's Research: Briefings in Behavioral Science*, 20(2), 3.]
- Habegger, S.L. (2007). What is the principal's role in successful schools? A study of Ohio's
 Schools of Promise at the elementary level. Ph.D. dissertation, Kent State University,
 United States -- Ohio. Retrieved March 29, 2008, from ProQuest Digital Dissertations
 database. (Publication No. AAT 3274103).
- Hoge, D. R., Smit, E. K., & Hanson, S. L. (1990). School experiences predicting changes in self esteem of sixth- and seventh-grade students. *Journal of Educational Psychology*, 82(1), 117-127.
- House, J. S. (1981). Work stress and social support. Reading, MA: Addison-Wesley.
- Hoy, W. (1990) Organizational climate and culture: A conceptual analysis of the school workplace. Journal of Educational and Psychological Consultation, 1(2) 149-168.
- Hoy, W, K. & Miskel, C. G. (1987). Educational Administration: Theory, Research and Practice (3rd ed.). New York: Random House
- Hughes, W. H. & Pickeral, T. (2013). School climate and shared leadership. School ClimatePractices for Implementation and Sustainability. A School Climate Practice BriefNumber 1, New York, NY: National School Climate Center.
- Marshall, M. L. (2004). Examining School Climate: Defining Factors and Educational

 Influences. Georgia State University Center for School Safety, School Climate and

 Classroom Management website: http://education.gsu.edu/schoolsafety/
- McEvoy, A., & Welker, R. (2000). Antisocial behavior, academic failure, and school climate: A critical review. *Journal of Emotional and Behavioral Disorders*, 8(3), 130-140.

- Mertens, D. M. (2010). Research and evaluation in education and psychology: integrating diversity with quantitative, qualitative, and mixed methods (3rd ed.). Thousand Oaks: Sage Publications.
- Moller, G. & Pankake, A. (2006) *Lead with me: A principal's guide to teacher leadership*. Larchmont, NY: Eye on Education.
- New Jersey Department of Education. (2013). Summary of New Jersey School Climate Survey

 Domain Scale Validation New Jersey Department of Education. Retrieved from

 http://www.state.nj.us/education/students/safety/behavior/njscs/NJSCS FactSheet.pdf
- Pepper, K. & Thomas, L. (2002). "Making Change: The Effects of the Leadership Role on School Climate." *Learning Enviornments Research* 5(2): 155-66.
- Trace, Natalie Elizabeth Lytle. (2016). Relationship Among Teacher Job Satisfaction, Trust In e Principal, And Principal Support. *Dissertations, theses, and Masters Projects*. Paper 1463413079.
- Turhan M., Akgül T. (2017). The Relationship between Perceived School Climate and the Adolescents' Adherence to Humanitarian Values. *Universal Journal of Educational Research*, *5*, 357 365. doi: 10.13189/ujer.2017.050308.
- Rhodes, J. E., Camic, P. M., Milburn, M., Lowe, S. R. (2009). Improving Middle School Climate through Teacher-Centered Change. *Journal of Community Psychology*, 37(6), 711-724.
- Skinner, E. & Belmont, M. (1993). Motivation in the classroom: Reciprocal e ects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, 85, 571-581.
- Stolp, S., & Smith, S. C. (1995). Transforming school culture: stories, symbols, values, and the leader's role. Eugene, OR: ERIC Clearinghouse on Educational Management.

Winter, J. S. (1987). A qualitative study of teachers' perceptions of school climate utilizing the interview method. *Retrospective Theses and Dissertations*. 9318.