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ORGANIZATIONAL JUSTICE PERCEPTIONS IN VIRGINIA HIGH SCHOOLS: A STUDY OF ITS RELATIONSHIP TO SCHOOL CLIMATE AND FACULTY TRUST

A Dissertation

Presented to

The Faculty of the School of Education

The College of William and Mary in Virginia

In Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

---

by

Stephanie L. Guy

September 2007

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A STUDY OF ITS RELATIONSHIP TO SCHOOL CLIMATE AND

FACULTY TRUST

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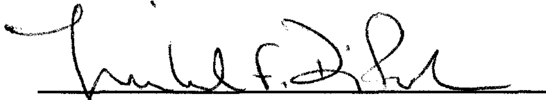
Stephanie L. Guy

Approved September 2007



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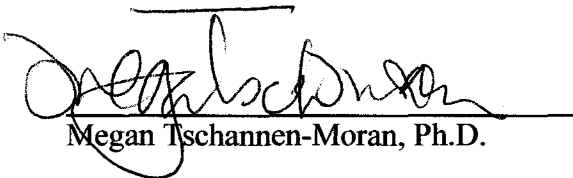

Megan Tschannen-Moran, Ph.D.

DEDICATION

This work is dedicated to my family. To my sons, Trey and Chris, thank you for inspiring me to always want to be more than I am. To my husband Ed, I cannot begin to express in words my thanks for your love and support. Not only did you provide the financial assistance for most of my education, more importantly you gave me the emotional support to push myself beyond what I thought possible. If not for your encouragement this work would not exist. You listened to countless readings and re-readings. You provided direction and even pushed every once in awhile to get me back on task. You also made this journey possible by taking the lead in so many of the routine tasks and responsibilities of family life giving me the time needed to complete this study. I thank you so very much for your unwavering love and support through this demanding process.

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ORGANIZATIONAL JUSTICE PERCEPTIONS IN VIRGINIA HIGH SCHOOLS: A STUDY OF ITS RELATIONSHIP TO SCHOOL CLIMATE AND FACULTY TRUST

ABSTRACT

In the private sector, organizational justice has consistently demonstrated a strong correlation with trust in management, employee commitment, and performance. The purpose of this study was to investigate whether organizational justice had a similar relationship with social processes in the educational arena. This study examined the relationship between organizational justice and school climate and it sought to replicate earlier findings of a significant link between perceptions of justice and faculty trust. The Organizational Justice Scale (OJS), School Climate Index (SCI), and Omnibus T-Scale were used to survey 988 licensed, professional staff members in 30 public high schools in Virginia.

A significant positive relationship was found between organizational justice and school climate. Additional analysis revealed a significant positive correlation between justice and each school climate factor: collegial leadership, teacher professionalism, academic press, and community engagement. When regressed with the other climate factors, collegial leadership alone demonstrated a significant independent effect on organizational justice. A significant positive correlation was also found between organizational justice and all three faculty trust factors: trust in principal, trust in colleagues, and trust in clients. However, only trust in the principal demonstrated a significant and independent effect on organizational justice when regressed with the other trust factors.

ORGANIZATIONAL JUSTICE PERCEPTIONS IN VIRGINIA HIGH SCHOOLS: A STUDY OF ITS RELATIONSHIP TO SCHOOL CLIMATE AND FACULTY TRUST

CHAPTER 1: THE PROBLEM

Introduction

In 1964 the U.S. Office of Education initiated one of the largest studies ever undertaken to examine the impact of school, teacher, and student characteristics on student outcomes. The "Equality in Educational Opportunity Study", more commonly known as the "Coleman Report", found that student background factors accounted for 10 to 25 percent of the variance in individual achievement (Coleman et al., 1966). However, the finding that caused much concern for individuals in the field of education was that school characteristics contributed little toward the variance in student achievement when student background factors were held constant.

Since this landmark investigation was carried out, countless studies have been conducted that challenged the findings of the Coleman Report. In particular, many studies completed in the 1970s and 1980s identified several correlates of "Effective Schools". These studies all pointed to the importance of strong instructional leadership, a pervasive emphasis on academics, high expectations for students, and a safe and orderly learning environment as being instrumental to student achievement (Brookover & Lezotte, 1979; Edmonds, 1979, 1981; Hallinger & Murphy, 1986). These early studies ushered in the era of accountability for schools and instructional leaders with respect to improving academic outcomes for all students.

Additional studies in the 1990s and beyond supported these early findings with regard to the last three correlates, academic emphasis, high expectations, and a safe and orderly learning environment, which have been frequently integrated together under the

heading of school climate. Most notably, the correlation between a strong academic focus and student achievement has been supported consistently by research studies (Erbe, 2000; Hoy & Hannum, 1997; Hoy, Hannum & Tschannen-Moran, 1998; Lee, Smith, Perry, & Smylie, 1999; Paredes, 1991; Zigarelli, 1996). In addition to a pervasive focus on student learning, Hoy et al. (1998) also found that collegial leadership, characterized as supportive and egalitarian principal behaviors, and teacher professionalism, characterized by commitment to students and respect for the competence of colleagues, had significant and independent, positive effects on variables of student achievement.

Unfortunately, research findings depicting a strong link between instructional leadership and student achievement have been limited. Hoy and Hannum (1997) suggested that the inability to make this connection empirically is due to the fact that the principal is "one step removed from teaching" (p. 305). Consequently, any link that exists is an indirect one. However, it has been argued that the remaining components of the effective schools research, which have been categorized together under school climate, cannot coexist without effective instructional leadership. Edmonds (1979) stated that "one of the most tangible and indispensable characteristics of effective schools is strong administrative leadership, without which the disparate elements of good schooling can be neither brought together nor kept together" (p. 32). Edmonds was not suggesting that a strong instructional leader alone would create an effective school, rather that all other components were unlikely if that one factor was missing.

The research of Heck, Larsen, and Marcoulides (1990) reinforced Edmonds' supposition. They proposed that school leaders influence student achievement through the governance structures created within the school, supervision and support of the

instructional program, and creation of a positive school climate which includes defining the school's mission. Utilizing a causal model, they found that the "principal's role in establishing strong school climate and instructional organization is precisely the area that strongly predicts school achievement" (p. 117).

These findings, which support the principal's influence over school climate factors, have not been missed by those individuals given responsibility for shaping the legislation which dictates policy for public schools. On January 8, 2002, the Elementary and Secondary Education Act was reauthorized as the No Child Left Behind Act (NCLB) and signed into law by President Bush. Under NCLB, schools have been charged with closing the achievement gap that exists between students with special needs, students in poverty, and designated minority populations as compared to those in the general population. Schools unable to affect the changes needed to close the achievement gap face restructuring, which can include replacement of management authority at the school level (United States Department of Education, n.d.). As such, NCLB holds the principal responsible for affecting the organizational and climate conditions necessary to improve academic achievement for all students.

How then do principals affect the necessary changes to improve academic outcomes for all students? As stated previously, instructional leaders affect student achievement through their ability to influence and shape organizational structures, teacher behaviors, and school climate (Hawley, 1985; Heck et al., 1990; Witziers, Bosker, & Kruger, 2003). Specifically, Heck et al. suggested that principals influence instruction and consequently the achievement of students by "formulating school goals, setting and communicating high achievement expectations, organizing classrooms for

instruction, allocating necessary resources, supervising teachers' performance, monitoring student progress, and promoting a positive, orderly environment for learning" (p. 95).

However, even with appropriate organizational structures and adequate supervision of the instructional program, most of the interaction between students and teachers occurs behind closed doors. As such, without trust the school leader is unlikely to influence teacher behavior in any meaningful way and therefore will have no significant impact on student achievement. When trust exists between teachers and principals, they are more apt to work together to solve organizational problems (Tschannen-Moran, 2004). Conversely, an absence of trust increases suspicion and drives behavior directed by self-interest; as a result, teachers are reluctant to rely on administrative authority (Hoy & Tarter, 1997). As such, principals must rely on contract specifications and job descriptions to enforce minimal compliance with expectations (Tschannen-Moran). Lewicki, McAllister and Bies (1998) have suggested that "trust is the mechanism by which risks associated with social complexity are transcended" (p. 446). By encouraging individuals to risk interdependence, trust enhances the ability of a principal to shape the mission and influence the behaviors of those within the organization, as it reduces the vulnerability that exists when one's interests are dependent upon the actions of another.

Tschannen-Moran (2004) has theorized that trust is shaped by five components: benevolence, honesty, openness, reliability, and competence. However, researchers in the field of justice have suggested that perceptions of fairness also function as determinants of trust. When individuals work together in groups, they have much to gain but also risk

exploitation. As such, they cannot function effectively as a unit if they are constantly worried that their interests and well-being are not respected. Justice serves to balance self-interest with that of collective need. Consequently, numerous studies outside the field of education have found that perceptions of justice, with respect to formal procedures and interpersonal treatment, are significantly correlated with trust in management (Alexander & Ruderman, 1987; Barling & Phillips, 1993; Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter & Ng, 2001; Folger & Konovsky, 1989; Kanfer, Sawyer, Earley, & Lind; 1987).

As an antecedent of trust, perceptions of justice influence perceptions of legitimacy, thereby increasing compliance with authority and commitment to the organization (Sheppard, Lewicki & Minton, 1992). Masterson (2001) found that perceptions of fair treatment had a trickle down effect from employee to customer. Simons and Roberson (2003) concurred with Masterson's findings; the results of their study demonstrated that the effects of fair policies and appropriate interpersonal treatment toward employees improved the ability of the organization to address the needs of its customers.

Within the field of education, there has been little research as to the influence of justice perceptions on organizational attitudes and outcomes. However, the research conducted thus far has shown promise. In a study involving 75 middle schools, Hoy and Tarter (2004) found an inextricable link between trust and organizational justice. Given these connections, instructional leaders who understand the dimensions of justice and the impact that these perceptions have on trust, compliance, and commitment are in a much

better position to shape the climate of their organization and as a consequence improve student achievement.

Conceptual Framework

Justice concerns have permeated human existence from the earliest civilizations, when human beings first formed social groups to combine their modest physical resources to accomplish greater results (Folger & Cropanzano, 1998). However, working as a collective agency means that the needs and desires of the individual must sometimes be subverted for the needs of the group. Additionally, "people generally recognize that ceding authority to another person provides an opportunity for exploitation" (Lind, Kulik, Ambrose, & de Vera Park, 1993, p. 225). As such, justice concerns permeate every social system.

Within organizations, people almost immediately begin collecting information regarding fairness in order to make justice judgments. This information may be ascertained from outcomes awarded, commonly referred to as distributive justice. However, it is more likely that an individual's perceptions of justice will be shaped by the formal procedures and processes which direct the allocation of resources (procedural justice) or through the treatment one receives in daily interactions within the organization (interactional justice). Van den Bos, Lind, and Wilke (2001) found that timing is responsible for the more significant role that procedural and interactional justice judgments play in forming the fairness heuristic, in that information available at an earlier point in time is likely to be much more influential than information collected at a later date. Once formed the heuristic serves as "an anchor and a context used to understand and interpret justice-relevant experiences and cognitions" (Lind, 2001, p. 73).

Although, justice research has developed and evolved over the past 40 years in the business sector, it is almost non-existent in the educational research community. The framework for this study assumes that in the educational arena, justice is likely to demonstrate the same correlation with trust in management as it has in the private sector. Additionally, it is proposed that perceptions of justice will influence school climate which has been linked with student achievement.

The climate measure used for this study originates from the research of Hoy and his associates. It utilizes previous findings which support the notion that school climate impacts student achievement beyond that accounted for by demographic variables (Hoy & Hannum, 1997; Hoy et al., 1998; Hoy, Tarter, & Kottkamp, 1991; Tschannen-Moran, Parish, & DiPaola, 2006). Hoy and Hannum (1997) described school climate as "the set of internal characteristics that distinguishes one school from another and influences the behavior of its members" (p. 291). Inherent in the definition of school climate is that it is a relatively stable phenomenon based on the perceptions of its members, and these perceptions in turn influence behavior.

Over the years, researchers have created a variety of measures to assess school climate. In particular, Hoy and his associates have developed a number of climate instruments based on the theoretical underpinnings of Halpin and Croft (1962) and Parsons (1967). Two of these instruments, the Organizational Climate Description Questionnaire for Secondary Schools (OCDQ-RS) and the Organizational Health Index for Secondary Schools (OHI-S), describe school climate as a state of openness and health, respectively. Viewing open schools as healthy and healthy schools as open, Hoy

et al. (1998) integrated these two instruments into one. This instrument was labeled the Organizational Climate Index (OCI) (Hoy, Smith, & Sweetland 2002).

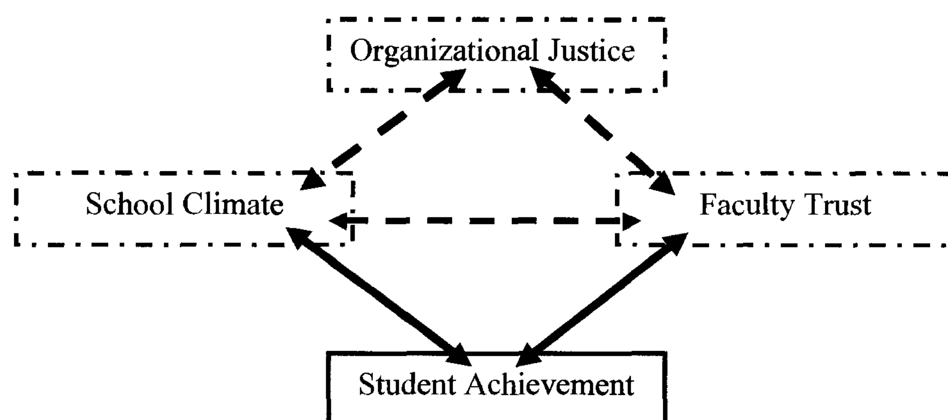
The OCI is characterized by four factors – collegial leadership, teacher professional behaviors, achievement press, and institutional vulnerability – each of which has correlated with some aspect of student achievement and trust. However, more recent changes to the OCI have been made by DiPaola and Tschannen-Moran (2005) in which institutional vulnerability, a subscale which commonly demonstrates a negative correlation with student achievement, has been replaced by community engagement. As community engagement demonstrates a positive correlation with student achievement, the School Climate Index (SCI) developed by DiPaola and Tschannen-Moran serves as the climate measure for the conceptual model presented in this chapter.

Numerous studies have demonstrated the impact that fairness judgments have on employee attitudes and behaviors; it enhances trust, commitment, and acceptance of authority. As such, it is proposed that justice judgments can enhance or diminish the principal's ability to shape school climate. If the justice perceptions formed suggest the principal is fair, then this perception is likely to make teachers more receptive to the standards established and values espoused by the principal. Additionally, it is proposed that the characteristics of collegial leadership – open, supportive, and egalitarian behaviors – align well with the attributes of procedural and interactional justice. As such, a collegial leader is one who typically uses fair procedures and treats individuals within the organization with courtesy and respect. This in turn enhances the principal's ability to shape teacher professional behavior, which in turn, impacts academic press and ultimately, student achievement.

Additionally, this model presumes that the strong correlation found in the private sector between justice and trust in management will also exist in schools. Since several studies have found a robust link between faculty trust and student achievement (Bryk & Schneider, 2002; Goddard, Tschannen-Moran, & Hoy, 2001; Hoy, 2002), the potential influence of organizational justice on faculty trust is an important construct for educational researchers to examine.

Conceptual Framework

Organizational Justice, School Climate, and Faculty Trust



Statement of the Problem

With respect to improving student outcomes, most notably for the most disadvantaged populations, NCLB has raised the stakes substantially for school personnel and instructional leaders in particular. However, the research suggests that principals, at best, have a limited effect on student achievement, as the means through which they affect change is indirect – governance structures, supervision of the instructional program, and most importantly school climate. If a principal is to shape the climate in such a way as to have a meaningful impact on instruction, he must understand that perceptions of justice are essential to engendering trust. As such, the purpose of this study

is to examine the relationship between organizational justice and school climate, and organizational justice and faculty trust.

Research Questions

1. What is the relationship between organizational justice, as measured by the Organizational Justice Scale (OJS), and school climate as measured by the School Climate Index (SCI)?
2. What is the relationship between organizational justice, as measured by the OJS, and each dimension of the SCI (collegial leadership, teacher professionalism, academic press, and community engagement)?
3. What is the relationship between organizational justice, as measured by the Organizational Justice Scale (OJS), and each dimension of faculty trust (trust in principal, trust in colleagues, and trust in clients), as measured by the Omnibus T-Scale?
4. What are the relative effects of the four dimensions of school climate on organizational justice?
5. What are the relative effects of the three dimensions of faculty trust on organizational justice?

Limitations of the Study

This study was limited due to the use of a convenience sample. Nonetheless, the researcher made every effort to include a diverse sample of high schools with respect to school size, geography, socio-economic status, and ethnicity. This research study involved public high schools in the state of Virginia willing to participate in the study.

Since the participants were not randomly selected from a defined population, the external validity was affected and generalizability beyond the scope of this study was limited.

This study focused exclusively on the relationship between organizational justice, school climate, as characterized by the SCI, and faculty trust factors. It is understood that other variables not being evaluated may confound the results. Additionally, since this study was correlational, causal effect cannot be determined.

Finally, the instruments used to assess organizational justice, trust, and school climate were all measured by self-reports. As such, the findings were based on the perceptions of the participants and individual responses may be affected by the events of the day on which the surveys were completed.

Definition of Terms

For the purpose of this study, the following definitions of terms apply:

- High School: Those schools with grade configurations of 9-12 or 10-12.
- School Climate: A relatively enduring, collective perception of the organization formed by group interactions, routine organizational practices, and norms of the organization, which in turn influences the behavior of its members.
    - Collegial Leadership: Principal behaviors which are supportive, egalitarian, and friendly while maintaining high academic expectations (Hoy et al., 1998; Hoy et al., 2002).
    - Teacher Professionalism: Professional teacher behaviors exhibited by high expectations, a commitment to students, and collegial teacher relationships imbued with respect and cooperation (Hoy et al., 1998; Hoy et al., 2002).

  - Academic Press: Characterized by an environment where academic goals for students are high but achievable, students respect those who excel, and the learning environment is serious and orderly (Hoy et al., 1998).
  - Community Engagement: Actively seeking to engage parents in the school and building coalitions to align parents and community members with the school's missions and goals (DiPaola & Tschannen-Moran, 2005)
- Organizational Justice: "Organizational justice is concerned with the ways in which employees determine if they have been treated fairly in their jobs and the ways in which those determinations influence other work-related variables" (Moorman,1991, p. 845). These perceptions of justice are formed as employees examine their work-related outcomes, procedures which regulate the distribution of those outcomes, and through the interpersonal treatment received in everyday encounters on the job.
  - Distributive Justice: Perceived fairness of the distribution of outcomes. It involves comparing the inputs, costs, and rewards of one individual with that of a significant other.
  - Procedural Justice: Perceived fairness regarding the process or procedures utilized to determine the distribution of outcomes.
  - Interactional Justice: Perceived fairness regarding the quality of the interpersonal treatment one receives in interactions with others. Individuals have an expectation of being treated with courtesy, dignity, and respect. Furthermore, it includes an expectation of openness and propriety in communication.

- Trust: A willingness to be vulnerable to another based on the confidence that the person is benevolent, honest, competent, reliable, and open (Tschannen-Moran & Hoy, 1998).

CHAPTER 2: REVIEW OF THE LITERATURE

Conceptual Underpinnings of Justice

The concept of justice acts as a force to balance the interests of the individual with that of the group. This principle is echoed throughout the justice literature. Deutsch (1985) suggested that justice serves to foster the relationship between society and the individual, whereby social cooperation promotes individual well being. Conversely, Folger and Cropanzano (1998) see justice as a constraint to the unmitigated pursuit of self-interest in order to achieve the cooperative interests of a moral community. Regardless of perspective, individuals cannot function effectively as a group if they are constantly concerned that their interests and well-being are not valued. Justice ensures that an individual be given his due (Bies, 2001).

Likewise, within organizations symmetry between the needs of the individual and that of the organization as a whole must be addressed if the organization is to effectively achieve its goals. Leventhal (1980) suggested that the manner in which a social system makes decisions regarding the allocation of rewards, punishments, and resources "has a great impact on its effectiveness and on the satisfaction of its members" (p. 27). If individuals within the organization are dissatisfied and believe they are being treated in an unjust manner, they are less likely to comply with organizational directives (Lind & Tyler, 1988); more likely to exhibit negative attitudes (Greenberg, 1993; Lind & Tyler, 1988) and counterproductive behaviors (Barling & Phillips, 1993; Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Folger & Cropanzano, 1998; Greenberg. 1993; Greenberg, 1990; Lind & Tyler, 1988); or leave the organization altogether (Alexander &

Ruderman, 1987; Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Masterson, Lewis, Goldman, & Taylor, 2000).

Sheppard et al. (1992) stated that "perceptions of justice lead to perceptions of perceived legitimacy, which in turn lead to compliance with the system.... We are willing to follow a leader who is fair, and we are more committed to an organization that we perceive as fair" (p. 103). This statement is supported by countless studies conducted over the past 20 years, which have shown a significant correlation between justice perceptions and organizational commitment (Ambrose & Harland, 1995; Colquitt et al., 2001; Folger & Konovsky, 1989; Konovsky, Folger, & Cropanzano, 1987; Masterson, 2001; Masterson et al., 2000; McFarlin & Sweeney, 1992; Mossholder, Bennett, & Martin, 1998; Naumann & Bennett, 2000).

Research has also demonstrated that justice perceptions correlate with compliance with authority and regulations (Greenberg, 1994; Lind, 1995; Lind et al., 1993); organizational citizenship behaviors (Cohen-Charash & Spector, 2001; Colquitt et al., 2001; De Cremer & Van Knippenberg; Masterson et al., 2000; Moorman, 1991); performance (Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Greenberg, 1987; Konovsky & Cropanzano, 1991; Masterson et al., 2000); job satisfaction (Alexander & Ruderman, 1987; Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Konovsky & Cropanzano, 1991; Masterson et al., 2000; McFarlin & Sweeney, 1992; Moorman, 1991; Mossholder et al., 1998); and trust in management (Alexander & Ruderman, 1987; Barling & Phillips, 1993; Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Folger & Konovsky, 1989; Konovsky & Cropanzano, 1991; Van den Bos, Wilke, & Lind, 1998). As such, perceptions of justice are critical to the success of organizations.

Organizational Justice

Moorman (1991) stated that "organizational justice is concerned with the ways in which employees determine if they have been treated fairly in their jobs and the ways in which those determinations influence other work-related variables" (p. 845). Perceptions of justice are formed as employees examine their work-related outcomes and the procedures which regulate the distribution of those outcomes (Cropanzano & Prehar, 2001). Additionally, justice perceptions are formed through the interpersonal treatment one receives, not only in the process and procedures which impact allocation, but also in everyday encounters on the job (Bies, 2001).

Over the past 40 years the concept of organizational justice has evolved. Originally the focus of the literature was on the fairness of outcomes, labeled distributive justice. In the 1970s, researchers began to examine perceptions of fairness as determined by the procedures within the system which regulate outcomes (Deutsch, 1985; Leventhal, 1980). This component of justice was identified as procedural justice. However, procedural justice did not fully address the impact of interpersonal treatment on fairness perceptions; by definition, it excluded the importance of interpersonal treatment outside the allocative process. As such, a third component of justice was advanced; interactional justice addressed fairness perceptions regarding interpersonal treatment received in all organizational encounters.

In 1993, Greenberg further subdivided interactional justice into two separate components, informational justice and interpersonal justice. He suggested that informational justice refers to the social aspects of procedural justice, in that, thorough explanations of procedures and accounts demonstrate regard for the individual. Whereas,

interpersonal justice refers to the concern and sensitivity that must be shown in the distribution of outcomes or the social aspects of distributive justice. To fully understand how perceptions of justice influence and shape climate, each of these constructs was examined to determine its impact on organizational effectiveness.

Distributive Justice

Homans (1961) first coined the term distributive justice, defining this construct as the "distribution of rewards and costs between persons" (p. 74). He suggested that in an exchange relationship each individual asks, "Given my costs or investments, did I receive as much as I had a right to expect?" and "Did I receive as much reward, given my costs as I ought to in comparison to another?" Stated plainly, "the rule of justice says that a man's rewards in exchange with others should be proportional to his investments" (Homans, p. 235).

Unfortunately, justice is a perceptual phenomenon. Although each individual assesses his or her investments and costs relative to another, there is no guarantee that each person in the exchange will make the same assumptions regarding costs, investments, and rewards for self or other (Homans, 1961). With respect to investments, which Homans defined as the background information or past history of self and other, one person may consider age or experience on the job as valid investments, whereas another may consider neither to be important in comparison to training, educational background, or professional association.

Through his research, Homans (1961) also found that different rewards and costs were not necessarily interchangeable. He found that an increase in costs such as greater responsibility and decreased autonomy may be considered unjust in comparison to

another individual with less responsibility and more autonomy, if the only rewards associated with this cost differential are increased recognition and greater variety of work tasks. Thus, distributive justice demands that not only investments and rewards be proportional but costs as well. Homans defined "profit as reward less cost" (p. 241); he further explained that if the profits of self and other are proportional, distributive justice is achieved.

Ultimately, the impact of ignoring proportionality in terms of investments, costs, and rewards, can be costly to organizations. Homans (1961) suggested that when distributive justice fails people react; individuals may respond by complaining about the unjust disadvantage, avoiding those activities where costs exceed rewards, or increasing participation in activities that are rewarded.

Equity theory. Building on the research of Homans, Adams described distributive justice in terms of equity. He stated that equity exists when the sum of one's inputs to outcomes ratio is equivalent to the sum of a significant other's inputs to outcomes ratio (Adams, 1963, 1965). Adams utilized the term inputs in place of Homans' investments; however the meaning is the same. Effort, education, experience, skills, and seniority, as well as age, gender, ethnicity, and social status are just a few of the inputs identified by Adams that an individual may consider as important contributions. Ultimately, the determination of whether an attribute is considered an input is "contingent upon the possessor's perception of its relevance to the exchange" (Adams, 1963, p. 423). Likewise, the relevance of outcomes, such as pay, benefits, status, and perks, is also dependent on perception.

Additionally, Adams expanded on Homans' concept of the referent *Other*. Other may describe another individual with whom one is in an exchange relationship; other may be an individual in a similar position outside the direct exchange with whom one makes a comparison during a third party exchange with an employer; or other may be oneself in a previous job or different social role (Adams, 1965). Regardless of who the referent other is, Adams (1963) found that "when the normative expectations of the person making the social comparisons are violated – when he finds his inputs and outcomes are not in balance in relation to those of others – feelings of inequity result" (p. 424).

Equity theory states that inequity creates tension proportional to the degree of inequity perceived, which in turn causes the individual to work to restore equity to reduce this tension (Adams, 1963, 1965). This response to inequity is what distinguishes Adam's theory from that of Homans. To restore equity, one may "vary his inputs, either increasing them or decreasing them depending on whether the inequity is advantageous or disadvantageous" (Adams, 1965, p. 283). In multiple field and laboratory studies conducted to test this hypothesis, Adams (1965) found that participants frequently altered productivity rates or work quality to address perceived inequity. However, not all inputs are subject to modification (i.e. age, gender, and ethnicity).

Given that some inputs cannot be altered, Adams found that individuals may also attempt to alter outcomes to restore equity. Requests for an increase in wages, benefits, or status are examples of equity restoration when one's outcomes are low relative to a significant other. Adams found little evidence that individuals in an advantageous outcome scenario would decrease their outcomes to restore equity. In addition to altering

inputs or outcomes in response to perceived inequity, Adams' research also demonstrated that individuals may exhibit withdrawal behaviors (i.e., quit their job, transfer, or increase absenteeism); may attempt to cognitively distort one's own or another's inputs or outcomes; or change their referent other. With respect to which mode of equity restoration is most likely, Adams (1965) proposed that the individual will most often make choices which maximize outcomes and minimize costly inputs.

Concerns with equity theory. Implicit in equity theory is the assumption that "equitable rewards will increase productivity by delivering high rewards to good performers and low rewards to poor performers" (Deutsch, 1985, p. 28). However, Deutsch proposed that depending upon the orientation of the group, principles of equality and need may be greater motivators than equity. Theorists have also expressed concern that equity theory considers the impact of inputs and outcomes on perceptions of justice, but ignores everything that happens in between. "In system-theory terms, the neglect of process amounts to overlooking 'throughputs' as a series of transforming events that help generate a final product" (Folger & Cropanzano, 1998, p. 42).

In addition to its one-dimensional perspective and its neglect of process events on outcome, equity theory has been criticized for its failure to address the mental gymnastics required to accurately compare one's own inputs and outcomes with those of another. In order to make a valid appraisal regarding equitable outcomes, one must have sufficiently accurate knowledge of one's own contributions and rewards, as well as those of significant others with whom one draws comparisons in an exchange relationship (Deutsch, 1985). Unfortunately, the cognitive capabilities of humans adversely limits understanding; "most people cannot perform implicitly or explicitly the calculations that

equity theory assumes they make in order to form an equity judgment" (Deutsch, 1985, p. 29).

Lastly, equity theory has also drawn criticism for its inability to "link antecedents and consequences in a predictable manner" (Folger & Cropanzano, 1998, p. 19). When will an unjust outcome cause an individual to increase productivity and when will it cause one to withdraw or retaliate? As theories of organizational justice evolved, each attempted to resolve the questions and criticisms surrounding equity theory.

Beyond equity. Deutsch (1985) proposed that the value system underpinning the distribution of outcomes was much broader than the singular dimension of equity. Specifically, he identified equity, equality, and need as the three values which serve as the basis for the allocation of resources. Whereas equity would likely serve as the dominant principle in a cooperative relationship focused on maximizing economic productivity, equality is more likely to dictate the distribution of outcomes if fostering or maintaining positive social relationships is the principle goal; likewise, if the primary focus of those in a cooperative relationship is toward the development and welfare of its members, then need will drive the allocation of valuable resources (Deutsch).

Stated in a more simplified version, the basic value underlying the system of distributive justice for economically-oriented groups is the principle of equity, for solidarity-oriented groups it is equality, and for caring-oriented groups it is need (Deutsch, 1985). Furthermore, Deutsch proposed that even in an economically-oriented system, utilizing the principle of equity to distribute rewards can be costly to the group. Equity disrupts social relations as it signals that "different participants in the relationship do not have the same value" (Deutsch, p. 41).

Procedural Justice

Procedural justice examines the influence of all throughput processes, which occur between inputs and outcomes, on perceptions of justice. Leventhal (1980) defined this component of justice as "an individual's perceptions of the fairness of procedural components of the social system that regulate the allocative process" (p. 35). Much of the initial research on the influence of procedures on justice perceptions was conducted by Walker and Thibaut. Their research focused on perceptions of fairness with respect to the resolution of legal disputes.

Process control. In a study designed to assess perceptions of justice in adversarial versus non-adversarial proceedings, Walker, Lind, and Thibaut (1979) found that reactions to adversarial procedures were consistently more favorable than that of non-adversarial proceedings. Additionally, Walker et al. (1979) found that regardless of the trial outcome, participants in the adversary variation consistently showed a more favorable reaction to the verdict. However, verdict had no significant effect on the reactions of any of the subject groups regarding the fairness of the trial procedures utilized.

By providing participants in the adversarial proceedings with a measure of control in the process, trial procedures were deemed more fair and satisfying, and these perceptions positively influenced participant reaction to the verdict (Walker et al., 1979). As such, process control was viewed as instrumental to achieving one's desired outcome, forming a critical connection between procedural and distributive justice. Namely, that "procedure becomes not merely a means to the end of distributive justice, but a means that profoundly affects the psychological meaning of that end" (Walker et al., p. 1403).

Consequently, an individual is less apt to consider an outcome unjust, if he believes the procedures guiding the outcome were fair (Folger & Cropanzano, 1998; Sheppard et al., 1992).

Most prevalent in the early conceptualization of procedural justice was the attribute of voice or process control. This construct most commonly refers to the opportunity to actively participate in the decision-making process or to present one's point of view on issues concerning outcomes. Earley and Lind (1987) asserted that the impact of voice on procedural judgments is "arguably, the most widely replicated and most reliable phenomenon in the area" (p. 1148). In support of this argument, numerous studies have provided evidence of the positive correlation between voice and perceptions of procedural justice (Bies, 1987; Bies & Shapiro, 1988; Folger, 1977; Van den Bos et al., 1998; Walker et al., 1979). Studies have also demonstrated the positive influence of voice on organizational attitudes such as supervisor satisfaction (De Cremer & Van Knippenberg, 2002; Kanfer et al., 1987), organizational commitment, and trust in one's supervisor (Folger & Konovsky, 1989).

Additional components. Some theorist believed that procedural justice was conceptualized too narrowly by the construct of voice or process control. Leventhal (1980) postulated that six justice rules shape perceptions of procedural fairness. He identified these rules as consistency, accuracy, bias-suppression, correctability, representativeness, and ethicality. With the exception of representativeness, which builds on the attribute of voice, Leventhal's rules incorporated additional fairness concerns raised by individuals involved in the allocation process.

The rule of consistency speaks to the need for procedures to remain relatively stable over time and across individuals (Leventhal, 1980). To be judged as fair, an organization may not use one process to determine the outcome for one individual and a different process for someone else, particularly if they are in a similar work group or if little time has passed between the two events. Leventhal posited that individuals are likely to view a sudden deviation from established organizational practices as a violation of fair procedure. The research of Sheppard et al., (1992) supports this assertion; they stated that “inconsistency with past practice or policies can create a sense of distrust or disenfranchisement among those who are disadvantaged by a decision” (p. 29).

Beyond the need for consistency, for procedures to be viewed as fair care must be taken to ensure that the information gathered to make a decision is accurate and that the process is free from bias. Accuracy dictates that outcomes are based “on as much good information and informed opinion as possible” (Leventhal, 1980, p. 41). It implies that the tools for collecting information are thorough and appropriate, and that the observer is competent. As such, if a supervisor lacks the knowledge or skill to make an adequate assessment or the assessment is based on an insufficient collection of evidence, then it is likely the process will be perceived as unfair. Likewise, an outcome is not likely to be viewed as fair if the individual making the decision is blinded by self-interest or preconceived notions, as both mindsets act as barriers to securing accurate information.

Leventhal’s (1980) rule of correctability “dictates that opportunities must exist to modify and reverse decisions made at various points in the allocation process” (p. 43). As such, grievance procedures are an essential component of rectification. Correctability lends support to the rule of accuracy and to the rule of representativeness, in that it allows

for changes to be made based on new or additional information and it provides the constituent with voice. It enhances perceptions of justice by acknowledging that people and processes are fallible. Furthermore, it suggests that when mistakes are identified, outcomes may be revised. In support of Leventhal's rules, Sheppard et al. (1992) found that when the information gathering process is thorough, accurate, and correctable, the procedures followed are consistent, and individuals within the organization are treated in a manner commensurate with their standing in the group, it is likely that the procedures will be viewed as fair or "correct" by the group.

Treatment commensurate with standing aligns with Leventhal's final procedural rule of ethicality. Leventhal (1980) suggested that the rule of ethicality is met when the allocative process is "compatible with the fundamental moral and ethical values accepted by the individual" (p. 45). However, some theorists have suggested that perceptions of procedural justice are influenced by a moral code that extends beyond the individual. Folger and Cropanzano (1998) asserted that justice concerns often center on honoring one's relational obligations. Ethicality demands that the organization treat the individual with respect and dignity. Lind and Tyler (1988) found that procedures that "violate basic norms of politeness will be seen as unfair both because the basic normative rules that are violated are valued in their own right and because impolite behavior denies the recipient's dignity as a full-status member of the group" (p. 237).

In a meta-analysis conducted by Colquitt et al. (2001), researchers established a clear connection between Leventhal's rules and perceptions of procedural fairness. Colquitt et al. (2001) discovered that Leventhal's rules showed a significantly stronger relationship to perceptions of procedural fairness ($\beta = 0.61$) than did Thibaut and

Walker's conceptualization, which focused primarily on process control ($\beta = 0.51$). "The Leventhal criteria are even more impressive when we consider that they predicted almost as much variance in procedural fairness perceptions as process control, even when entered in a later step in the regression analysis" (Colquitt et al., p. 435). Additionally, when distributive justice was controlled, Colquitt et al. found that only the Leventhal criteria ($\beta = 0.30$) and interpersonal justice ($\beta = 0.26$) retained their unique explanatory powers.

Interactional Justice

Although Leventhal's definition of procedural justice encompassed the formal procedures, processes, and mechanisms, which regulate the distribution of outcomes, some theorists believed it fell short in describing the full spectrum of conditions that influence perceptions of fairness. Bies and Moag (1986) described "an allocation decision as a sequence of events in which a procedure generates a process of interaction and decision making through which an outcome is allocated to someone" (p. 45). Most notably, their perspective incorporated a new dimension into the justice literature, that being the construct of interactional justice.

Bies (2001) defined interactional justice as the concern expressed by an individual regarding the interpersonal treatment received from others. Furthermore, he suggested that concerns regarding interpersonal treatment extend beyond the context of formal decision making events to include everyday encounters. Interactional justice carries an expectation that the individual will be treated with courtesy, dignity, and respect (Ambrose & Harland, 1995). To act in a manner inconsistent with these expectations, demonstrates disregard for the feelings of others. This disregard negatively impacts

perceptions of justice as it "implies so much unfettered self-interest as to interfere with due consideration of opposing interests and others' well-being" (Folger & Cropanzano, 1998, p. 30).

Numerous experiments have demonstrated the impact of interactional justice on work-related attitudes and behaviors. Significant correlations have been found between interpersonal sensitivity and acceptance of authority (Greenberg, 1994); affective commitment (Barling & Phillips, 1993); trust in management (Barling & Phillips, 1993; Cohen-Charash & Spector, 2001; Colquitt et al., 2001); job satisfaction (Cohen-Charash & Spector, 2001; Moorman, 1991); and organizational citizenship behaviors (Moorman, 1991). In an experiment that researched the impact of interpersonal sensitivity and thorough causal accounts on employee acceptance of a smoking ban, Greenberg (1994) found that treating others in a socially fair manner had a significant impact on the acceptance of the ban, particularly with those most adversely affected.

However beyond the requirement for interpersonal sensitivity, interactional justice also requires explanations and justifications. Individuals are more willing to accept a negative outcome if they understand the reason or circumstances behind the decision. In a study which examined the impact of explanations on pay cuts, Greenberg (1990) found that thorough explanations provided "in an honest and caring manner were not seen as being as unfair as pay cuts that were not explained carefully" (p. 566). Greenberg's (1994) study on smoking bans also supports this concept; he found that acceptance of the ban was significantly facilitated by providing individuals with detailed information regarding the necessity of the ban.

Additionally, if information is not provided prior to an outcome decision and something unfortunate or untoward occurs, adequate justifications must be provided (Folger & Cropanzano, 1998). In a synthesis of multiple studies, Bies and Shapiro (1987) found that "a causal account claiming mitigating circumstances enhances the perceptions of interactional fairness and approval of the decision maker's actions" (p. 214). More importantly however, they discovered that the adequacy of the explanation was significantly more influential in shaping perceptions of fairness and garnering support for said action, than was the claim itself. Adequate explanations have a powerful influence over perceptions of justice in that they provide information about intentionality. Bies and Shapiro (1987) suggested that outrage is not induced by the violation of procedures alone, but more often "upon the perception of the violator's intentionality" (p. 216). Explanations provide individuals with the information needed to assess intent.

These two components, interpersonal sensitivity and adequate explanations, are the primary attributes of interactional justice. However, Greenberg (1994) has questioned whether these two components describe one distinct construct or two; he believed the two components represented separate constructs in that informational justice addresses the social aspects of procedure, whereas interpersonal justice refers to the social components of distribution. As defined by Greenberg, informational justice requires that thorough explanations be provided regarding the procedures used to make a decision; interpersonal justice demands that the individual be treated with respect and sensitivity regarding the distribution of outcomes.

In a meta-analysis conducted by Colquitt et al. (2001), evidence was found to support the distinction between informational and interpersonal justice in that each

construct provided a unique contribution to perceptions of fairness and they differed in their correlations with several outcome variables. Although both showed strong correlations with agent-referenced evaluation of authority and moderate correlations with job satisfaction and negative reactions, only informational justice demonstrated a strong correlation with trust (Colquitt et al.). Furthermore, informational justice showed a stronger relationship with outcome satisfaction, organizational commitment, and withdrawal behaviors than did interpersonal justice.

Integrated Theories of Justice

Although the debate is not yet resolved regarding the number of organizational justice dimensions, there is sufficient evidence for the distinctive nature and impact of the various constructs that have evolved over the past four decades. As such, several researchers have developed theories which attempt to explain the impact of these different constructs on perceptions of fairness in an integrated fashion.

Referent Cognition Theory

Most justice models are based upon the premise of referent comparisons. Whereas distributive justice theories typically compared the inputs and outputs of self to a referent other, Folger's Referent Cognition Theory (RCT) altered the referent from what is to what could or should have been. Folger (1984) suggested that "the process of evaluation inevitably involves judging what something is in terms of what it is not" (p. 94). In order to make this comparison, one must mentally undo what has occurred; a process Folger labeled counterfactual assessment. Counterfactual thinking merges outcome with procedure, in that one cannot compare what something is with what it is not, without examining "the background conditions – circumstances, events, arrangements,

procedures, policies, and other systemic properties – instrumental to the outcomes' having been brought about" (Folger, p. 94).

As such, RCT requires that the individual compare actual outcomes to referent outcomes, and actual instrumentalities (or background conditions) to referent instrumentalities. Folger (1984) asserted that when referent outcomes surpass those actually obtained, dissatisfaction will likely result; however when one can easily imagine plausible referent instrumentalities, dissatisfaction may lead to negative reactions. Outcomes and instrumentalities are thus inextricably linked in RCT, as referent outcomes are the hypothetical end results which may have been brought about, if only different instrumentalities had actually existed. Folger stated that "the combination of both comparisons influences the perception of injustice and the accompanying feelings of resentment about unjust treatment" (p. 98).

RCT suggests that resentment and negative reactions will be greatest when high referent outcomes meet with unjustified actual instrumentalities. However, Folger (1984) also found that depending upon whether the referent outcomes were local (viewed in the context of one's own current well-being) or global (seen in the broader context of group welfare), justification of instrumentalities could have differing effects on one's reaction. In an experiment conducted by Folger and Martin (as cited in Folger, 1984), designed to study the interaction of local and global referent conditions, with high and low referent outcomes, and high and low levels of justification, researchers found that low justification subjects in the global perspective condition expressed greater resentment regardless of their referent outcome. However for those participants in the local perspective condition, referent outcome interacted with justification as hypothesized by

Folger. When low justifications were provided, participants with high referent outcomes expressed significantly greater resentment than those in the low referent outcome group. As such RCT resolved some of the issues left unanswered by equity theory; it linked outcomes to procedures and addressed when dissatisfaction was likely to result in negative emotions and behaviors.

Fairness Theory

Folger later reframed RCT under the label of Fairness Theory. As was the case with RCT, fairness theory retained counterfactual thinking as its conceptual foundation. However, fairness theory focused more heavily on the issue of accountability or blame. Folger and Cropanzano (2001) proposed that "if no one is to blame, there is no social injustice" (p. 1). In essence, an individual can be unhappy about a particular outcome, but if the outcome is the result of factors beyond anyone's control, there can be no assignment of blame and consequently no claim of injustice.

This accountability aspect of fairness theory is based upon three components, which Folger and Cropanzano (2001) identified as a harmful condition, attributable to discretionary action, and in violation of an ethical principle of conduct. In order to make these assessments, one must compare what has occurred with what might have been; in so doing, judgment is based upon three elements – would, could, and should (Folger & Cropanzano). Harm or injury is typically addressed by a "would" counterfactual. The easier it is to imagine that events would have been different if only this or that had not occurred, the more likely an individual is to believe that he has been harmed. Folger and Cropanzano suggested that "the same consequence can seem more or less pernicious

depending upon the imagined alternative" (p. 10). However, fairness theory requires that the injury be attributable to someone's discretionary action.

"Could" counterfactuals ask if the person or target, to whom one attributes the injurious state, could have acted differently? If there was a viable alternative to the course selected, then the individual is likely to assign blame. Consequently when circumstances result in a harmful state, a credible explanation is critical to reducing blame. If the target had no discretionary control over the events which resulted in harm, feelings of social injustice are unlikely; in essence, "causal accounts short circuit the Could judgment by pointing to mitigating circumstances" (Folger & Cropanzano, 2001, p. 20). Folger and Cropanzano reasoned that "it makes no sense to hold people morally responsible for the implication of events that they could not control or could not reasonably be expected to have anticipated" (p. 13).

Lastly, if an individual has been harmed and blame assigned, the final component utilized to determine if injustice has occurred is the "should" counterfactual. This judgment asks, if the target person should have acted differently based on moral or ethical standards. These standards may be shaped by universal principles of justice or by the ethical standards developed within a close knit community. Ultimately, "something is not unfair until it violates the moral tenets by which people should act" (Folger & Cropanzano, 2001, p. 20). As such, organizational hierarchy must be attentive to "could" and "should" counterfactuals; as "the strength of negative reactions toward management and against management actions will depend on the ease of imagining how management could have acted otherwise and why management should have acted otherwise" (Folger & Cropanzano, 1998, p. 66).

Self-Interest versus Group Value Model

Although Adam's theorized that inputs and outcomes of self and other were the most important determinants when wrestling with justice concerns, numerous studies have demonstrated the mitigating effect that procedures have on one's perception of fairness with respect to outcomes. Even when outcomes are unfavorable, research has shown that fair procedures favorably enhance perceptions of outcome (Colquitt et al., 2001; Greenberg, 1987; Greenberg, 1994; Lind et al., 1993; Moorman, 1991; Van den Bos et al., 1998; Walker et al., 1979). Lind and Tyler (1988) attempted to resolve the effect of procedures on outcome by proposing two models of justice – self-interest and group value.

Lind and Tyler's (1988) self-interest model was based upon the premise that individuals understand that they have more to gain in the long run by working cooperatively with others. However, group dynamics require that the individual sometime subvert his own interests for the needs of the group, if group affiliation is to be maintained. How then can the individual be assured that his needs will be met through group membership? Lind and Tyler hypothesized that by ensuring the procedures utilized to make decisions are fair, the individual can be confident that he will benefit from his association with the group in the long run. For this reason, procedures often carry more weight than outcomes in making justice decisions.

The self-interest model easily explains the importance of procedures with respect to justice concerns in that fair procedures "reassure members that their interests will be protected and advanced through group membership" (Lind & Tyler, 1988, p. 227). Unfortunately, this model does not address why fair procedures often negate negative

outcomes, even when these negative outcomes are experienced so frequently that a favorable outcome over the long-run seems unlikely (Lind & Tyler). The self-interest model suggests that the individual would disassociate with the group if there is little possibility of a successful outcome down the road.

Additionally, the self-interest model has difficulty explaining the impact of interpersonal treatment on perceptions of procedural justice. In a review of justice studies which addressed interpersonal sensitivity, Lind and Tyler found that "procedural justice judgments are strongly affected by concerns about how people are treated under the procedure" (p. 229). However, the self-interest model suggests that individuals are primarily concerned about procedures as they influence future outcomes, and as such the link between this model and the importance of interpersonal treatment is weak (Lind & Tyler).

As a result of these inconsistencies, Lind and Tyler (1988) proposed the group value model. They suggested that humans are by nature social beings and as such, group affiliation has a powerful influence on attitudes and behaviors, as it plays a part in shaping one's identity. The fact that one's identity is frequently shaped by the groups with which one affiliates explains why, even in the face of repeated negative outcomes an individual may choose to remain committed to the group. Procedures are also a critical component of the group value model, in that they provide the "norms of treatment and decision making that regulate much of a group's social structure and process" (Lind & Tyler, p. 231).

The way in which one is treated by members of the group says much about his status and value within the group. As such, the group value model easily explains why

voice and interpersonal sensitivity are important determinants of procedural justice judgments. "Procedures that allow voice are seen as fair … because the opportunity to exercise voice constitutes a visible marker of group membership" (Lind & Tyler, p. 236). Additionally, treating an individual with respect and dignity also demonstrates that one is a valued member of the group.

Unfortunately, the group value model also falls short in consistently predicting reactions to justice concerns. Some studies have shown that outcomes can influence perceptions of procedural fairness (Colquitt et al., 2001; Van den Bos, Vermunt, & Wilke, 1997). If as the group value model suggests group affiliation is valued in and of itself, then outcomes should play no part in shaping procedural justice judgments. However, if the group value model is considered in concert with the self-interest model, together they resolve most of the questions raised by justice studies.

Fairness Heuristic Theory

Building on previous models, Lind later proposed fairness heuristic theory as an explanation for the mechanism through which justice judgments are made. Fairness heuristic theory begins with the basic assumption that organizational life creates an inherent conflict for the individual between providing time, energy, and resources to a group that has the potential to provide greater rewards than could be achieved alone, while at the same time acknowledging that group affiliation also increases the risk for exploitation (Lind, 2001). As such, when given a directive by someone in a position of legitimate authority, people are faced with a "dilemma between trust, cooperation, and obedience on the one hand and self-protection, individualism, and resistance on the other" (Lind, 1995, p. 86).

Because ceding authority to others increases the risk of exploitation, people immediately begin looking for justice-relevant information in their encounters with those in authority to determine the security of their position within the organization (Lind, 1995). Justice relevant information communicates to individuals "whether they can trust others not to exploit or exclude them from important relationships and groups" (Van den Bos et al., 2001). Lind (2001) suggested that "people use overall impressions of fair treatment as a surrogate for interpersonal trust" (p. 65). Once formed, fairness judgments dictate how the individual will respond to requests or directives made by others within the organization, both those in a position of authority and those with whom the individual assumes an equal footing (Van den Bos et al., 2001).

If the fairness judgment formed is one that suggests that the individual has been treated fairly by the organization, then the individual is likely to acquiesce to group demands; if however, the judgment formed suggests that the individual has been treated unfairly, then one's reaction is likely to be determined by self-interest (Lind, 1995; 2001; Van den Bos et al., 2001). As such, fairness judgments serve as a heuristic, providing individuals with a cognitive shortcut for responding to group demands. Additionally this heuristic, once formed, "guides the interpretation of subsequent events" (Van den Bos et al., p. 54).

Since fairness judgments are most critical early in a group relationship, when information regarding trust is unknown, individuals typically begin the task of collecting justice-relevant information immediately. Lind (2001) suggested that the "perceiver 'grabs' any justice-relevant information that is handy, forms a quick general fairness judgment, and then gets out of the business of processing fairness experiences" (p. 81).

Because information regarding procedures and treatment is often available well before information concerning outcome is known, procedural justice perceptions typically have a greater impact on fairness judgments (Van den Bos et al., 2001; Van den Bos et al., 1997). Consequently, procedural judgments often serve as a heuristic substitute for assessing the fairness of outcomes (Van den Bos et al., 2001).

However, the issue at hand is actually one of primacy. If procedural information is available first, as it typically is, it will form the basis of the fairness judgment; if on the other hand, outcome information is available first, it will serve as the foundation for justice interpretations. This assertion was validated in an experiment conducted by Van den Bos et al. (1997) in which they found that "fairness judgments are more strongly influenced by information that is available in an earlier stage of interaction" (p. 96).

As stated previously, Lind (2001) suggested that the initial phase, in which justice judgments are formed, is relatively brief as "people need to arrive quickly at a justice judgment in order to have it to guide decisions about cooperation and self-interest" (p. 69). Additionally, he found these judgments to be relatively stable. Lind stated that "once a fairness judgment is generated, it will be assumed to be accurate, and any incoming information relevant to the fairness of treatment will be reinterpreted and assimilated to be congruent with the existing general fairness judgment" (p. 70). He proposed that individuals are unlikely to move back into the judgmental phase unless the organization or group is undergoing significant change or a justice-relevant event occurs that falls well outside the range of one's existing fairness heuristic.

Correlates of Organizational Justice

Acceptance of Authority

Several studies have demonstrated an inextricable link between justice perceptions and compliance with authority and regulations (Greenberg, 1994; Lind, 1995; Lind et al., 1993). These studies have demonstrated similar findings across multiple settings and different cultures. In a study which examined the impact of procedure and outcome on acceptance, Lind et al. discovered that litigants were much more likely to accept an arbitrator's award when they believed the procedures utilized to determine the outcome were fair. Utilizing structural equation analysis, the authors found a strong and significant path from procedural justice perceptions to award acceptance ($t = 2.497$, $p < .05$). The results of their study revealed that when people believed the procedures utilized to determine the outcome of the case were fair, the rejection rate was only 23 percent compared to a rejection rate of 43 percent when the procedures were believed to be unfair. Additionally, the effect of procedural justice judgments on award acceptance was more influential than that of all outcome measures combined (Lind et al.).

Moving from the courtroom to the workplace, Greenberg (1994) found a similar relationship between procedural fairness and employee compliance. Examining the impact of procedural justice components on employee acceptance of a smoking ban, Greenberg's research revealed that both the degree of information thoroughness and level of social sensitivity displayed a strong correlation with employee acceptance of the ban. Specifically, employees showed greater acceptance of the smoking ban when high amounts of information were given as opposed to low amounts [$t(102) = 3.63$, $p < .01$]; likewise, high amounts of social sensitivity also improved acceptance of the ban [$t(103) =$

9.51, $p < .001$]. In particular, utilizing fair treatment procedures had the greatest impact on the heaviest smokers. As such, Greenberg found that compliance with organizational policy could be significantly enhanced by providing employees with a great deal of information regarding necessity and showing awareness of the impact on employees and concern for their welfare.

In a review of three separate studies, Lind (1995) found additional evidence to support a strong correlation between perceptions of procedural justice and obedience. Whether examining perceptions of employees in the United States, Hong Kong, or Germany regarding interactions with their immediate supervisors, university students in the United States or Japan regarding exchanges with their professors, or subjects in a laboratory experiment in which procedure and outcome were manipulated to assess compliance with authority, Lind discovered that in every setting procedural justice judgments were based on "perceptions of status recognition, benevolence, and neutrality, and not on the outcome of the encounter with the authority" (p. 92). Additionally, he found that outcome influenced obedience only in instances where people believed they were being treated unfairly.

Trust in Management

A considerable body of research has shown that justice perceptions are significantly associated with trust in management (Alexander & Ruderman, 1987; Barling & Phillips, 1993; Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Folger & Konovsky, 1989; Hubbell & Chory-Assad, 2005; Konovsky & Cropanzano, 1991; Van den Bos et al., 1998). Specifically, this research has consistently demonstrated that procedural justice has the strongest impact on managerial trust.

Alexander and Ruderman (1987) found that procedural justice contributed greater unique variance than did distributive justice. They confirmed that perceptions of procedural fairness accounted for 11 percent of the variance in managerial trust, whereas, distributive justice accounted for less than five percent. Utilizing hierarchical regression analysis, Folger and Konovsky (1989) found that when controlling for procedural justice, distributive justice explained no unique variance in managerial trust. However, procedural justice maintained a significant relationship with managerial trust even after controlling for distributive justice. Konovsky and Cropanzano (1991) also found evidence to assert that beyond the contribution of other variables, procedural justice contributed unique variance to trust in management ($\beta = 0.35, p < .01$). These findings were supported by the results of a meta-analysis conducted by Cohen-Charash and Spector (2001). Additionally, the work of Hubbell and Chory-Assad (2005) lends further support to the link between procedural justice and trust. Their research revealed that procedural justice was a stronger predictor of managerial trust ($\beta = 0.57, p < .05$) than was distributive justice ($\beta = 0.25, p < .05$).

What makes procedural justice one of the strongest and most consistent predictors of trust in management? In a study conducted by Folger and Konovsky (1989), the authors found that feedback ($\beta = 0.47, p < .05$) and, to a lesser extent, recourse ($\beta = 0.18, p < .05$) were significantly correlated to trust in management. The authors described feedback according to the manner in which appraisal information was provided. Was the judgment grounded in evidence? Did the supervisor treat the subject in a candid and ethical manner? And, was the subject provided an opportunity to present his perspective

before a final decision was made? Recourse, on the other hand, addresses the opportunity for appeal.

The importance of these components received additional support in a meta-analysis conducted by Colquitt et al. (2001) in which they found a strong correlation between informational justice and trust (r_c= 0.51, $p <.05$). Greenberg (1994) described informational justice as the justice construct focused on the adequacy of explanations provided regarding procedures. As such, the feedback loop attends to informational justice concerns. Additionally, feedback also speaks to fair treatment, which suggests that the strong empirical evidence linking procedural justice to trust in management might actually indicate a connection between trust and interactional justice.

However, the findings with respect to interactional justice have been mixed. In a study that gauged subject response to a vignette, Barling and Phillips (1993) found that both formal procedures and interactional justice exerted significant influence on trust in management, $F(1, 189) = 20.18$, $p < .01$ and $F(1, 189) = 8.05$, $p < .01$, respectively. Unfortunately, the meta-analysis conducted by Cohen-Charash and Spector (2001) did not support this finding. They contended that the lack of support was due to insufficient research on the construct of interactional justice. Furthermore, the research of Hubbell and Chory-Assad (2005) leaves the question unresolved. They found no significant link between interactional justice and trust in management, but they maintain that the lack of a relationship between the two may be due to the assessment used to measure trust in management.

Ultimately, the relationship between trust in management and perceptions of justice may be less dependent on the specific domain of justice and more reliant on what

is known regarding the trustworthiness of management. Van den Bos et al. (1998) found that variations in procedural components were more significant in judging outcome fairness when the trustworthiness of those in positions of authority was unknown. If the trustworthiness of the supervisor is known, either positive or negative, Van den Bos et al. found that voice had no significant effect on perceptions of outcome fairness. On the other hand, when trustworthiness is unknown voice has a significant impact on perceptions of outcome fairness and outcome satisfaction. As such, it may be surmised that the relationship between justice and trust is reciprocal and that information regarding one may be substituted for the other when missing.

School Climate

Climate has been a topic of interest in schools and organizations for more than 40 years. This interest has been driven, in large part, by the belief that as a collective perception of the organization, climate shapes behavior and ultimately organizational outcomes. With respect to educational organizations, there is a large body of research which indicates that school climate has a significant effect on student achievement, beyond that accounted for by demographic variables. However, these studies often characterize school climate in very different ways. Consequently, it is essential that the meaning of school climate be clarified.

Throughout the literature, school climate has often been conceptualized as the personality, atmosphere, or feeling which emanates from members within a school. There is a distinctive nature to it that clearly distinguishes the climate of one school from another (Hoy & Hannum, 1997; Hoy et al., 1991). However, personality, atmosphere, and

feeling are open to interpretation and do not provide much in the way of clarification. In 1968, Tagiuri defined organizational climate as:

> a relatively enduring quality of the internal environment of an organization that (a) is experienced by its members, (b) influences their behavior, and (c) can be described in terms of the values of a particular set of characteristics (or attributes) of the organization (p. 27).

Although, this definition has been reshaped over the years by other researchers, most of the aspects have endured.

A review of the literature suggests that school climate is considered to be a relatively stable phenomenon (Hoy & Hannum, 1997; Hoy et al., 1998; Lindelow, Mazzarella, Scott, Ellis, & Smith 1989). Additionally, researchers have agreed that collective perceptions of climate are formed by group interactions, routine organizational practices, and norms of the organization, which in turn, influence behavior (Brookover et al., 1978; Hoy et al., 1998; Hoy & Tarter, 1997; Hoy et al., 1991; Lindelow et al.). With respect to the circuitous connection between behavior and perception, Lindelow et al. suggested that it is analogous to the influence of self-image on behavior. Self-image shapes how we see ourselves and drives behavior; in turn, "behavior consistent with the self-image reinforces the self-image, which then dictates future behavior" (Lindelow et al., p. 177).

Measuring School Climate

The first instrument designed to assess school climate was the Organizational Climate Description Questionnaire (OCDQ) developed by Halpin and Croft in 1962. This instrument measures climate along a continuum from "open" to "closed", with an open

climate designated as the optimal climate condition. It is important to note, that the OCDQ measures the organizational members' perceptions of climate. However, Halpin and Croft did not view this as a problem, as it is "perceptions of behavior that motivate action" (Hoy et al., 1991, p. 13).

The OCDQ incorporates four factors designed to assess teacher-teacher interactions and four factors intended to evaluate teacher-principal interactions. The factors which focus on teacher-teacher behaviors are esprit, characterized by a strong sense of collaborative effort and task accomplishment; intimacy, exemplified by warm and friendly teacher relationships; disengagement, typified by an atmosphere where teachers simply "go through the motions"; and hindrance, characterized by an environment where teachers feel overburdened by administrative tasks unnecessary to teaching. The four factors of the OCDQ which center on teacher-principal interactions are thrust, consideration, production emphasis, and aloofness. Thrust conveys an atmosphere where the principal leads by example. Consideration is revealed when the principal behaves in a manner which demonstrates warmth and support toward the faculty; whereas aloofness implies that the principal is likely to be impersonal and often relies on formal rules and procedures for each and every decision. Lastly, production emphasis is characterized by the highly directive principal who maintains close supervision through controlling behaviors.

In their study of school climate, Halpin and Croft (1962) collected data from 71 elementary schools. Their results yielded six climate clusters from open to closed. An open climate is characterized by a high degree of esprit, thrust, and consideration; while hindrance, disengagement, production emphasis, and aloofness are low. Conversely, a

closed climate is epitomized by the opposite dimensions. These schools are characterized by a principal who is impersonal and keeps teachers in check through tight supervision procedures; additionally, teachers believe they are overburdened by non-essential paperwork and respond by doing just what is required of them and little else.

Unfortunately, the OCDQ has been criticized for its inadequacies in a number of areas. Hoy and his associates asserted that the OCDQ was designed for elementary schools and as a result provides an inaccurate climate assessment for secondary schools. In general, high schools tend to be larger in size, their faculties are comprised of individuals who are more often content specialists, and their organizational structures are inherently different from the elementary school program. As a result of these aspects alone, secondary schools using the OCDQ are likely to be characterized as closed climates (Hoy et al., 1991).

A second concern raised regarding the OCDQ involves the six clusters identified by Halpin and Croft – open, autonomous, controlled, familial, paternal, and closed. Beyond the descriptor of open and closed, the middle climates lacks clear distinction and as such provide little useful information to the organization beyond that of being more or less, open or closed. Lastly, the OCDQ examines teacher-teacher and teacher-principal interactions, but ignores the impact that student-teacher interactions have on school climate, as well as the impact of parents and other constituents outside the school who have a vested interest in student outcomes.

Miles (1965) asserted that the bureaucratic model in which schools most frequently operate does not encourage "the invention, adoption, adaptation, and diffusion of educational innovations" (p. 55). As such, he began to examine the organizational

characteristics necessary for innovation. As a result of this research, Miles developed a conceptual framework for organizational climate which centered on the concept of "health". He suggested that a healthy organization was one that could not only survive, but flourish over the long run. He believed that schools cope and thrive by adapting to external environmental demands, setting and achieving established goals, and integrating a cohesive culture.

Miles framework consisted of 10 elements, which addressed the healthy organization's ability to adapt, achieve, and sustain. He identified goal focus, communication adequacy, and optimal power equalization as the necessary components to address the goal orientation or task needs of the organization. The factors which focus on maintaining the needs of organizational members and group identity were referred to as resource utilization, cohesiveness, and morale. Lastly, he suggested that growth and adaptation to change are best met through the dimensions of innovativeness, autonomy, adaptation, and problem-solving adequacy.

Unfortunately, when Kimpston and Sonnabend (1975) created the Organizational Health Description Questionnaire (OHDQ) utilizing the 10 elements conceptualized in Miles' framework, the results were less than satisfactory. Their research identified only six discrete factors, one of which was eliminated due to the fact that it "contained only two items and was unidentifiable in the Miles context" (p.34). Additionally only two factors, autonomy and innovativeness, were found in original form as described by Miles. Equally disconcerting was the finding that with the exception of interpersonal relations – a composite of cohesiveness and morale– the reliability coefficients for all remaining

factors were remarkably poor. Additional studies based on Miles' framework of organizational health have exhibited similar psychometric problems (Hoy et al., 1991).

Refinement of Early Climate Measures

Utilizing the OCDQ and the OHDQ as the underpinnings of their framework for organizational climate and organizational health, Hoy and his associates developed school climate instruments which addressed the criticisms and failures of these earlier prototypes. The section which follows will provide a brief description of three instruments designed by Hoy and his associates to measure the openness and health of school climates. These instruments are the Organizational Climate Description Questionnaire for Secondary Schools (OCDQ-RS), the Organizational Health Inventory for Secondary Schools (OHI-S), and the Organizational Climate Index (OCI) which integrates openness and health into a singular climate instrument. Hoy and his colleagues also developed climate and health instruments designed specifically for elementary and middle schools; however, an analysis of the development and findings of these instruments will not be reviewed.

OCDQ-RS. In developing the OCDQ-RS, Hoy et al. (1991) sought to address the shortcomings of Halpin and Croft's framework in measuring climate at the secondary level. They began their work by completing an item analysis, in which items were eliminated or revised based on three questions: was the item appropriate for the high school setting, was the item conceptually consistent with the designated subtest, and did the item consistently load on one factor alone? Additionally, Hoy and his colleagues added items to address teacher-student interactions. Following the initial analyses, Halpin and Croft's eight factors were reformulated into five. The five factors of the OCDQ-RS

included two which addressed principal behaviors and three which addressed teacher behaviors.

Hoy et al. (1991) designated the two principal behaviors as supportive and directive. Supportive principal behaviors are consistent with an open climate and incorporate the dimensions of thrust and consideration as conceived by Halpin and Croft. Hoy et al. described this component of principal behavior as one in which the principal is supportive of the needs of teachers, but also maintains a clear focus on task achievement. Supportive principals encourage teacher participation and work to establish genuine relationships with staff members. Directive principals, on the other hand, tend to focus on tight control and close supervision, which aligns with Halpin and Croft's dimension of production emphasis. As such, directive principal behaviors are indicative of a closed climate (Hoy et al.).

Teacher behaviors were distinguished by Hoy et al. (1991) as engaged, intimate, and frustrated. Hoy and his colleagues suggested that engaged teachers are highly collaborative and committed to the success of the school and most importantly students. In an engaged climate, student-teacher and teacher-teacher relationships are characterized as supportive and teacher morale is high. As such, an engaged climate is characterized as an open climate (Hoy et al.). In an intimate climate, teachers are friendly and cohesive. However, interaction is limited to social relationships and as a consequence intimate teacher behaviors are not a prerequisite for an open climate. Hoy et al. found that "intimacy is neither a sufficient nor a necessary condition for openness" (p. 61) and as such, it can be found in both open and closed climates. In contrast, Hoy and his associates found that frustrated teacher behaviors, exemplified in schools where teachers felt

overburdened by administrative tasks and paperwork, were indicative of a closed climate. In forming this factor, Hoy et al. integrated Halpin and Croft's dimensions of hindrance and disengagement.

An analysis of the OCDQ-RS was conducted utilizing 78 schools in New Jersey. Although participation was voluntary, the study involved a representative sample from the state with respect to geography, school size, and socio-economic classification. Results indicated strong support for the factor structure with reliability coefficients ranging from (.71) for intimacy to (.91) for principal support, with the remaining factors scoring in the .85 to .87 range.

OHI-S. In developing the OHI-S, Hoy and his colleagues utilized some aspects of Miles' framework, but relied more heavily on Parsons' three tiered conceptualization of organizations. Parsons (1967) suggested that formal organizations are comprised of three levels – technical, managerial, and institutional. With respect to educational organizations, he stated that the technical function includes the actual process of teaching. He proposed that the purpose of the managerial component is to "mediate between the technical organization and those who use its 'products' – the 'customers,' pupils, or whoever" (p. 43). As such the managerial level is consumed by activities such as allocating resources for instruction, making staffing decisions, and organizing the instructional program. Finally, the third level of Parsons' framework is the institutional level, which intercedes between management and community interests.

Using Parsons' framework, Hoy and his associates identified seven factors of a healthy school climate. The technical level includes two factors, morale and academic emphasis, defined primarily by the effective schools correlates as high academic

expectations, an orderly learning environment, teacher support and belief in students, and a strong student work ethic. The OHI-S consists of four factors at the managerial level – principal influence, principal consideration, initiating structures, and resource support. Influence addresses the principal's ability to effectively persuade superiors to meet the needs of the school. Consideration is demonstrated by the principal through interactions with the faculty that are friendly, supportive, and collegial. The principal shows evidence of initiating structure by setting clear expectations and standards for performance. Lastly, resource support is met by acquiring adequate supplies to meet program needs. At the institutional level only one factor was identified by Hoy and his colleagues, institutional integrity, which they characterized as the ability to buffer the school from environmental or community demands.

As illustrated above, the OHI-S not only aligns with Parsons' framework in terms of the technical, managerial, and institutional levels, but Hoy et al. (1991) proposed that it also meets the standards of adaptation, goal attainment, and integration articulated by Miles' conceptual framework of healthy organizations. The factors of institutional integrity and resource support correspond with the organizations need to adapt; academic emphasis and initiating structure are consistent with goal attainment; and, principal influence, consideration, and morale align with the need for integration and cohesion within the organization (Hoy et al.).

Hoy et al. (1991) proposed that a healthy school should be high in all seven factors. They characterized a healthy school as one where the principal sets high standards, supports teachers, and is able to procure resources and influence superiors to get what is needed; teachers are committed to teaching and learning and they support

students, one another, and their school; students demonstrate a strong academic work ethic; and the school is reasonably protected from excessive, external pressures. Conversely, unhealthy schools demonstrate the opposite.

Similar to the analysis of the OCDQ-RS, the OHI-S was conducted utilizing 78 schools in New Jersey. Participation in the study was voluntary but the sample was diverse, especially with respect to socio-economic classification. Results indicated strong support for the factor structure with reliability coefficients ranging from (.87) for principal influence to (.93) for academic emphasis.

A Consolidated Framework

As "open schools tend to be healthy ones and healthy schools tend to be open" (Hoy et al., 1998, p.341), Hoy and his colleagues began to examine the possibility of collapsing the two instruments into one. In 1998, Hoy and Sabo conducted an analysis of all twelve dimensions of openness and health and found that the twelve dimensions could be reduced to four major factors. The four factors identified by the analysis – collegial leadership, teacher professionalism, academic press, and institutional integrity – explained 71 percent of the variance.

In this consolidated framework, Hoy et al. (1998) characterized collegial leadership, as principal behaviors that are supportive, egalitarian, and friendly toward staff members, while simultaneously maintaining high academic expectations. Teacher professionalism is exemplified by high expectations, a commitment to students, and collegial teacher relationships imbued with respect and cooperation (Hoy et al.). The authors describe the third factor, academic press, as an environment where academic goals for students are high but achievable, students respect those who excel, and the

learning environment is serious and orderly. The last dimension, formerly labeled institutional integrity, was renamed environmental press by Hoy and his colleagues as this factor primarily describes external pressure from parents and community members as well as the degree to which principals buffer teachers from these external demands.

Guided by this research, Hoy et al. (1998) developed the Organizational Climate Index (OCI) which was a parsimonious compilation of the OCDQ and OHI. Collegial leadership and teacher professionalism were maintained in this model; however, due to the manner in which some items loaded, environmental press was relabeled institutional vulnerability. This change was the result of factor analysis which revealed that those items addressing parental pressure for high expectations did not load on environmental press as expected. Only those items which addressed behaviors focused on protecting teachers from external demands loaded on environmental press, as such the authors labeled it institutional vulnerability. A school is considered institutionally vulnerable when the principal and teachers are unprotected and susceptible to the demands of a small, but influential group of individuals (Hoy et al., 2002).

Refinement of the OCI

DiPaola and Tschannen-Moran (2005) characterized the attempt to protect the core tasks of teaching and learning from external demands of parents and community groups as buffering. However multiple studies, which examined this construct through the lens of institutional integrity and environmental press, have consistently demonstrated a significant, negative correlation between institutional vulnerability, or buffering, and student achievement (Hoy & Sabo, 1998; Hoy et al., 1991). As such, DiPaola and Tschannen-Moran conducted a study to analyze the effects of bridging strategies to

address environmental demands. They defined bridging as "cooperative strategies that schools employ to increase the interdependence of the organization with elements in the environment" (p. 64). Principals who utilize bridging strategies seek to actively engage parents in the school and build coalitions to align parents and community members with the school's mission and goals (DiPaola & Tschannen-Moran).

This study, which examined the effects of buffering and bridging on student achievement in middle schools, revealed that while buffering demonstrated a moderate correlation with English achievement ($r = 0.31$, $p < 0.05$), bridging demonstrated a strong correlation with both math and English achievement ($r = 0.64$ and 0.63, respectively, $p < 0.01$) (DiPaola & Tschannen-Moran, 2005). DiPaola and Tschannen-Moran concluded that schools too successful at buffering the demands of parents and community groups may "ultimately pay a price in student learning" (p. 68). As a result of these findings, DiPaola and Tschannen-Moran developed the School Climate Index (SCI), which mirrors the OCI with the exception of institutional vulnerability. The SCI replaced institutional vulnerability with community engagement, a construct which reflects the bridging strategies associated with greater student achievement.

Correlates of School Climate

Student Achievement

Although, Hoy et al. (1991) did not find any significant correlations between the openness variables of the OCDQ-RS and student achievement, the healthy school variables of the OHI-S tell a different story. When regressed, both institutional integrity ($\beta = -.44$, $p < .01$) and academic emphasis ($\beta = 0.62$, $p < .01$) demonstrated unique and independent effects on student achievement. Additionally, when socio-economic status

(SES) was added to the analysis as a predictor variable, academic emphasis still retained explanatory power ($\beta = 0.31, p < .01$).

In a study of middle schools, Hoy and Hannum (1997) confirmed early findings regarding the impact of school health variables on student achievement. As expected, school health was positively correlated with student achievement in mathematics ($r = 0.61, p < .01$), reading ($r = 0.58, p < .01$), and writing ($r = 0.55, p < .01$). When utilizing zero-order correlations, all dimensions of school health, with the exception of principal influence, were significantly associated with student achievement across all three disciplines. When regressed, all of the dimensions except principal influence and collegial leadership retained some explanatory power. Institutional integrity demonstrated a unique and negative correlation with mathematics ($\beta = -0.28, p < .01$), reading ($\beta = -0.29, p < .01$), and writing ($\beta = -0.29, p < .01$); academic emphasis offered a unique and positive correlation with math ($\beta = 0.28, p < .01$) and reading ($\beta = 0.22, p < .05$); and teacher affiliation and resource support provided unique and positive contributions to reading achievement ($\beta = 0.17, p < .05$ and $\beta = 0.19, p < .05$, respectively).

In an integrated model, which combines the OCDQ and OHI into a four-factor model, Hoy et al. (1998) found all four variables – environmental press, collegial leadership, teacher professionalism, and academic press – to be significantly associated with middle school student achievement in mathematics, reading, and writing, when using zero-order correlations. When regressed utilizing the four climate variables and SES, each factor makes an independent contribution to explaining the variance. Academic press provides a significant and independent effect on achievement in mathematics ($\beta = 0.44, p < .01$), reading ($\beta = 0.43, p < .01$), and writing ($\beta = 0.40, p < .01$);

environmental press also makes a unique contribution to all three achievement measures ($\beta = 0.30$, $p < .01$, mathematics, reading and writing). However, collegial leadership makes a significant and unique contribution to reading achievement alone ($\beta = 0.19$, $p < .01$) and teacher professionalism makes a similar contribution to writing alone ($\beta = 0.16$, $p < .01$).

In a study that utilized the SCI to examine the relationship between student achievement and school climate at the middle school level, Tschannen-Moran, Parish, and DiPaola (2006) found a moderately strong and positive correlation between school climate and student achievement in English ($r = 0.51$, $p < .01$), math ($r = 0.56$, $p < .01$), and writing ($r = 0.41$, $p < .01$). Additionally, climate made a significant independent contribution over and above the effect of socio-economic status in explaining the variance on all three measures of student achievement: English ($\beta = 0.24$, p < .01), math ($\beta = 0.16$, p < .05), and writing ($\beta = 0.22$, p < .05).

Tschannen-Moran et al. (2006) also found that three of the four subscales – community engagement, academic press, and teacher professionalism – demonstrated significant, positive relationships with student achievement. Specifically, community engagement yielded the strongest correlation with achievement in math, English, and writing ($r = 0.68$, $p < .01$, $r = 0.65$, $p < .01$, and $r = 0.53$, $p < .01$, respectively). Likewise, academic press also demonstrated a strong correlation with all three achievement tests ($r = 0.63$, $p < .01$, $r = 0.61$, $p < .01$, and $r = 0.52$, $p < .01$, respectively). Although teacher professionalism was also significantly related to math and English achievement, the relationship was not as strong ($r = 0.36$, $p < .01$, and $r = 0.31$, $p < .05$, respectively).

In a multiple regression analysis of the four climate variables in relation to student achievement, community engagement demonstrated significant independent effects on English and math achievement ($\beta = 0.45$, $p < .01$, and $\beta = 0.51$, $p < .01$, respectively). Whereas, academic press demonstrated a significant and unique effect on writing ($\beta = 0.45$, $p < .05$) and math achievement ($\beta = 0.42$, $p < .05$).

Trust

Utilizing the OCDQ-RS, Hoy et al. (1991) demonstrated that an open school climate was significantly correlated with faculty trust in the principal ($r = 0.44, p <.01$) and trust in colleagues ($r = 0.35, p <.01$). When subtests were analyzed, both supportive and directive behaviors demonstrated significant correlations with trust in the principal; however, directive behavior had a negative correlation ($r = -0.22, p <.05$). Taking the analysis one step farther, Hoy et al. utilized partial correlation and multiple regressions to rule out the influence of a third variable. They found supportive principal behaviors had an independent, positive correlation to faculty trust in the principal ($r_{y1.2} = 0.49, p <.01$). Additionally, teacher behaviors were found to influence both trust in the principal and trust in colleagues. Engaged teacher behavior correlated independently with both trust in the principal ($r_{y3.4} = 0.20, p <.05$) and trust in colleagues ($r_{z3.4} = 0.35, p <.01$). Although frustrated behavior demonstrated a significant, negative relationship with trust in principals ($r = -0.23, p <.05$) and trust in colleagues ($r = -0.29, p <.01$), these results did not hold up under multiple regression analysis. As such, this study demonstrates that it is primarily the leader's behavior that predicts trust in the administration and interactions between teachers that determine trust in colleagues (Hoy et al. 1991).

With respect to the OHI-S, Hoy et al. (1991) found that "the greater the general state of school health, the higher the level of faculty trust in the principal ($r = 0.40$, p <.01)" (p. 110); specifically, consideration ($r = 0.50$, p <.01) and institutional integrity ($r = 0.36$, p <.01) were the best predictor's of faculty trust in the principal. Hoy et al. found that faculty trust in colleagues was also significantly correlated with school health ($r = 0.45$, p <.01); in fact, every dimension except initiating structure and resource support were correlated with faculty trust in one another, with morale ($r = 0.50$, p <.01) functioning as the single best predictor.

Utilizing the integrated four-factor framework of the OCDQ and the OHI, Tschannen-Moran and Hoy (1998) found that all four factors – collegial leadership, teacher professionalism, environmental press, and academic press – explained nearly 40 percent of the variance in faculty trust in colleagues and nearly 60 percent of the variance in faculty trust in the principal. When the school climate variables were used to predict faculty trust in a regression analysis, teacher professionalism alone made a significant and unique contribution to trust in colleagues ($\beta = 0.635$, p <.01). Likewise, collegial leadership made a strong and significant contribution to trust in the principal ($\beta = 0.677$, p <.01); a small but significant contribution to trust in the principal was also made by teacher professionalism ($\beta = 0.195$, p <.01).

In a more recent study, Hoy et al. (2002) correlated measures of trust with the OCI using zero-order correlations and found that collegial leadership, professional teacher behaviors, and achievement press were all positively associated with faculty trust in colleagues. Institutional vulnerability demonstrated a negative correlation. When regressed, only professional teacher behaviors retained unique predictive powers (β =

0.40, $p < .01$) regarding trust in colleagues. With respect to faculty trust in the principal, only institutional vulnerability and collegial leadership showed a significant correlation. However when regressed, only collegial leadership maintained a unique and powerful correlation with trust in the principal ($\beta = 0.84, p < .01$).

Commitment

Hoy et al. (1991) defined commitment as not simply participation or compliance, but the "wholehearted support of organizational ventures and values" (p. 122). As such, commitment is a powerful force within organizations as it guarantees allegiance to organizational goals. Regarding the OCDQ-RS, each of the climate variables, except intimacy, were found to be significantly correlated to teacher commitment. In fact, the more open the climate, the greater the degree of teacher commitment ($r = 0.46, p < .01$). When regressed however, the only subtest that retained descriptive power was that of teacher engagement, which "explained 24% of the variance in teacher commitment" (Hoy et al., p. 129).

Hoy et al. (1991) found that the dimensions of the OHI-S had much greater predictive power with respect to teacher commitment, suggesting that "healthy organizations seem to breed high commitment" (p. 124). As a collective measure school health demonstrated a moderately strong relationship with teacher commitment ($r = 0.55$, $p < .01$). Additionally, every dimension of school health had a significant and positive correlation with teacher commitment when utilizing a zero-order correlation. When regressed however, only principal influence made a unique contribution to teacher commitment ($r = 0.44$, $\beta = 0.29$, $t = 2.1$, $p < .05$). This finding is significant as it suggests that principals have the ability to influence teacher commitment.

Trust

Tschannen-Moran and Hoy (1998) defined trust as a willingness to be vulnerable to another based on the confidence that one will be treated in a benevolent, honest, competent, reliable, and open fashion. As this definition suggests "unless parties are dependent on one another for something they care about or need, trust is not critical" (Tschannen-Moran, 2004, p. 17). Furthermore, trust is most important in an ongoing relationship, as it is within this context that the consequences of untrustworthy behavior extend beyond immediate circumstances (Tschannen-Moran & Hoy, 2000). When present, "trust reduces social complexity and uncertainty by allowing specific undesirable conduct to be removed from consideration" (Lewicki, McAllister, & Bies, 1998, p. 443). Consequently when it is absent, individuals within the organization are suspicious and resist being influenced by one another (Kouzes & Posner, 1995).

Components of Trust

Trust requires a sense of vulnerability predicated on the reality that one must rely on another to meet a particular need or interest. Since the potential for exploitation exists within any interdependent relationship, benevolence is critical to the formation of trust. Benevolence ensures that one party will act in a manner which demonstrates good will toward the other. Leaders exhibit benevolence by protecting the interests of employees and by showing consideration and sensitivity for the needs of those within the organization (Tschannen-Moran, 2004; Tschannen-Moran & Hoy, 2000; Whitener, Brodt, Korsgaard, & Werner, 1998). Benevolence is also demonstrated through accessibility and interaction. Kouzes and Posner (1995) suggested that "the most genuine

way to demonstrate that you care and are concerned about other people as human beings is to spend time with them" (p. 171).

In addition to benevolence, honesty is also an integral component of trust. "Honesty concerns a person's character, their integrity, and authenticity" (Tschannen-Moran, 2004, p. 22). It implies that one's word, once given, can be relied upon. As such, it is unlikely that a principal can establish trust unless he acts in a moral and ethical manner. Greenleaf (1996) asserted that a leader must "think, speak, and act as if personally accountable to all who may be affected by his thoughts, words, and deeds" (p.41). Likewise, there must also be congruence between what a leader says he believes and what he does. Tschannen-Moran and Hoy (2000) maintained that a reputation for trustworthiness develops from "knowledge that accumulates over repeated interactions in which expectations are fulfilled" (p. 562). Peters and Waterman (1982) concurred, stating that individuals within the organization "watch for patterns in our most minute actions, and are wise enough to distrust words that in any way mismatch our deeds" (p. 56).

Beyond the components of benevolence and honesty, competence and reliability are also critical to the formation of trust. Tschannen-Moran (2004) defined competence as "the ability to perform a task as expected, according to appropriate standards" (p. 30). Competence implies a confidence in the ability of another to successfully accomplish a specified task. Consequently, if an individual lacks competence it is unlikely that others will exhibit a sizeable measure of trust. Likewise, reliability is also essential to building trust. Reliability conveys a sense of predictability or consistency. Trustworthiness is enhanced by the ability to accurately predict the future actions of another (Whitener et al., 1998) as it makes one less vulnerable by reducing the potential for exploitation.

Trust also develops through open, effective communication and purposeful interaction. Purposeful interaction involves reducing the barriers to professional dialogue and decision making. In many schools teachers are professionally isolated from one another by "norms of individualism"; it is the principal's responsibility to create "norms of collegiality" whereby teachers are provided with frequent opportunities to interact, share ideas, and participate in the decision making process (Hawley, 1985). By sharing control, leaders demonstrate their trust in others; shared decision making also reduces vulnerability by providing the individual with a measure of control, as well as affirming one's value to the organization (Whitener et al., 1998).

However, openness requires more than removing barriers to foster shared decision-making. Information sharing is also a critical attribute of openness. Sergiovanni (1991) reasoned that despite the principal's best effort to empower teachers and include them in the decision making process, the relationship between the two is inherently unequal as the principal has greater access to people and information. He asserted that "information is a source of power" (p. 324). As such, the principal must provide access to the flow of information if he intends to build relationships of trust. Additionally, this information must be accurate and timely (Tschannen-Moran & Hoy, 2000; Whitener et al., 1998).

Ultimately, if leaders fail to establish openness within the organization, it is unlikely that they will be able to build the trust necessary to get others to follow the vision. Kouzes and Posner (1995) wrote that "leadership is a relationship, founded on trust and confidence. Without trust and confidence, people don't take risks. Without risks, there is no change. Without change, organizations and movements die" (p. 12).

Trust and Student Achievement

Several studies have demonstrated a robust link between faculty trust and student achievement (Bryk & Schneider, 2002; Goddard et al., 2001; Hoy, 2002). In a large study which examined the impact of relational trust on improvements in student learning in grades two through eight over a five year period in Chicago Public Schools (CPS), Bryk and Schneider discovered that the composite trust measure was highly predictive of improvements in student achievement, even when student demographic variables, school context, and teacher background factors were held constant. The relational trust scale of Bryk and Schneider addressed trust in parents, trust in colleagues and trust in the principal.

Their analyses suggested that if a school, average in most respects, was in the bottom quartile of CPS on the trust composite in 1991 and remained in this quartile in 1997, the overall productivity index would rank this school at the fortieth percentile for reading and the forty-fourth percentile for mathematics. Conversely, a similar school that started in the bottom quartile on relational trust in 1991 but moved to the top quartile by 1997 would have moved to the seventy-second percentile in reading and the seventy-third percentile in mathematics. Thus, the study of Bryk and Schneider (2002) demonstrated a "strong statistical link between improvements in relational trust and gains in academic productivity" (p. 116).

Additional studies by Goddard et al., (2001) and Hoy (2002) support these findings; however, both of these studies limited their examination to student achievement and teacher trust in students and parents. In the Goddard et al. study, which included 47 urban elementary schools in the Midwest, the results revealed that even after controlling

for student demographics and prior achievement, teacher trust in students and parents "explained 81% of the between school variation in mathematics and reading achievement" (p. 12). Likewise, Hoy's study demonstrated similar results at the high school level. In a study of 97 high schools in Ohio, Hoy found that even after controlling for SES the partial correlation remained significant and substantial (partial $r = 0.55$, $p < .01$) regarding the relationship between trust in students and parents, and achievement in mathematics.

Link between Justice and Trust in Schools

Although there are numerous studies outside the field of education that have demonstrated overwhelming evidence of a strong, empirical relationship between organizational justice and trust in management, research on this topic within the school setting is noticeably absent. However, educational researchers have begun to tentatively explore the construct of justice and its implication for educational organizations. In 2004, Hoy and Tarter constructed a survey instrument to measure perceptions of organizational justice in schools, incorporating Leventhal's components of procedural justice as well as the characteristics of voice and interactional justice. Utilizing this instrument, they examined the relationship between justice and trust in the educational setting. Similar to early research outside the field of education, Hoy and Tarter found a strong and significant link between organizational justice and faculty trust.

Utilizing path analysis, Hoy and Tarter (2004) found both faculty trust in the principal and faculty trust in colleagues demonstrated significant independent effects on organizational justice ($\beta = 0.72, p < .01$, $\beta = 0.31, p < .01$, respectively). Combined these two factors of faculty trust explained 90 percent of the variance in organizational justice.

Their model also confirmed that professional teacher behavior had a significant independent effect on faculty trust in colleagues ($\beta = 0.77$, $p < .01$) and collegial leadership had a significant independent effect on faculty trust in the principal ($\beta = 0.66$, $p < .01$); thereby linking elements of school climate to perceptions of organizational justice. As a result of this research, Hoy and Tarter claimed that "trust and justice are inextricably linked; you cannot have one without the other" (p. 257).

Conceptually it should come as no surprise that justice and trust share such a strong relationship. By definition, trust requires a willingness to be vulnerable to another based on the confidence that one will be treated in a benevolent, honest, competent, reliable, and open fashion (Tschannen-Moran & Hoy, 1998). Likewise, researchers in the field of justice have theorized that perceptions of justice are critical within organizational settings as these perceptions reduce vulnerability by providing vital information regarding whether an individual can "trust others not to exploit or exclude them from important relationships or groups" (Van den Bos et al., 2001, p. 53). Additionally, the attributes of procedural and interactional justice serve to address the conceptual elements of trust.

Leventhal (1980) identified the components of procedural justice as consistency, bias-suppression, accuracy, correctability, representativeness, and ethicality. Interactional justice, on the other hand, addresses the quality of communications and interpersonal treatment received within the organization. Given these elements, one can easily draw the parallels with trust. Treating an individual in a sensitive and respectful manner certainly demonstrates benevolence, as do the procedural justice components of bias-suppression and correctability. If the principal ensures that preconceived notions and self-interest

have no place in the decision making process and he or she is willing to modify or reverse decisions based on additional information, then these actions certainly demonstrate that one is acting in the best interest of another.

Table 1

Parallels between Trust and Justice

Components of Trust	Components of Justice	
	Procedural	Interactional
Benevolence	Bias-suppression Correctability	Interpersonal Sensitivity
Honesty	Ethicality	
Reliability	Consistency	
Competence	Accuracy	
Openness	Voice Representativeness	Thorough Explanations

Competence aligns with the procedural justice rule of accuracy, which requires that decisions be based "on as much good information and informed opinion as possible" (Leventhal, 1980). The facet of openness is met by the interactional component which demands thorough explanations and timely feedback. Furthermore, the procedural justice components of voice and representativeness also address openness, as both reduce vulnerability by allowing others the opportunity to provide input to the decision making process. Lastly, the procedural justice element of ethicality clearly aligns with the trust dimension of honesty and consistency aligns with reliability.

Beyond the obvious alignment between the components of trust and justice, researchers have demonstrated another interaction between these two constructs. Notably, that justice relevant information is most critical early in a relationship when trust is unknown. Van den Bos et al. (1998) found that when people lack information regarding an authority figures' trustworthiness, their reaction to whether an outcome is judged to be fair is dependent on their perception of procedural justice. When trustworthiness is known, procedural justice perceptions have little effect on outcome judgments. Because information regarding procedures, processes, and treatment are often available early in a relationship, this information is typically the most relevant in forming justice perceptions. As a result, Lind (2001) suggested that these fairness judgments often serve as a proxy for trust. Furthermore once these judgments are formed, they remain relatively stable.

Given the established relationship between trust and justice outside of education and the correlation between trust and climate within the educational setting, it is imperative that the construct of justice be explored in order to determine how it might impact school climate and, ultimately student achievement. As the research has indicated, the principal's ability to influence student achievement is mediated through teachers. In order to influence and shape that which occurs within the confines of the classroom, the principal must establish an environment of trust – trust, predicated on perceptions of justice.

CHAPTER 3: METHODOLOGY

Although there is substantial empirical evidence of the powerful influence of demographic variables such as socioeconomic status and ethnicity on student achievement, countless studies have demonstrated that schools also make a significant difference in determining educational outcomes for students, most notably those whose background variables suggest otherwise. Focusing on this second finding, the No Child Left Behind Act holds school personnel accountable for closing the achievement gap that exists between students in the general population as compared to students with special needs, those in poverty, and designated minority populations. As such, if school leaders are to influence the climate of their schools to affect meaningful change, they must be cognizant of the potential influence of perceptions of justice and trust within the organization and their ability to shape these constructs.

The purpose of this study was to determine if a relationship exists between organizational justice, as measured by the Organizational Justice Scale (OJS), and the four dimensions of school climate, as measured by the School Climate Index (SCI). Additionally, this study sought to replicate earlier findings of a significant link between perceptions of organizational justice, as measured by the OJS, and faculty trust, as measured by the Omnibus T-Scale.

Research Questions

1. What is the relationship between organizational justice, as measured by the Organizational Justice Scale (OJS), and school climate as measured by the School Climate Index (SCI)?

2. What is the relationship between organizational justice, as measured by the OJS, and each factor of the SCI (collegial leadership, teacher professionalism, academic press, and community engagement)?
3. What is the relationship between organizational justice, as measured by the Organizational Justice Scale (OJS), and each factor of faculty trust (trust in principal, trust in colleagues, and trust in clients), as measured by the Omnibus T-Scale?
4. What are the relative effects of the four factors of school climate on organizational justice?
5. What are the relative effects of the three factors of faculty trust on organizational justice?

Research Design

This study was a quantitative correlational study. In this study, the researcher sought to discover if a relationship exists between organizational justice and school climate at the high school level. Additionally, the relationship between organizational justice and each factor of school climate was examined. These climate factors are collegial leadership, teacher professionalism, academic press, and community engagement. This study also explored the relationship between organizational justice and faculty trust in the principal, colleagues, and clients. Furthermore, this study sought to determine the relative effect of climate and trust on justice.

Participants and Setting

This study was conducted in 30 public high schools throughout Virginia during regularly scheduled faculty meetings. One-half of all licensed professional staff members

present at the meeting completed the survey on organizational justice, school climate, and faculty trust, which resulted in 988 completed surveys. Each school was self-selected based on their willingness to participate in the study. Although participation was voluntary, a diverse sample of schools was asked to participate to ensure a representative sample from the state with respect to geography, school size, ethnicity and socio-economic status.

Regarding geography, the Virginia Department of Education divides school divisions across the state into eight regional study groups. The 30 schools participating in this study were drawn from all but the two most western regions in the state. The student population of the schools in this sample ranged in size from 539 to 2098. Table 2 provides additional data comparing the student populations in the sample with traditional, 4-year public high schools in Virginia. The data show that with respect to school size, mid-size schools were represented at a slightly higher rate and large-scale schools were underrepresented in the sample as compared to the state. Utilizing free and reduced lunch eligibility data as a measure of socio-economic status, the percentage of low income students in the sample closely resembles that of the state. With respect to ethnicity, black students were slightly overrepresented in the sample; however, the overall distribution was fairly similar to the student population in public high schools in Virginia.

Table 2

Comparison of Student Populations between Sample and Virginia Public High School

Student Population	Schools in Sample		Virginia Public High Schools	
School Size[a]	Number	Percentage	Number	Percentage
0 – 890	9	30.00%	88	33.21%
891 – 1635	13	43.33%	88	33.21%
1636 – 3300	8	26.67%	89	33.58%
Free & Reduced Lunch[b]				
Mean	10,041	27.72%	80,415	26.85%
Ethnicity[a]				
Asian	1,101	2.96%	19,515	5.17%
Black	12,728	34.18%	98,154	26.02%
Hispanic	1,657	4.45%	25,485	6.76%
White	21,429	57.54%	222,645	60.35%

[a]Virginia Department of Education. (2006). *Fall membership 2006-2007.*

[b]Virginia Department of Education. (2007). *School nutrition: Program statistics.*

Instrumentation

The Organizational Justice Scale (OJS), School Climate Index (SCI) and Omnibus T-Scale were incorporated into one survey to assess school-level perceptions of

justice, climate, and trust by licensed, professional staff in each school. The combined instrument included 64-items.

Organizational Justice

The OJS is a 10-item Likert-type scale with six choices ranging from "strongly disagree" to "strongly agree". This instrument incorporates principles of procedural and interactional justice and it addresses both teacher and principal behaviors to measure organizational justice perceptions within the school. The OJS was tested in a study of 75 middle schools in Ohio (Hoy & Tarter, 2004). The alpha coefficient of reliability was high for the OJS at 0.97. Construct validity for this instrument was supported by factor analysis which demonstrated strong single factor loading on organizational justice, as each item had factor loadings greater than 0.77 (Hoy & Tarter). A copy of this instrument is provided in Appendix A.

School Climate

The SCI is a 28-item Likert-type scale with five choices ranging from "never" to "very frequently". This instrument includes four subscales – collegial leadership, teacher professionalism, academic press, and community engagement – which tap into the dimensions of open and healthy schools. The SCI was tested in 82 middle schools in Virginia (Tschannen-Moran et al., 2006). Cronbach's alpha coefficient of reliability was strong for the SCI at 0.96. Each subscale also demonstrated strong reliability: collegial leadership (0.93), teacher professionalism (0.94), academic press (0.92), and community engagement (0.93). Construct validity was supported by factor analysis with items loading from .56 to .91 for collegial leadership, .66 to .83 for teacher professionalism, and .53 to .87 for academic press and community engagement. Although academic press

and community engagement were statistically indistinguishable, the authors retained both as separate factors as they are conceptually distinct (Tschannen-Moran et al., 2006). A copy of this instrument is provided in Appendix B.

Trust

The Omnibus T-scale is a 26-item Likert-type scale with six choices ranging from "strongly disagree" to "strongly agree". This instrument measures the five facets of trust – benevolence, honesty, reliability, competence, and openness – as well as the three referent groups of faculty trust – principal, colleagues, and clients (Hoy & Tschannen-Moran, n.d.). The earliest version of the trust scale included both parents and students as two separate factors; however, the two were collapsed into a single group (clients) as factor analysis demonstrated that the items for students and parents loaded together on a single factor. The Omnibus T-scale, which evolved from earlier trust scales designed specifically as elementary or secondary school measures, is designed to measure faculty trust at both the elementary and secondary level.

The Omnibus T-scale demonstrates strong alpha coefficients of reliability across all three referent groups – trust in principal (0.98), trust in colleagues (0.93), and trust in clients (0.94) (Hoy & Tschannen-Moran). Content validity was initially obtained through item analysis by a panel of experts, professors from the College of Education and Business School at Ohio State University. Hoy and Tschannen-Moran found strong agreement among the panelists for almost all items regarding the referent group and the facet of trust being measured. Furthermore, the authors found construct validity for this instrument was supported by factor analysis with items loading from .84 to .97 for trust in

principal, .43 to .83 for trust in colleagues, and .30 to .90 for trust in clients with the secondary level sample. A copy of this instrument is provided in Appendix C.

Data Collection

The data for this research project were collected in cooperation with a second researcher from the College of William and Mary. The OJS, SCI, and Omnibus T-Scale were combined into one survey to assess school-level perceptions of justice, climate, and trust by licensed, professional staff at the high school level.

From August 2006 through April 2007, the researcher contacted school personnel to obtain approval for the study. With this request, key aspects of the study, consent forms, and sample surveys were provided to appropriate personnel. Once approval was granted, principals were contacted to make arrangements to administer the survey during a regularly scheduled faculty meeting. The OJS, SCI, and Omnibus T-Scale survey was administered from October 2006 to June 2007 to one-half of all licensed, professional staff members present at the faculty meeting. A second survey related to social processes in schools was administered to the other half. The researcher explained the purpose of the study and assured participants of confidentiality. The surveys were distributed and collected by the researcher during the meeting. The average completion time for the survey was 10 minutes. No effort was made to administer the survey to staff members who were absent from the meeting.

Data Analysis

Statistical analysis was used to answer the research questions. Since the school was the unit of analysis, organizational justice, school climate, and faculty trust data were aggregated at the school level. To avoid common methods bias, one-half of the OJS, SCI,

and Omnibus T-scale surveys collected were used to analyze organizational justice perceptions; the other half were used to analyze school climate and faculty trust. The Statistical Package for Social Sciences (SPSS) was used for analyses. Missing values for individual items were replaced using the mean score of all other subjects for the individual school. Mean scores, standard deviations, and ranges were calculated for organizational justice, school climate, faculty trust, the four climate factors (collegial leadership, teacher professionalism, academic press, and community engagement), and the three trust factors (trust in the principal, trust in colleagues, and trust in clients). Correlations employing Pearson *r* statistics, which are used to measure the strength and direction of a relationship between two variables that are approximately normally distributed, were computed to determine relationships between organizational justice and factors of school climate and organizational justice and faculty trust factors. Multiple regression analysis, which is a statistical technique utilized to predict the influence of two or more independent variables on a dependent variable, was used to determine the relative effect of the four factors of school climate and the three factors of faculty trust on organizational justice.

Table 3

Data Analysis

Research Questions	Data Analysis
1. What is the relationship between organizational justice, as measured by the Organizational Justice Scale (OJS), and school climate, as measured by the School Climate Index (SCI)?	Correlations

2. What is the relationship between organizational justice, as measured by the OJS, and each factor of the SCI (collegial leadership, teacher professionalism, academic press, and community engagement)?	Correlations
3. What is the relationship between organizational justice, as measured by the Organizational Justice Scale (OJS), and each factor of faculty trust (trust in principal, trust in colleagues, and trust in clients), as measured by the Omnibus T-Scale?	Correlations
4. What are the relative effects of the four factors of school climate on organizational justice?	Multiple Regression
5. What are the relative effects of the three factors of faculty trust on organizational justice?	Multiple Regression

Ethical Safeguards

Permission for this project was approved by the Protection of Human Subjects Committee at the College of William and Mary prior to conducting the study. All participants were given the opportunity to opt out of the study. Principals were provided the opportunity to receive the results of the OJS, SCI, and Omnibus T-Scale regarding their school; however, individual teachers' responses were not identifiable. Additionally, the results were published collectively, therefore individual schools were not identifiable.

CHAPTER 4: ANALYSIS OF RESULTS

Introduction

This study investigated the relationship between organizational justice and school climate to include the four factors of school climate (collegial leadership, teacher professionalism, academic press, and community engagement). This study also sought to replicate earlier findings of a significant link between organizational justice and faculty trust, including the three trust factors (trust in principal, trust in colleagues, and trust in community). Further analyses investigated the relative effects of the four factors of school climate and the three factors of faculty trust on organizational justice.

The Organizational Justice Scale (OJS), School Climate Index (SCI), and Omnibus T-Scale were combined into a single 64-item instrument to measure justice, school climate, and faculty trust respectively. The OJS, SCI, Omnibus T-scale survey was administered by researchers at regularly scheduled faculty meetings. One-half of all licensed, professional staff members completed the OJS, SCI, and Omnibus T-Scale survey; the other half completed a second survey to be used in future research. Staff members responded to each item on the OJS and Omnibus T-Scale using a six-point, likert-type scale with one representing strongly disagree and six representing strongly agree. For the SCI, participants responded to each item using a five-point, likert-type scale ranging from never (number one) to always (number five).

The survey was completed by 988 participants in 30 public high schools in Virginia. Researchers administered the surveys to licensed, professional staff members from October 2006 to June 2007. The smallest school in the study had a student population of 539 and the largest school had a student population of 2098. To avoid

common methods bias, one-half of the OJS, SCI, and Omnibus T-Scale surveys collected were used to analyze organizational justice perceptions and the other half were used to analyze school climate and faculty trust.

Findings

The five research questions for this study were answered by analyzing the data using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics, presented in Table 4, were computed for organizational justice, school climate, faculty trust, the four climate factors (collegial leadership, teacher professionalism, academic press, and community engagement), and the three trust factors (trust in the principal, trust in colleagues, and trust in clients). Data were aggregated at the school level. The results were determined by averaging the scores for each item within each construct. The mean score for organizational justice was calculated by averaging the scores for all 10 justice items; school climate was determined by averaging the scores for all 28 climate items and trust by averaging all 26 trust items. Likewise, the mean scores for the climate factors and trust factors were determined by averaging the scores for all of the items within each factor respectively.

In addition to presenting the mean, standard deviation and range, Table 4 also provides reliabilities for each variable. Reliabilities were computed using the Cronbach's alpha method of evaluating internal consistency. Correlations and multiple regressions were used to answer the research questions.

Table 4

Descriptive Data for Organizational Justice, School Climate, and Trust (N=30).

Variables	Mean	S.D.	Range	Reliability
Organizational Justice	4.38	.56	3.32 – 5.46	.97
SCI	3.66	.28	3.06 – 4.25	.96
Collegial Leadership	3.77	.54	2.61 – 4.58	.98
Teacher Professionalism	3.86	.22	3.35 – 4.33	.92
Academic Press	3.46	.23	2.96 – 3.88	.84
Community Engagement	3.48	.34	2.87 – 4.14	.88
Faculty Trust	4.04	.40	3.32 – 4.91	.96
Trust in Principal	4.40	.74	2.95 – 5.62	.98
Trust in Colleagues	4.31	.37	3.42 – 5.20	.96
Trust in Clients	3.54	.38	2.53 – 4.12	.95

Relationship between Organizational Justice and School Climate

The first question asked: What is the relationship between organizational justice, as measured by the Organizational Justice Scale (OJS), and school climate, as measured by the School Climate Index (SCI)? The data presented in Table 5 show that there was a strong and positive correlation between organizational justice and school climate ($r = .76$, $p < .01$) with organizational justice explaining 58 percent of the variance in school climate.

The second question asked: What is the relationship between organizational justice, as measured by the OJS, and each factor of the SCI (collegial leadership, teacher professionalism, academic press, and community engagement)? The data in Table 5 reveal that there was a significant positive correlation between organizational justice and each of the four factors of school climate: collegial leadership, teacher professionalism, academic press, and community climate. Of the four climate factors, collegial leadership demonstrated the strongest relationship with organizational justice ($r = .76, p < .01$) explaining 58 percent of the variance. However, teacher professionalism ($r = .57, p < .01$), academic press ($r = .55, p < .01$), and community engagement ($r = .59, p < .01$) all showed a moderately strong correlation with organizational justice.

Table 5

Correlation Analysis of Organizational Justice and School Climate.

	2.	3.	4.	5.	6.
1. Organizational Justice	.76**	.76**	.57**	.55**	.59**
2. School Climate Index (SCI)		.85**	.88**	.82**	.85**
3. Collegial Leadership			.58**	.51**	.53**
4. Teacher Professionalism				.84**	.79**
5. Academic Press					.82**
6. Community Engagement					

** $p < .01$

Relationship between Organizational Justice and Faculty Trust

The third question asked: What is the relationship between organizational justice, as measured by the Organizational Justice Scale (OJS), and each factor of faculty trust (trust in principal, trust in colleagues, and trust in clients), as measured by the Omnibus T-Scale? The data presented in Table 6 show that there was a strong and positive correlation between organizational justice and faculty trust ($r = .75, p < .01$) with organizational justice explaining 56 percent of the variance in faculty trust. Further analyses revealed significant correlations between organizational justice and each of the three trust factors: trust in principal, trust in colleagues, and trust in clients. Of the three trust factors, trust in the principal demonstrated the strongest relationship with organizational justice ($r = .79, p < .01$) explaining 62 percent of the variance. The data also showed a strong correlation between organizational justice and trust in colleagues ($r = .60, p < .01$).

Table 6

Correlation Analysis of Organizational Justice and Faculty Trust.

	2.	3.	4.	5.
1. Organizational Justice	.75**	.79**	.60**	.38*
2. Faculty Trust		.85**	.86**	.76**
3. Trust in Principal			.56**	.35
4. Trust in Colleagues				.70**
5. Trust in Community				

** p < .01

* p < .05

Relative Effects of School Climate Factors on Organizational Justice

The fourth question asked: What are the relative effects of the four factors of school climate on organizational justice? The data in Table 7 indicated that although the four climate factors combined explain 64 percent of the variance in organizational justice, only one factor, collegial leadership, ($\beta = .62, p < .001$) had a significant and unique effect on organizational justice. The lack of an independent effect on organizational justice by teacher professionalism, academic press, and community engagement can be explained by covariance. As shown in Table 5, all four factors demonstrated moderate to strong correlations with one another.

Table 7

Regression Analysis of Organizational Justice and School Climate.

	Organizational Justice		
	Beta	t	Sig.
Collegial Leadership	.62	4.14	.000
Teacher Professionalism	–.09	–.335	.741
Academic Press	.14	.628	.536
Community Engagement	.24	1.18	.250
			$R^2 = .64$
			Adjusted $R^2 = .58$
			S.E. = .36

Relative Effects of Faculty Trust Factors on Organizational Justice

The fifth question asked: What are the relative effects of the three factors of faculty trust on organizational justice? Multiple regression analyses revealed in Table 8 that although the three trust factors combined explain 66 percent of the variance in organizational justice, only one factor, trust in the principal, ($\beta = .66$, $p < .001$) had a significant, independent effect on organizational justice. Again, covariance provides a possible explanation for the lack of an independent effect on organizational justice by trust in colleagues. As shown in Table 6, trust in the principal had a moderately strong correlation with trust in colleagues ($r = .56$, $p < .01$). Although the relationship between organizational justice and trust in clients was significant ($r = .38$, $p < .05$), it was the weakest of the three factors and less likely to demonstrate a significant, independent effect.

Table 8

Regression Analysis of Organizational Justice and Faculty Trust.

	Organizational Justice		
	Beta	t	Sig.
Trust in Principal	.66	4.75	.000
Trust in Colleagues	.25	1.36	.185
Trust in Clients	-.03	-.18	.862

$R^2 = .66$

Adjusted $R^2 = .62$

S.E. = .35

Conclusion

Significant relationships were found between the variables tested in this study. Organizational justice demonstrated a moderate to strong correlation with SCI and all four school climate factors. However, multiple regression analysis revealed that collegial leadership was the only climate factor found to have a significant independent effect on organizational justice. Additionally, organizational justice was significantly correlated with faculty trust and all three trust factors. Further analysis revealed that trust in the principal was the only trust factor to demonstrate a significant and unique effect on organizational justice. These findings provide the basis for further discussion of this study and recommendations for possible future research.

CHAPTER 5: DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Summary

Introduction

Over the past several decades, numerous studies have shown that schools can make a difference in student achievement, despite the socioeconomic status of their students. The research reveals that effective schools share common climate characteristics, which include a strong academic focus, high expectations, and a safe and orderly learning environment. Additional studies also found a link between effective instructional leadership and student achievement; however, these findings have been limited, most likely due to the fact that school administrators do not have a direct role in instruction. Given the mandates put in place by the No Child Left Behind Act, which dictate that schools close the achievement gap between the general population and disadvantaged students or face restructuring, school leaders must examine the factors that enhance their ability to shape school climate and improve student achievement.

Outside the educational arena, numerous studies have focused on the impact of organizational justice perceptions on employee behaviors. Numerous studies in the private sector have shown significant correlations between organizational justice and compliance with authority, organizational justice and commitment, and organizational justice and trust in management. Educational researchers have finally begun to examine the influence of organizational justice on faculty trust, and the limited results have been similar to those in the private sector. Hoy and Tarter (2004) found that faculty trust in the principal and faculty trust in colleagues both exerted significant and independent effects on organizational justice. Given these findings, this study is important as it adds to the

limited body of knowledge regarding the influence of organizational justice perceptions on faculty trust and school climate.

This study investigated the relationship between organizational justice and school climate at the high school level. Additionally, the relationship between organizational justice and each factor of school climate (collegial leadership, teacher professionalism, academic press, and community engagement) was examined. This study also sought to replicate earlier findings of a significant relationship between organizational justice and faculty trust, and included an examination of the relationship between organizational justice and the three faculty trust factors (trust in the principal, trust in colleagues, and trust in clients). Finally, this study sought to determine the relative effect of the climate factors and trust factors on organizational justice.

Discussion of the Results

This study yielded several significant results. These findings support previous research both within and outside the educational arena regarding the relationship between organizational justice and trust in management. This study also provides new insight into the relationship between organizational justice and school climate.

Justice and Climate. This study explored the relationship between organizational justice and school climate. Organizational justice demonstrated a strong, positive correlation with school climate. The results also revealed significant correlations for each of the four climate factors: collegial leadership, teacher professionalism, academic press, and community engagement.

Of the four factors, collegial leadership showed the strongest correlation with organizational justice. Additionally, when all four factors were regressed collegial

leadership demonstrated a significant independent effect on organizational justice, which suggests that collegial leaders must also be concerned with perceptions of organizational justice. Collegial leadership is characterized by open, supportive, and egalitarian behaviors. Procedural justice requires that voice or process control be provided to the individual and interactional justice demands that one treat others with dignity and respect. As such, these two elements of organizational justice correspond well with the attributes of collegial leadership. This finding implies that in schools where teachers feel they are treated in a just manner, collegial leadership prevails.

Organizational justice perceptions also demonstrated a significant and moderately strong correlation with teacher professionalism. This finding suggests that in schools where teachers feel they are treated fairly, teacher professionalism is likely to be more evident. Since collegiality, cooperation, respect, and support for one another are some of the items measured by teacher professionalism, the relationship between this factor and organizational justice is not surprising. Within organizations, individuals assess the benefits and risks that come from working together as a collective group. If one is treated with dignity and procedures are in place to ensure fair treatment, perceptions of organizational justice are likely to be high. In this environment, collegial relationships and cooperation are enhanced as the risk of exploitation is diminished. Additionally, respect and support are attributes of both teacher professionalism and organizational justice.

Since teacher professionalism also addresses the issue of commitment to students, a parallel may be drawn linking the correlation between teacher professionalism and organizational justice to research results outside the educational arena that have

consistently demonstrated a significant correlation between employee perceptions of organizational justice and commitment to the organization (Ambrose & Harland, 1995; Barling & Phillips, 1993; Colquitt et al., 2001; Folger & Konovsky, 1989; Konovsky et al., 1987; Masterson, 2001; Masterson et al., 2000; McFarlin & Sweeney, 1992; Mossholder et al., 1998; Naumann & Bennett, 2000).

One may draw a distinction between commitment to the organization and commitment to students; however, Hoy and Miskel (2005) suggest that teachers are likely to possess a dual orientation. They argue that in service related professions, acting in the best interest of the client (professional orientation) and acting in the best interest of the organization (bureaucratic orientation) are not typically at odds with one another. Additionally, multiple studies have linked organizational commitment to customer satisfaction. Using path analysis, Simons and Roberson (2003) found a significant relationship between employees' perceptions of justice, commitment to the organization, and discretionary service behavior directed toward the customer. In a second study, which examined perceptions of fairness with organizational commitment and customers' ratings of employee effort, researchers found a positive link between organizational commitment and students' reports of instructor effort and helping behaviors (Masterson, 2001). As such, Masterson (2001) suggested that "the effects of fair treatment go beyond employee attitudes, trickling down through the organization to affect the customer as well" (p. 600).

Community engagement also demonstrated a significant and moderately strong correlation with organizational justice. These findings suggest that in schools where the community is involved and responsive, there is a stronger sense of justice. Even though

parents are typically viewed as external to the organizational structure, their interactions with staff can influence teachers' perceptions of the workplace. When schools build strong coalitions with parents and community groups, trust is enhanced and parents are more likely to demonstrate respect and value in their interactions with teachers. As a result of this fair treatment, teachers are more likely to feel that the organization is just.

Lastly, academic press also demonstrated a significant and moderately strong correlation with organizational justice, suggesting that in schools where academic expectations are high, there is a stronger sense of justice and vice versa. However, when the characteristics of academic press are compared to the attributes of organizational justice, an association between the two is not readily apparent. One may speculate that the relationship between organizational justice and academic press is due to the significant interaction between the four climate factors.

Although all four climate factors demonstrated moderate to strong correlations with organizational justice, only collegial leadership demonstrated a significant, independent effect on organizational justice when regressed. This finding suggests that the relationship between organizational justice and the three climate factors of teacher professionalism, academic press, and community engagement may be influenced by the covariance each of these factors share with collegial leadership. In this study, collegial leadership showed a moderately strong correlation with each of the other three climate factors. This covariance between the factors means that in schools where collegial leadership is high, teacher professionalism, academic press, and community engagement are likely to be higher. In schools where collegial leadership is low, teacher professionalism, academic press, and community engagement tend to be lower.

Justice and Trust. Organizational justice also demonstrated a strong and positive relationship with faculty trust. This finding should come as no surprise, as trust implies a willingness to be vulnerable to another and justice perceptions provide critical information regarding the likelihood of fair treatment within the organization. The results also depicted a significant correlation between organizational justice and all three trust factors, with trust in the principal demonstrating the strongest relationship with organizational justice. These findings suggest that in schools where teachers perceive they are being treated fairly, trust in the principal is also likely to be high. Likewise, when trust in the principal is high, teachers exhibit a positive perception of justice within their organization. The strong correlation between organizational justice and trust in the principal is similar to research results outside the educational arena that have consistently found a significant correlation between employee perceptions of organizational justice and trust in management (Alexander & Ruderman, 1987; Barling & Phillips, 1993; Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Folger & Konovsky, 1989; Hubbell & Chory-Assad, 2005; Konovsky & Cropanzano, 1991; Van den Bos et al., 1998); these findings are also supported by the limited body of knowledge on organizational justice in education (Hoy & Tarter, 2004).

In addition to the strong correlation between organizational justice and trust in the principal, trust in colleagues also demonstrated a moderately strong correlation with organizational justice. These findings indicate a positive relationship between justice perceptions and trust in colleagues. Although these results appear to support previous findings within educational research, there is a slight difference. Additional statistical analysis revealed that when all three trust factors were regressed, only trust in the

principal had a significant independent effect on organizational justice. However in their study of 75 middle schools in Ohio, Hoy and Tarter (2004) found that both trust in the principal and trust in colleagues had significant independent effects on organizational justice.

In this study, trust in colleagues did not exert an independent effect on organizational justice. A possible explanation for this disparity may be a result of demographic differences between the schools in the Ohio study and those in this sample. Additionally, the Ohio study examined the perceptions of middle school teachers and this study investigated the perceptions of high school teachers. Since high schools are structured differently than middle schools, it is possible that the differences in structure and interpersonal behaviors caused high school teachers to affiliate organizational justice more strongly with the principal than with one another.

Trust in clients also demonstrated a significant correlation with organizational justice; however, this relationship was the weakest of the three. These findings suggest that in schools with a stronger sense of organizational justice, trust in clients is likely to be higher. The relationship between these variables is likely a result of the interaction between parents, teachers, students, and the principal. If parents are supportive of the school and demonstrate respect toward teachers, dignity, the interactional component of justice is addressed and trust is enhanced. If on the other hand, parents are unreasonable in their demands and the principal does not provide appropriate support, perceptions of justice are likely to be diminished and trust reduced.

Implications

Since the early 1990s, educators have faced increasing demands from the general public and political leaders to improve academic outcomes for all students, regardless of demographic variables. The advent of high stakes testing and the No Child Left Behind Act created a national agenda focused on closing the achievement gap. One evident consequence of this attention was the changing role of the principal from that of building manager to instructional leader. Witziers et al., (2003) defined an instructional leader as "someone whose, actions (both in relation to administrative and educational tasks) are intentionally geared to influencing the school's primary processes and, therefore, ultimately students' achievement levels" (p. 403). To meet these new expectations effectively, principals must be aware of how their behavior impacts teachers and student learning.

Much of the research in education has suggested that principals, at best, have an indirect effect on student achievement. Since they are not directly involved in the delivery of instruction, their ability to influence achievement is mediated through the teacher. As such it is critical that principals attend to the constructs of justice and trust, both of which enhance the principal's ability to influence school climate and ultimately the interaction between teacher and student.

Justice and School Climate

School climate demonstrated a strong correlation with organizational justice. Additionally all four climate factors (collegial leadership, teacher professionalism, academic press, and community engagement) showed moderate to strong relationships with organizational justice. Given that previous studies have demonstrated correlations

between all four climate factors and student achievement, the relationship between each climate factor and organizational justice has implications for practitioners.

Justice and Collegial Leadership. In addition to demonstrating a strong correlation with organizational justice, collegial leadership also had a significant and unique effect on justice when regressed with the other three climate factors. As such, the relationship between these two variables has implications for school leaders.

Since much of the interaction between students and teachers occurs without direct supervision, principals who rely on formal authority as a source of control are likely to be disappointed in achievement outcomes for students, as it does little to encourage teachers to extend themselves beyond minimal compliance. Instead principals must build collegial relationships with teachers, inviting them into thoughtful dialogue regarding academic expectations and goals for students. Hoy et al. (1998) suggested that the collegial leader is supportive and egalitarian. However, the findings of this study suggest that the collegial principal must also be concerned with perceptions of justice.

In order to engage in robust, thoughtful discussions with administrators, teachers must trust that they won't be exploited or taken advantage of by those in authority. Consequently, perceptions of justice may not shape the egalitarian behaviors of principals, but it could very well influence the teachers' response to any attempt to engage them in unrestricted conversation. If perceptions of justice are low, teachers are less apt to be forthcoming in collegial discussions or they may say what they think administrators want to hear and then go about doing what they did before. On the other hand, if teachers feel they are treated fairly by their principal, reflective dialogue is more likely to follow.

Numerous studies have shown that the inclusion of teachers in some aspect of the decision making process is a common characteristic in high achieving schools (Blum et al., 1987; Hallinger & Murphy, 1987; Hawley, 1985; Heck et al., 1990; Rutter et al., 1979). When leaders utilize the knowledge, experience, and perspectives of everyone possible in making decisions and formulating change, they gain greater legitimacy and commitment from their constituents (Spady & Schwahn, 2001). These findings suggest that collegial leaders regularly incorporate rules of procedural justice, such as voice, accuracy and bias-suppression. Principals must understand that individuals are much more likely to commit to the goals of an organization and cultivate its mission when they are appropriately involved in the decision making process.

Principals must also acknowledge that when perceptions of justice are low, trust is diminished, and their sphere of influence is reduced. Using path analysis, Hoy and Tarter (2004) found significant links between collegial leadership, trust in the principal, and organizational justice. Therefore, school leaders who wish to build collegial relationships and enhance their informal authority with teachers must recognize that integrating the elements of procedural and interactional justice into organizational life are critical to developing the trusting relationships required for meaningful dialogue. Specifically, the collegial leader must treat teachers with dignity and respect, and must ensure that procedures are consistently applied, the collection of information is thorough and accurate, decisions are corrected when necessary, bias is suppressed in decision-making, and the allocative process provides a voice to those who have to live with the outcome.

Justice and Teacher Professionalism. Although teacher professionalism demonstrated a moderately strong correlation with organizational justice, it did not

provide a significant and independent effect on justice when regressed with the other three climate factors. However, the lack of a unique contribution is likely due to the strong covariance between the four climate factors. Even so, principals should still examine the implications for practice which may exist as a result of the relationship between these two variables.

Hoy et al., (1998) characterizes teacher professionalism as "commitment to students, respect for the competence of colleagues, warmth and friendliness, and engagement in the teaching task" (p. 342). There is a considerable volume of research in the private sector that demonstrates a significant correlation between perceptions of justice and organizational commitment. Since teachers, like those in other service-oriented professions, typically exhibit dual orientation, commitment to organization and commitment to client can coexist with little conflict. Given this connection, principals must recognize the possible influence of justice perceptions on teacher commitment to students and engagement in the teaching task. By adhering to the principles of procedural and interactional justice, school leaders create norms of behavior. When teachers are treated in a just manner, commitment is enhanced and teachers are more likely to exhibit similar behavior toward their students and one another.

Conversely, equity theory may explain how a lack of justice can diminish teacher professionalism. Adams (1963) suggested that perceived inequity creates tension. Individuals can reduce this tension by seeking increased outcomes, quitting, or reducing input. If additional outcomes are not available and the person does not quit, the only option left is to reduce inputs. When teachers choose to reduce inputs, commitment to students is likely to be adversely affected.

Additionally, equity theory explains that individuals make comparisons between self and others. The referent other may be the same individual at another point in time or it may be a different person in a similar position. Since teachers are likely to make these same comparisons, it is important that principals attend to equity issues. If over time, teachers who demonstrate extraordinary commitment to students are treated no differently than those who hurry out of the building at the end of the school day, then inequity is evident. Given this concern, principals who wish to engender teacher professionalism and commitment to students must attend to the impact of inequity on perceptions of justice. They must try to find ways to address inequity and restore justice by providing additional rewards in the way of increased compensation, benefits, or recognition.

Justice and Academic Press. Academic press demonstrated a moderately strong correlation with organizational justice; however, it did not provide any unique contribution to justice when regressed with the other three climate factors. The lack of an independent effect is possibly due to the strong covariance between academic press and the other climate variables, in particular collegial leadership. Thus, the correlation between academic press and organizational justice is likely a result of the relationship both variables share with collegial leadership. Given these findings, what are the implications for principals regarding justice perceptions and academic press?

In numerous research studies, academic press has consistently demonstrated a unique and independent effect on student achievement (Hoy & Hannum, 1997; Hoy et al., 1998; Hoy et al., 1991; Tschannen-Moran et al., 2006). As such, principals must attend to this climate factor. Schools strong in academic press are characterized by high, but

achievable academic expectations, an orderly and focused learning environment, and a student population that works hard and respects academic success. Through their words and actions, collegial principals can influence the academic climate of their schools.

Sergiovanni (1991) believed that the principal must not only highlight and enforce the values of the school but also "provide the conditions and support that allow people to function in ways that are consistent with agreed upon values" (p. 328). Principals accomplish this task by establishing clear standards for the instructional program and attending to the structures of the organization which either support or inhibit these values (Hawley, 1985). Effective principals recognize that how they spend their time, where they focus their attention, and what they choose to honor, sends signals as to what is valued (Deal & Peterson, 1999). Specifically, when principals get into classrooms frequently and provide teachers with feedback, review and share student progress data regularly, and structure frequent opportunities for professional teacher interaction, they communicate to teachers that instruction is valued. These behaviors also communicate fair treatment as they incorporate the procedural justice rules of consistency, accuracy, bias-suppression, and representativeness.

Justice and Community Engagement. Community engagement also demonstrated a moderately strong correlation with organizational justice, but did not provide any unique contribution to justice when regressed with the other three climate factors. Additionally, there was a strong relationship between this variable and both academic press and teacher professionalism; the correlation with collegial leadership was also moderately strong.

In a study conducted by DiPaola and Tschannen-Moran (2005), bridging strategies demonstrated a significant independent effect on student achievement in both math and English. Bridging strategies are aimed at building community engagement by enhancing cooperation between the school, parents, and community groups. Given the strong correlation between community engagement and student achievement and the moderately strong relationship between community engagement and organizational justice, principals must examine the implications for practice that may exist as a result of the relationship between these two variables.

When principals invite parents and community groups into the educational process to dialogue about school issues, they address the need for voice or process control. When principals treat parents and students with respect, use multiple methods to communicate openly with those outside the school, and encourage teachers to communicate and build relationships with parents, they address interactional elements of justice. These elements of justice help to foster trust; and, if parents trust the school and teachers, it is likely that teachers will reciprocate this trust. Since learning is a cooperative process, Hoy (2002) suggested that an absence of trust is likely to hinder student achievement as it "makes cooperation virtually impossible" (p. 97). Therefore, principals should employ the same procedural and interactional justice concepts utilized within the organization to those outside the building to ensure community engagement and enhance student achievement.

Justice and Faculty Trust

Trust in the Principal. Similar to findings in previous studies, both in the private sector and educational arena, this study indicated a strong correlation between

organizational justice and trust in management. Additional statistical analysis revealed that trust in the principal had a significant and independent effect on organizational justice. Given these findings, the implication for high school principals is clear. If a principal wants to create a climate of trust, organizational justice matters.

Lind (1995) suggested that early in a relationship, individuals begin looking for justice relevant information to determine whether the other individual, or organization as a whole, is trustworthy. Similarly, Van den Bos et al., (1998) found that when the trustworthiness of individuals in positions of authority was unknown, the components of procedural justice were much more important in determining whether a particular outcome was judged as fair. Once formed, fairness judgments are relatively stable and subsequent events are likely to be interpreted in a manner congruent with pre-existing perceptions (Lind, 2001).

Given these findings, principals must attend to the components of procedural and interactional justice to ensure that teachers, particularly those newest to the organization, trust those in positions of authority. Whereas interactional justice refers to the interpersonal treatment and quality of communication one receives within the organization, procedural justice addresses the mechanisms and processes used to determine outcomes. Leventhal (1980) asserted that for an allocative process to be deemed fair, six procedural justice rules must be met. These rules are identified as consistency, bias-suppression, accuracy, correctability, representativeness, and ethicality. The value of this research to principals is that each of these components is within their scope of control.

Interactional justice requires that principals treat staff members with dignity and respect in every encounter. This is not to say that principals cannot sanction inappropriate behavior; rather that they address the behavior in a manner which conveys confidentiality and respect for the feelings of the individual. Lind and Tyler (1988) claimed that impolite behavior is viewed as unfair as it violates basic normative rules and "denies the recipient's dignity as a full-status member of the group" (p. 237). Additionally, interactional justice requires that principals provide thorough explanations, particularly when a decision results in adverse outcomes for staff members. Bies and Shapiro (1987) found that causal accounts, explaining how and why a decision was made, enhanced employee perceptions of fairness and approval of the decision.

As is the case with interactional justice, principals also have the ability to influence perceptions of fairness, and consequently, faculty trust, by attending to the six procedural justice rules (consistency, bias-suppression, accuracy, correctability, representativeness, and ethicality). When making decisions that affect the outcome of others, principals must ensure that the procedures used are consistent regardless of the individual with whom one is dealing and that over time, procedures remain relatively stable. If the principal ignores inappropriate behavior by one teacher or group and censures the same behavior in another, the principal will be perceived as unfair and trust is likely to be diminished.

Likewise, principals must try to ensure that when the possibility exists that an allocative process may result in a negative impact on staff, that decisions not be biased by personal self-interest or preconceived notions and that the information-gathering process is thorough. When teachers believe that decisions are based on accurate and non-biased

information, they are more likely to perceive those decisions as fair. Additionally, principals must be willing to modify and reverse decisions when necessary. By correcting a decision that is not in the best interest of staff or students, principals demonstrate that they are more concerned with what is right, rather than being right.

However, the most important rule for principals to address regarding perceptions of justice is the rule of representativeness. The correlation between perceptions of fairness and the rule of representativeness is one of the most widely replicated and reliable findings in organizational justice literature (Ambrose & Harland, 1995; Earley & Lind, 1987; Lind & Tyler, 1988). Representativeness requires that voice or process control be provided to all individuals affected by the allocative process. Even in the face of repeated negative outcomes, Lind and Tyler found that voice or process control enhanced perceptions of fairness. Given these findings, it is essential that principals involve teachers in the decisions that impact what they do. By providing voice, principals not only reduce the perception of bias but also convey that they value teachers. Lind and Tyler (1988) argued that this second attribute of representativeness enhances perceptions of fairness "because the opportunity to exercise voice constitutes a visible marker of group membership" (p. 236).

Finally, the ethicality rule requires that principals act in a manner compatible with the moral and ethical values accepted by the members of the organization. In regard to this rule, it is important that principals follow generally accepted norms regarding fair treatment. This rule appears to bridge the gap between procedural justice and interactional justice as it addresses treating staff members in a dignified and respectful manner. Additionally, this rule requires that the principal's words and actions be aligned.

When a principal's actions are inconsistent with his words or with the values espoused by the organization, it creates confusion. Confusion increases vulnerability, which reduces trust.

Trust in Colleagues. Although trust in colleagues exhibited a strong correlation with organizational justice, it did not have a significant and unique effect on organizational justice when regressed with the other two trust factors in this study. However, the lack of an independent contribution by this factor may be explained by the moderately strong correlation between trust in the principal and trust in colleagues. Given these results, what are the implications regarding organizational justice and collegial trust for high school principals?

Hoy and Miskel (2005) suggest that faculty trust in colleagues is not created by principal behaviors, rather it is built through the interactions that teachers have with one another. When trust in colleagues is strong, teachers view one another as competent and interactions are typically open and honest. Because trust in the principal and trust in colleagues tend to covary, it may be assumed that the organizational justice behaviors previously described to enhance trust in the principal may have a similar effect on trust in colleagues. If teachers work in an environment where they are treated with dignity and respect, where they are provided a voice in allocative decision making, where there are consistent procedures in place to ensure that outcomes are based on accurate information and non-biased sources, and where the principal behaves in an ethical manner, one might reason that teachers will mirror these same behaviors with one another and trust between colleagues will be enhanced.

Trust in Clients. Faculty trust in clients demonstrated a significant correlation with organizational justice; however, it did not produce a significant independent effect on justice when regressed. It's not surprising that the relationship between trust in clients and organizational justice is weaker than the other two factors, as the OJS examines teachers' perceptions regarding how fairly they are treated by the organization, and parents and students are external to the organizational structure.

One might assume that since the relationship between organizational justice and faculty trust in clients is small, that there is no need for further examination regarding the implications for practice. However of the three faculty trust factors, trust in clients consistently demonstrates the strongest correlation with student achievement. As such, principals should consider that the same procedural and interactional justice elements employed within the organization can be applied to clients. This application of justice principles toward clients might enhance their perceptions of fairness regarding the school, and as a consequence trust. If parents and students believe that they can trust the school, then there's a greater likelihood of cooperation and bridging activities between the school and community, which in turn encourages teacher trust in clients, both of which promote student achievement.

Recommendations for Further Research

Further research in the area of organizational justice should be done to broaden the understanding of the relationship between justice perceptions and school climate and trust. The results of this study were limited by the fact that participating schools were self-selected. Although efforts were made to select a diverse sample of schools to ensure a representative sample from the state with respect to geography, school size, ethnicity,

and socio-economic status, this study was limited to 30 public high schools in Virginia, therefore, the results cannot be generalized to all high schools in Virginia, nor to high schools in other states. It would be beneficial to replicate this study to include a more extensive sampling of schools both within and outside Virginia at the middle school and high school level. In addition to exploring the construct of justice at the secondary level, replication of this study at the elementary level would also be of value.

Further research is also recommended to identify whether organizational justice has a direct correlation with student achievement. Multiple studies have found a significant and positive correlation between school climate and student achievement, even when controlling for socio-economic status. Findings from this study indicate a strong correlation between organizational justice and school climate. However, this study only hints at a relationship between justice and student achievement through the common correlate of school climate.

Finally, given the findings in previous studies regarding the strong link between community engagement and student achievement, further research is recommended to examine the relationship between the clients' perception of organizational justice and that of teachers. Additionally, how does the clients' perception of justice correlate with the teachers' perception of community engagement and teacher professionalism? By examining the clients' viewpoint in relation to the teachers' perspective, valuable insight may be gained as to how relationships may be built between schools and the communities they serve.

Final Thoughts

In sum, the findings of this study indicate that in the educational setting perceptions of justice appear to have a similar relationship with trust in management as it does in the private sector. Additionally, this study revealed that the relationship between justice and school climate is also strong. Given these findings, principals must realize that teachers observe their behavior and make judgments regarding whether the organization is just. These perceptions, in turn, correlate strongly with the degree of trust teachers have in their leaders and ultimately, the climate of the school. Consequently, principals need to treat everyone within the organization with dignity and respect; they need to provide adequate explanations when outcomes are unfavorable; they need to make certain that the procedures used in the allocative process are consistent and accurate; and, they need to ensure that individuals affected by an outcome have a voice in the process and that the process is ethical, free from bias, and allows for correction. By attending to the components of procedural and interactional justice, principals may enhance faculty trust and school climate, resulting in greater student achievement.

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Appendix A

Organizational Justice Scale (OJS)

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

1. The principal's behavior is consistent.
2. Students in this school are treated fairly.
3. The principal does not play favorites.
4. The principal treats everyone with respect and dignity.
5. There is no preferential treatment in this school.
6. The principal in this school is fair to everyone.
7. Educators in this school follow courses of action that are generally free of self-interest.
8. The principal adheres to high ethical standards.
9. Teachers are involved in decisions that affect them.
10. Teachers are treated fairly in this school.

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Appendix B

School Climate Index (SCI)

Five point scale (Never, Rarely, Sometimes, Often, Always)

Collegial Leadership
1. The principal explores all sides of topics and admits that other opinions exist. (C 16)
2. The principal treats all faculty members as his or her equal. (C 17)
3. The principal is friendly and approachable. (C 7)
4. The principal puts suggestions made by the faculty into operation. (C 8)
5. The principal is willing to make changes. (C 23)
6. The principal lets faculty know what is expected of them. (C 24)
7. The principal maintains definite standards of performance. (C 25)

Teacher Professionalism
1. The interactions between faculty members are cooperative. (C 3)
2. Teachers help and support each other. (C 11)
3. Teachers respect the professional competence of their colleagues. (C 4)
4. Teachers in this school exercise professional judgment. (C 12)
5. Teachers accomplish their jobs with enthusiasm. (C 18)
6. Teachers "go the extra mile" with their students. (C 19)
7. Teachers provide strong social support for colleagues. (C 20)
8. Teachers are committed to helping students. (C13)

Academic Press
1. Students respect others who get good grades. (C 6)
2. Students try hard to improve on previous work. (C 15)
3. The school sets high standards for academic performance. (C 5)
4. Students seek extra work so they can get good grades. (C 22)
5. Academic achievement is recognized and acknowledged by the school. (C 14)
6. The learning environment is orderly and serious. (C 21)

Community Engagement
1. Community members attend meetings to stay informed about our school. (C 26)
2. Parents and other community members are included on planning committees. (C 9)
3. Organized community groups (e.g., PTA, PTO) meet regularly to discuss school issues. (C 27)
4. Community members are responsive to requests for participation. (C 10)
5. School people are responsive to the needs and concerns expressed by community members. (C 28)
6. Our school is able to marshal community support when needed. (C 2)
7. Our school makes an effort to inform the community about our goals and achievements. (C 1)

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Appendix C

Omnibus T-Scale

Six Point Scale (Strongly Disagree-1 to Strongly Agree-6)
* Items are reversed scored.

Faculty Trust in the Principal
1. Teachers in this school trust the principal. (1)
2. The teachers in this school are suspicious of most of the principal's actions. (4)*
3. The teachers in this school have faith in the integrity of the principal.(7)
4. The principal in this school typically acts in the best interests of teachers. (9)
5. The principal of this school does not show concern for the teachers. (11)*
6. Teachers in this school can rely on the principal. (15)
7. The principal in this school is competent in doing his or her job. (18)
8. The principal doesn't tell teachers what is really going on. (23)*

Faculty Trust in Colleagues
1. Teachers in this school trust each other. (2)
2. Teachers in this school typically look out for each other. (5)
3. Teachers in this school are suspicious of each other. (8)*
4. Even in difficult situations, teachers in this school can depend on each other. (12)
5. Teachers in this school do their jobs well. (13)
6. Teachers in this school have faith in the integrity of their colleagues. (16)
7. The teachers in this school are open with each other. (19)
8. When teachers in this school tell you something, you can believe it. (21)

Faculty Trust in Clients
1. Teachers in this school trust their students. (3)
2. Teachers in this school trust the parents. (6)
3. Students in this school care about each other. (10)
4. Parents in this school are reliable in their commitments. (14)
5. Students in this school can be counted on to do their work. (17)
6. Teachers can count on parental support. (20)
7. Teachers here believe students are competent learners. (22)
8. Teachers think that most of the parents do a good job. (24)
9. Teachers can believe what parents tell them. (25)
10. Students here are secretive. (26)*

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