School Climate & School Size:
Implications for the Role of the School Psychologist

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For mom and dad
For being the wind beneath my wings

ABSTRACT

Grade Seven, Eight and Nine students shared their perspectives on school climate and participation in extracurricular activities using quantitative and qualitative methods. Students attending both large, urban schools (N = 60) and small, rural schools (N = 32) completed the School Climate Inventory and School Participation Inventory. A subset of volunteer students (N = 5) were interviewed via the School Climate Interview Schedule, which more fully explored the survey items. Quantitative results indicated that Grade Eight small school participants had significantly more positive perceptions of school climate than all other participants. Results further indicated that small school respondents participate significantly more in extracurricular activities, specifically athletics, cultural activities and student government activities. Qualitative responses indicated that participants feel supported in school and for the most part, enjoy the manner in which they are taught. Implications include the need for school psychologists to become more visible within the schools that they service and be flexible in their models of service delivery.

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CHAPTER I

INTRODUCTION

A. Introduction

The idea of larger schools is not new, rather it dates back to research conducted by James Conant (1959a). Increasingly, the organization of schools into larger units is becoming a reality. Over the past decade, a major school consolidation movement has taken place. Century old schools have been torn down and replaced with "super schools" that accommodate three times the original population of the school. Although one of the aims in increasing school size is to offer more comprehensive programs, the social needs of students may be neglected.

As the school consolidation movement continues, increased pressure on schools to meet the social needs of children and adolescents continues to mount. Research has expressed that schools have a critical role in meeting the social needs of students within a larger network of integrated service delivery (Ross, Powell, & Elias, 2002). The school psychologist, therefore, plays a critical role in ensuring that the social needs of students are met. School psychologists are in a position to learn and understand the dynamics of schools, an aspect of which is climate, and they can use this knowledge to ensure that students are socially competent. Unfortunately, with an increase in school consolidation, meeting the social needs of students will become increasingly more difficult. As with many changes, school consolidation is accompanied by supporters and opponents.

B. Big Schools versus Small Schools

There is much controversy over the increase in large schools with some supporting and others opposing this change. Conant (1959a) initiated the drive for larger schools because he believed that larger schools were more comprehensive and could better meet the educational needs at that time. Current research indicates that the drive for larger schools is due to better resources and facilities and more specialized services assumed to exist within large schools (Gardner, Ritblatt, & Beaty, 2000).

On the other side of the controversy, are those who support smaller schools. Research by Barker and Gump (1964) was one of the earliest studies in defense of smaller schools. They believe that although larger schools are assumed to be more comprehensive, smaller schools offer more in the way of opportunity for participation and satisfaction. Thus, they examined student rates of participation in extracurricular activities and levels of student satisfaction, among other variables, and found that small schools were rated more positively than large schools on all variables measured. This study was later replicated by Lindsay (1982), who found similar results. A host of other research supports the superiority of smaller schools with regards to student rates of participation and satisfaction (Fowler & Walberg, 1991; Holland & Andre, 1987; Mok & Flynn, 1997). Researchers have also found support for the academic superiority of smaller schools, as well (Fowler & Walberg, 1991; Lee & Smith, 1995).

Fowler and Walberg (1991) investigated school size effects for secondary

schools on school outcomes, including average scores on state-developed tests, student retention, suspensions, post-school employment, and college attendance. They found that district socioeconomic status and the percentage of students from low-income families had the strongest influence on schooling outcomes. School size was the next most influential factor and was found to be negatively related to positive school outcomes. The results suggest that smaller schools and smaller school districts may be more conducive to positive school outcomes, such as achievement test scores, student retention, and college attendance. Therefore, it appears that in some small and large schools a trade-off exists, with larger schools offering more comprehensive education and small schools meeting developmental and social needs. There is, however, increasing support for the academic superiority of smaller schools, in addition to being socially superior.

C. The Role of School Climate

Evidence suggests that smaller schools are, at the very least, socially and developmentally superior to larger schools, and may even be academically superior. We do not, however, understand the role that school climate plays in large versus small schools, as there is limited research in this area. Although the research examining school climate is plentiful, the terms culture and climate are often used interchangeably and, as a result, the literature lacks clarity and consistency. In addition, the terms are operationalized differently.

The terms school culture and school climate actually represent two

separate constructs. Sergiovanni and Starratt (2002) define climate as representing the psychological characteristics of a school, that can influence the behavior of the teachers and students. They further describe it as the "feel" that they have for the school. School culture, on the other hand, is presented as the symbolic side of school life. That is, the norms, understandings, values, beliefs, and meanings that exist within a school that cannot be measured because they are not readily operationalized. In simpler terms, school climate is the measurable aspect of school culture. Across studies, these appear to be the most consistent definitions of school culture and school climate.

Just as the size of the school influences the engagement and academic achievement of students, so does the climate of the school. In addition, research often focuses on the characteristics of effective schools when discussing school climate. This emphasis may be attributed to the important role that school climate plays in the effective functioning of a school.

Grossin (1991) examined the effects of teaching and social climate on student achievement, behavior, and social and personal adjustment. The author proposed that the social structure of the school and the climate of the school were intervening variables between the characteristics of the teachers, students and administrators of a school and the interaction of these individuals. Results supported the position that student outcomes in schools with a good teaching and social climate are somewhat better than or comparable to student outcomes in schools with more favorable peer social interactions but poorer climates.

In a similar study, Ma and Klinger (2000) examined the influence of student and school factors, specifically school climate, on students' performance in mathematics, science, reading, and writing. School climate was divided into three areas: disciplinary climate, academic press, and parental involvement. It was found that disciplinary climate, which encompassed school rules, student behavior, and punishment, was significantly related to achievement in mathematics, science, and writing.

Purkey and Smith (1983) studied school culture transformation as a means of improving achievement levels. They proposed that school improvement will occur when school culture is taken into account because it is their belief that the quality of the school experience at the classroom level will depend on the quality of activity at the level above it. To make cultural transformations, Purkey and Smith stress the importance of collaborative relationships, sense of community, clear goals and high expectations, and order and discipline.

In a review of the characteristics of effective schools, Coyle and Witcher (1992) stress the importance of school culture in the creation and maintenance of an effective school, that is, a school that stresses successful teaching and learning, so as to increase achievement of students. Drawing on research conducted by Purkey and Smith (1983), the authors identify several norms that exist in effective schools. These consist of: collegiality; experimentation; high expectations; trust and confidence; tangible support; appreciation and recognition; caring, collaboration, and humor; involvement in decision making; protecting what is

important; traditions; and open communication that is honest.

The literature examining school culture and school climate, although inconsistent in its use of terms and definitions, appears to draw on a number of core characteristics of effective schools. These characteristics include collaboration and collegial relationships; high expectations, sense of community; and order and discipline. Each of these characteristics, in turn, contributes to a positive school climate and an effective school; one that meets both the social and academic needs of students.

D. Statement of the Problem

There exists a significant body of literature in the area of school culture and school climate and in the area of school size. There is, however, minimal research examining these variables in conjunction with each other. It is empirically evident that school size and school climate effect student outcomes, but we do not know if school size impacts school climate. Professionals working within the school setting, examine issues and collaborate in an effort to help students learn more effectively. Therefore, if the size of the school is negatively effecting the climate of a school, student academic achievement, engagement, and behavior are simultaneously impacted because these variables have been shown to be related to school climate. This knowledge would allow these professionals to buffer the effects of negative school climates in particular-sized schools and work towards school climate improvement.

The purpose of the present study is to examine the relationships among

gender, school location (rural and urban), grade level, and school size and school climate. School climate is defined as the psychological characteristics of a school, that can influence the behavior of teachers and students. In the present study, school climate consists of five dimensions as measured by the School Climate Inventory (adapted from the Quality of School Life Scale, Karatzias, Power, and Swanson, 2001). Additional purposes are to examine whether gender, school location, grade level, school size are related to student participation in extracurricular activities, to examine whether there is a relationship between school climate and student participation in extracurricular activities and to examine the expectations surrounding the academic, behavioural and social aspects of school.

E. Research Questions

There is a significant amount of literature examining school climate and school size and their influence on various student outcomes, such as academic achievement, course comprehensiveness, participation in extracurricular activities, engagement, and behavior (Fowler & Walberg, 1991; Grossin, 1991; Lindsay, 1982; Ma & Klinger, 2000). Of the examined literature, none studied the effect of school size on school climate. There are several questions related to this examination:

(1) How similar or different are perceptions of school climate a) for males and females, b) in rural and urban schools, c) at each grade level and d) in small and large schools?

(2) Does participation in extracurricular activities vary a) among males and females, b) in rural and urban schools, c) at each grade level and d) among small and large schools?

(3) How similar or different are perceptions of each of the individual dimensions of school climate a) for males and females, b) in rural and urban schools, c) at each grade level and d) in small and large schools?

(4) Does participation in each of the individual categories of extracurricular activities vary a) among males and females, b) in rural and urban schools, c) at each grade level and d) among small and large schools?

(5) Is there a relationship between the five categories of extracurricular activities and the five dimensions of school climate?

(6) What expectations exist at small and large schools with regards to the academic, behavioral and social aspects of these schools and are students satisfied with each of these areas?

F. Definitions

School climate, consistent with Sergiovanni and Staratt's definition (2002), will be defined as the psychological characteristics of a school that can influence the behavior of the teachers and students. For the purpose of the present study, school climate consists of five dimensions: Curriculum, Assessment and Achievement; Teaching Methods and Learning; Personal Needs and Support; Sense of Belongingness and Relationships; and Environment.

Large schools will be defined as those schools with a total enrollment of

five hundred students or more, while small schools will be defined as those schools with a total enrollment of one hundred students or less.

Consistent with Lindsay's (1982) definitions of urban and rural schools, urban schools will be defined as those that are located in larger cities and their suburbs, while rural schools are those located in smaller, more isolated communities that are not suburbs.

CHAPTER II

REVIEW OF LITERATURE

School size and school climate and culture have been found to exert an effect on various student outcomes, such as academic achievement, participation in extracurricular activities, rates of absenteeism, and the quality of school life (Fowler & Walberg, 1991; Gardner et al., 2000). This chapter will review the literature related to school size, school climate, and school culture.

A. School Size

Research by James Conant (1959a) initiated the drive for larger schools. He proposed that small high schools could not offer programs that were comprehensive enough for high quality education. Conant's beliefs sparked an interest in the comprehensiveness and academic superiority of small versus large schools with many researchers finding larger schools to be more comprehensive and academically superior. This success is often attributed to the greater resources, specialized services, and better facilities found in big schools (Gardner et al., 2000).

Haller and colleagues (1990) found support for the comprehensiveness of larger schools. They proposed that although larger schools do offer more courses than smaller schools, it does not necessarily mean that they are more comprehensive. Using data from the *High School and Beyond* surveys, which consist of questions directed towards administrators regarding their schools and

communities, they analyzed the comprehensiveness of the courses offered by each school. They grouped the schools according to the number of students in the graduating class as a measure of size. Each senior class ranged in size from less than 25 graduates to 400 or more graduates. Results showed support for the more comprehensive nature of larger schools, however, it was found that at any given size school, comprehensiveness varies according to the particular subject. Haller and his colleagues also found that there was no point at which the programs of smaller schools became equal in comprehensiveness to the programs of larger schools.

Just as Conant was a supporter of larger schools, Barker and Gump were the initiators of research in support of small schools. Their 1964 study was one of the earliest in defense of small schools. The study examined student participation in extracurricular activities and student satisfaction, in addition to other variables, and it was found that small schools were superior on all of the variables measured.

Barker and Gump's original study was replicated by Lindsay (1982), who examined the effect of high school size on student participation, satisfaction, and attendance using a representative sample of students. School attendance was included as a variable based on previous evidence that the amount of time that students are exposed to school is a significant factor in the amount of learning that takes place (Heyns, 1978).

It was hypothesized that student participation, satisfaction, and attendance

would be higher in smaller schools. Participation rates were examined in four categories of activities. These included athletics; drama, music, and debating; journalism; and student government and political clubs. Two types of student satisfaction were measured. One type tapped into the quality of required courses and the other questioned whether students felt they were a part of the school. The author also examined three test variables: the urban or rural location of the school, students' socioeconomic status, and students' academic ability.

Lindsay defined school size according to the number of students enrolled in the senior class. Those schools that were classified as small consisted of 100 or less students in the senior class; those classified as medium consisted of 101 to 400 students in the senior class; and large schools were those where 400 or more were enrolled. Schools located in rural or farming communities and cities or towns of fewer than 50,000 people that were not suburbs of larger places were classified as rural. Urban schools were defined as those located in larger cities and their suburbs.

Results showed that participation in extracurricular activities was higher in smaller schools with females participating significantly more in music, drama, debating and journalism. The participation levels were reversed when looking at the category of athletics, where males participated significantly more than females. The findings also indicated that the size of the school appears to have more of an impact on female participation rates, that is, females participate more in small schools than in large schools. Similarly, it was found that student

satisfaction and attendance were higher at smaller schools, with differences being greater for females. When controlling for each of the three test variables, student participation, satisfaction and attendance, it was found that socioeconomic status had little effect on student satisfaction. Results also indicated that when academic ability was controlled for, those students who scored higher on academic ability tests participated in more activities, regardless of school size. With respect to school location, it was found that participation and satisfaction were somewhat higher in rural schools. Contrary to expectation, attendance was higher at urban schools than rural schools.

In a literature review of extracurricular participation and its relation to adolescent development, Holland and Andre (1987) proposed that schools either value academics or they value the developmental well-being of their students. They believe that schools are meant to socialize adolescents and therefore, need to provide more than academics if they are to promote the full development of students. The authors propose that extracurricular activities are one possible way of ensuring that developmental goals are reached. Specifically, Holland and Andre review literature regarding extracurricular participation and its impact on personal-social characteristics, academic achievement, educational aspirations and attainments, participants' roles in activities, and environmental social context. The available research indicates that participation in extracurricular activities, including both athletic and nonathletic activities, is positively correlated with desirable personality/social characteristics. It is also correlated with improved

race relations, involvement in political and social activity as a young adult, male academic ability, educational aspirations, feelings of control over one's life, and lower delinquency rates. Although the research does indicate that participation is positively related to adolescent development, it does not provide sufficient evidence to support that participation is causally related to such desirable outcomes. The authors additionally examined the literature pertaining to school size and participation and found that students in smaller schools report feeling needed, being challenged, and developing self-confidence, all of which are consistent with positive developmental growth.

Fowler and Walberg (1991) investigated school size effects for secondary schools on school outcomes, including average scores on state-developed tests, student retention, suspensions, post-school employment, and college attendance for 293 public schools. These school outcomes were then regressed on a number of school characteristics, including district socioeconomic status, school size and number of schools within each district, and teacher characteristics. They found that district socioeconomic status and the percentage of students from low-income families had the strongest influence on schooling outcomes. School size was the next most influential factor and was negatively related to positive school outcomes. Therefore, the results suggest that smaller schools and smaller school districts may be more conducive to positive school outcomes.

In a study examining the impact of high school size on academic achievement, absenteeism, dropout rate, and parental school involvement,

Gardner and her colleagues (2000), compared large high schools, defined as schools with enrollments of over 2000 students, to small high schools with enrollments between 200 and 600 students. It was found that those students in the larger schools exhibited higher academic achievement, as was measured by scores on the Scholastic Aptitude Test (SAT). In contrast, it was found that those students who attended the smaller schools displayed lower absenteeism, lower dropout rate, and higher parental school involvement, as was measured by membership in the Parent Teacher Association (PTA). Therefore, it appeared that the larger schools were excelling academically, while the smaller schools were excelling in social domains.

Grabe (1981), in a similar study, investigated how school size influences the relationship between successful participation in school activities, feelings of personal worth, and regard for the school. Based on Barker's theory of behavior settings, the author hypothesized that greater stress and greater alienation would be found in smaller schools because there would be more pressure for student participation in order for activities to operate. It was found that students in the smaller schools participated in more activities and this participation was strongly related to feelings of self-worth. Consistent with hypothesis, it was also found that small-school students were more alienated.

Schoggen and Schoggen (1988) also studied the effects of high school size on student voluntary participation by examining names printed near photographs of activity groups published in yearbooks. School size was measured according

to the number of students in the senior class, and the schools ranged in size from 21 to 622 senior students. As in previous studies examining student participation, the authors formed their hypothesis based on Barker's theory of behavior settings. That is, those students attending the smaller schools would have higher levels of participation in activities. It was further hypothesized that larger schools would offer a wider range of activities. Consistent with previous findings, larger schools offered a wider range of extracurricular activities, but the small school cohort had better experiences as was measured by level of participation in available activities.

In 1995, Lee and Smith evaluated restructuring effects on students' gains in achievement. It was proposed that size, a restructuring effect, indirectly affects school organization by influencing role specialization, social relations, differentiation of the curriculum, and/or all three and the authors view small size as an important factor in reforming urban schools. Results supported the hypothesis that higher and more socially equitable engagement and achievement were consistently associated with smaller high schools.

Similar results were found in a study examining small class size (i.e. classes with 20 students or less) and its' association with better academic performance. Finn, Pannozzo and Achilles (2003) hypothesized that when class sizes are reduced a change will occur both in social and academic engagement. The authors propose that each of these types of engagement strongly contribute to classroom learning. After reviewing literature on class size and school

engagement, the authors found support for their hypothesis. They attribute the increase in engagement as being related to how much pressure a person feels to participate and in smaller classes they feel more pressure because they are more visible. The authors also explain that in smaller classes, students feel a greater sense of belonging because they feel encouraged to participate and students in small classes are more unified in their purposes than students in larger classes. Therefore, having increased visibility and a greater sense of belongingness appear to be processes that contribute to higher levels of engagement in smaller classes.

Mok and Flynn (1997) examined the effect of school size on the quality of school life and the attributes of small and large schools that contribute to the quality of school life. The sample, which was comprised of grade 12 Australian Catholic students, responded to items on the Quality of School Life scale (Williams and Batten, 1981). The scale was composed of the following dimensions: satisfaction, alienation, teacher, achievement, opportunity, identity, and status. School size was measured by the total full-time enrollment of the school, with the smallest school consisting of 234 students and the largest 1274 students. Multivariate analysis indicated that there was no significant relationship between school size and any of the dimensions of the quality of school life. With regards to which attributes of small and large schools contribute to the quality of school life, several themes emerged from the qualitative analysis. First, small schools were perceived to be associated with warm and caring school environments. The physical aspects of a school were the next most significant

factor in determining the quality of school life. Finally, the participants expressed that there is a need for a balanced and diverse curriculum if a school is to be seen as high in quality. The results of this study, having contradicted much of the previous literature conducted in this area, were attributed to the sample, given that Catholic school life tends to be positive for the most part.

In a more recent study examining quality of school life, Karatzias, Power and Swanson (2001) developed the Quality of School Life scale using performance indicators to measure students' views about their school. The indicators consist of: Curriculum, Attainment, Teaching Methods, Teaching Style, Learning, Personal Needs, Assessment, Ethos, Support, Career, Relationships, and Environmental. Each one is then further broken down into several sub-areas. The authors define quality of school life as a general sense of student well-being, which is solely determined by students' involvement in school life and their engagement in the climate of the school. The cognitive component of the quality of school life is school satisfaction and is believed to account for students' individual perceptual differences in relation to their school climate. Based on these ideas, the authors developed the Quality of School Life Scale (2001), with school satisfaction as its' core cognitive component and items also tapping into affective dimensions. The authors stress that the development and examination of the quality of school life is important because effective learning is associated with school climate factors, which are the main components of the quality of school life. Thus, the Quality of School Life scale allows for the

examination of school climate and the information obtained from such an examination may be critical in school improvement efforts.

Goodenow (1993) proposed that situational and contextual factors, in addition to individual factors, influence student engagement, academic effort, and later school success or failure. One contextual factor is students' sense of belonging or psychological membership, which the author defines as the extent to which students feel accepted, rejected, included, and supported in the school social environment. That is, whether the students feel they are a part of the school culture or whether they feel they are socially isolated. The author points out that a students' level of belongingness is especially critical during adolescence, a period in which identities are malleable and sensitive to positive and negative influences. Unfortunately, many junior high schools are structured in a manner that is conducive to promoting academic achievement, rather than a social sense of belongingness. A further barrier to achieving a sense of belongingness in junior high schools is the mismatch between the developmental stage at which many adolescents find themselves and the heavy emphasis on academic achievement, rather than social belongingness.

In an attempt to measure students' sense of psychological membership to the school community, the author developed a scale known as The Psychological Sense of School Membership (PSSM) Scale. The final version consisted of 18 items which tapped into various areas such as, perceived liking, personal acceptance, respect, and encouragement for participation. The scale was

administered to adolescent junior high school and middle school students. Results indicated that suburban students reported a stronger sense of school membership than the urban students, which was attributed to their familiarity with the town and school and to the homogeneous communities and highly educated families that these students came from. In terms of gender differences, it was found that females reported higher levels of sense of school membership than males. The author also examined educational correlates of school membership and it was found that for urban students, the psychological sense of school membership was significantly correlated with both self-report motivation measures, expectancies for school success, and the value of schoolwork and school achievement.

Osterman (2000) also examined student's need for belonging in the school community. Sense of community, which was defined as a feeling of belongingness within a group, was used to examine whether this is an important aspect of student life and how schools influence students' sense of belonging. The author, using a social cognitive perspective on motivation, proposes that people have psychological needs and whether or not these needs are satisfied will, in turn, affect perception and behavior. How well the needs are met depends on characteristics of the social context, in this case the social context being the school. Findings from a review of relevant literature indicate that students' sense of belongingness does influence their behavior. Most importantly, it exerts an indirect, positive effect on achievement via engagement because it is found that those students who are more engaged in their school have higher rates of

achievement. Unfortunately, the organizational practices of many schools, for

instance the high enrollments in many schools and ability-grouping, may cause

this socio-emotional need of belongingness to be neglected. Osterman proposes

that smaller schools, block scheduling, departmental teaming, and inter-age

grouping will increase sense of community within schools.

It is evident from the above literature that school size exerts a direct affect

on many student outcomes, particularly the social aspects of schooling. Other

variables that are affected by school size are school climate and school culture.

B. School Culture and School Climate

Results from research examining school culture and school climate are

often difficult to interpret with clarity. This uncertainty stems from the

inconsistent definitions of school culture and school climate that are found in the

literature.

In an article by Sergiovanni and Starratt (2002), climate is defined as:

> . . . the enduring characteristics that describe the
> psychological makeup of a particular school, distinguish
> it from other schools, and influence the behavior of
> teachers and students, as well as the "feel" that teachers
> and students have for that school. (Sergiovanni & Starratt,
> 2002, p. 310)

They further propose that climate can be used to monitor schools and plan for

change.

School culture, on the other hand, is presented as the symbolic side of

school life. The authors define school culture as:

> ... a set of understandings or meanings shared by a
> group of people that define the group as being distinct
> from other groups. (Sergiovanni & Starratt, 2002, p. 319)

Sergiovanni and Starratt then further divide school culture into four levels. They propose that the most evident level is the artifacts, which is the language systems that people use and the stories that are told and are exhibited through what people say and how they behave. Perspectives is the next level of culture and incorporates the shared rules and norms; how they view various behaviors for instance. The proposed third level is values, which are viewed as the base for people to evaluate their behavior and the situations that they find themselves in. The final level involves assumptions, which are implied or understood, though they are not directly expressed.

Maehr and Midgley (1996) offer a definition of school culture that is different than that proposed by Sergiovanni and Starratt (2002). Unlike the latter authors, they view culture as consisting of perceptions that individuals hold and share with each other, rather than assumptions and meanings. They believe these perceptions are assessable and can affect behavior. Most importantly, they believe that the demise of today's schools is the result of negative school cultures. They propose, therefore, that schools must transform their cultures through school activities and tasks; methods of evaluation; rewards and recognition; freedom, autonomy, and responsibility; organization of students into classes and groups; scheduling; and the distribution of resources.

In a review of the literature on effective schools, Purkey and Smith (1983) critique school improvement efforts (i.e. improving academic achievement) that are not empirically based. They take the stance that schools operate on different levels, which act as layers. Thus, the quality of the school experience at the classroom level will depend on the quality of activity at the level above it. In light of this perspective they propose that school improvement will occur when school culture is taken into account. Looking at schools according to a school culture perspective means seeing that schools are social systems made up of a number of interrelated factors. They then propose that these factors combine to form a distinct climate or personality. Therefore, culture is viewed as contributing to the climate in this case. Like Maehr and Midgley (1996), Purkey and Smith stress that school improvement rests on school reorganization and a school culture transformation. In an effort to maintain cultural changes, they propose that collaborative relationships, sense of community, clear goals and high expectations, and order and discipline are key.

Consistent with Purkey and Smith (1983), Brookover and colleagues postulated that student achievement is affected by the school social system (Brookover, Beady, Flood, Schweitzer, & Wisenbaker, 1979). They believed the school social system to be composed of three interrelated variables. The first is the social inputs, that is, the student body and school personnel. The second variable is the social structure, which accounts for school size, whether the school has opened or closed classrooms and so forth. The third variable encompasses the

norms, values, and feelings and is known as the social climate. The researchers believe that the school social inputs affect academic achievement, however, they are modified through their interaction with the school social structure and the school social climate. In other words, there is no recipe for an effective school because how effective a school is depends on the people in the school, the physical characteristics of the school, and the climate of the school.

Based on their model, Brookover and colleagues (1979) analyzed two pairs of public elementary schools, which were matched in terms of race, mean SES, and urban location. Each pair of schools consisted of one high- and one low-achieving school. It was found that in the predominantly African American high-achieving school discipline was emphasized, without de-emphasizing achievement. In contrast the high-achieving school, consisting of primarily Caucasian students focused on achievement over discipline. Furthermore, the role of the principal also varied in these two types of schools. Therefore, consistent with Brookover et al. contention, this analysis seems to indicate that there is no single combination of variables that will produce an effective school.

Hoy and Hannum (1997) used an organizational health metaphor to conceptualize and measure important aspects of climate and to examine relationships between school health and student achievement in writing, reading, and mathematics. The researchers define the organizational climate of a school as being the internal characteristics that affect the behavior of the students and staff and that distinguish one school from another school. From this definition comes

their definition of school climate as being the property of the school environment that is experienced by the school community, influences their behavior, and is formed through their perceptions of behavior in the school. Using a health metaphor, the authors propose that all social systems must solve four basic problems if they are to be healthy. Schools must adapt to their environment, they must set and implement goals, maintain cohesion, and create and preserve a distinctive culture. As a means of solving these problems, Hoy and Hannum suggest that schools have three levels of control over activities. First, is the technical level, which is concerned with teaching and learning. At this level, teachers are responsible for solving the problems associated with teaching and learning. The managerial level, the second level, encompasses the internal coordination of the school. Here, principals have the primary responsibility for distributing resources and coordinating the work effort. The final level is the institutional level, which connects the school to the community. Based on these three levels, six dimensions of climate were created to define the health and well-being of interpersonal relationships in middle schools. At the technical level, teacher affiliation and academic emphasis were examined. Collegial leadership, resource support, and principal influence were three aspects of climate examined at the managerial level. Finally, institutional integrity, was the one aspect examined at the institutional level.

The authors used a sample of 86 middle schools, from a variety of urban, rural and suburban locations, however, extremely small schools were not a part of

the sample. Teachers responded to items on the Organizational Health Inventory for middle schools (OHI-RM). Results indicated that elements of health were related to mathematics, reading and writing achievement. Specifically, academic emphasis and SES were most strongly correlated for each subject area, while principal influences were least strongly correlated. Overall, the authors found that a healthy middle school is one where teachers like the school, the students, and each other, which represents high teacher affiliation and they see the students as serious in their learning, representing high academic emphasis. Teachers see the principal as their partner in improving instruction and as a friendly, open and respectful individual, that is, a strong collegial relationship. Furthermore, a healthy middle school is one where the principal is seen as influencing superiors, which is known as principal influence and who can get teachers the materials they require, which is known as high resource support. Finally, teachers are shielded from unreasonable pressure outside of the school, that is, high institutional integrity.

Grossin (1991) measured the effects of teaching and social climate on student achievement, behavior, and social and personal adjustment. The author, in conjunction with Brookover and colleagues (1979) theoretical framework, proposes that the social structure of the school and the climate of the school are intervening variables between the characteristics of the teachers, students and administrators of a school and the process of interaction between these individuals. Simply put, the school climate impacts student outcomes, whether it

be academic achievement, engagement, or behavior. Grossin defines school climate as the expectations, values, and norms held by the principal and teachers regarding the aims and possibilities of schooling, which determines their conduct toward their colleagues and the students.

Teachers and students were surveyed at Swedish junior high schools. Analyses indicated a significant correlation between school climate and both student achievement and behavior. These results supported the position that student outcomes in schools with a good teaching and social climate are somewhat better than or comparable to student outcomes in schools with better peer social compositions but poorer climates. Teachers' and students' assessments of school climate were very similar.

In another study on the effect of school climate on student outcomes, Gregoire and Algina (2000) used parenting style theory as a framework to examine the relationship of aspects of school climate with mathematics achievement, academic engagement, and locus of control orientation. Parenting style theory, which was pioneered by Baurmrind (1971), proposes several types of parenting styles, however authoritative parenting has been found to be associated with many positive outcomes. Like authoritative parenting, an authoritative school is one that is responsive to students' needs for increasing autonomy and control, but also challenges them intellectually within an environment with clear, well-defined rules. This type of school, therefore, is the model to which all schools should aspire to.

Using hierarchical linear modeling, the relationship between eighth grade students' and administrators' perceptions of school climate and students' achievement, engagement and control orientation were examined (Gregoire & Algina, 2000). Students' individual background characteristics and the socioeconomic status of the schools were controlled. Results showed that authoritarian school climates were associated with lower academic engagement and control perceptions. Authoritative schools were not associated with either positive or negative outcomes for students.

Ma and Klinger (2000) also examined the influence of student and school factors, specifically school climate, on students' performance in mathematics, science, reading, and writing. School climate was divided into three areas: disciplinary climate, academic press, and parental involvement. Disciplinary climate tapped into the consistency of rules at school, fairness of rules, behavior of students at school and so on. Academic press items encompassed class size, teacher expectations of students, student motivation and so on. Finally, parental involvement items included how often parents help their children with their homework, checked their homework to ensure it was completed, helped with school activities and so on. School size was also taken into consideration and was based on grade six enrollment.

Students completed achievement tests in the areas of mathematics, science, reading and writing. In addition to these tests, they completed a survey measuring student, family, and school characteristics. It was found that schools

performance in reading varied little, while their performance in mathematics was quite varied. With respect to each area of school climate measured, disciplinary climate significantly effected achievement in mathematics, science and writing. Additionally it was found that average school achievement in each subject area was not effected by school size.

In a review of the characteristics of effective schools, Coyle and Witcher (1992) stress the importance of school culture in the creation and maintenance of an effective school, that is, a school that stresses successful teaching and learning, so as to increase achievement of students. Drawing on research conducted by Purkey and Smith (1983), the authors identify several norms that exist in effective schools. These consist of: collegiality; experimentation; high expectations; trust and confidence; tangible support; appreciation and recognition; caring, collaboration, and humor; involvement in decision making; protecting what is important; traditions; and open communication that is honest. They additionally describe it as the "foundation" of the school. Coyle and Witcher also examine the affective dimensions of effective schools, that is the relationships that occur between those individuals who inhabit a school.

Based on the characteristics of effective schools that were reviewed, the authors look at both the implications at the system-level and at the building-level. At the system-level they propose that policies stress student achievement, but also continually work toward improving rates of achievement. In addition, school systems that emphasize student achievement must also allocate funding to ensure

that that goal is met. Within each school, at the building-level, it is implied that principals take on multiple roles, working as leaders, instructors, governors, and role models if schools are to be considered effective.

Just as school size is associated with student outcomes, so are school climate and school culture. The literature examining the latter two variables, stresses the importance of positive school cultures and climates on academic achievement, engagement, and other outcomes. A question of particular interest is whether school size influences school climate, thereby indirectly affecting positive outcomes for students? It is to this question that we now turn.

CHAPTER III

METHOD

A. Participants

Participants for this study were selected from junior high school students in Grade Seven to Nine within the Cape Breton-Victoria Regional School Board, Sydney, Nova Scotia. Junior high school students were chosen as the sample due to a lack of research in the area of school size and school climate targeting this population. In addition, junior high school students are going through the early stage of adolescence, which is a significant and unique period in the developmental life span. It is at this point that student identities and perceptions are malleable and can be negatively or positively impacted by their surroundings, in particular their school surroundings. Specifically, Grade Seven, Eight and Nine large school participants were asked to take part in the present study. The large, urban junior high school had a total enrollment of 662 students. Students attending the large school generally come from middle to upper class families and consist of a more heterogeneous ethnic population than the small, rural school. A certain percentage of students are bused, as this school offers French Immersion. The small, rural junior high school had a total enrollment of 81 students. The small school is located within a small fishing community thirty minutes outside of the city limits. This community is generally classified as close-knit and families are generally lower to middle class. The small school consists of a homogeneous ethnic population. A portion of small school students

are also bused, but a significant proportion live within the community that the school is situated. It is important to keep in mind that although the small schools meet the criteria for rural schools and large schools meet the criteria for urban schools, Cape Breton is highly rural in nature when compared to larger cities in larger provinces. In addition, it is important to note that a school that is considered large within Cape Breton, may be considered small in other regions. Thus, size is relative, but for the purpose of the present study, schools were classified according to the definitions set out. As a means of measuring the impact of school size and location on the climate of the schools, the school with the highest enrollment was compared and contrasted with the school with the lowest enrollment.

Also of relevance is why Cape Breton was selected as the location for the present study. Cape Breton is a unique region due to its socio-economic status and the rural nature of the island. Therefore, examining the impact of school size and location of the school on school climate in a predominantly rural area, may offer some additional insights as to how the size of the school influences the school climate in this type of setting.

B. Instruments

The School Climate Inventory

The School Climate Inventory and School Participation Inventory (See Appendix A) were administered to the total sample of junior high school students and was adapted from the Quality of School Life Scale (QSL), which

was developed by Karatzias, Power, and Swanson (2001). The original version consists of 56 items, which are organized in 14 domains, with 4 items in each domain. The domains, or performance indicators as the authors refer to them, include the following: Curriculum, Attainment, Teaching Methods, Teaching Style, Learning, Personal Needs, Assessment, Ethos/School Factors, Ethos/Individual Factors, Support, Career, Relationships, Environmental-Objective factors, and Environmental-Subjective factors. Each of the items that comprise the domain have a positive meaning and participants respond on a five-point Likert scale with items anchored at 1 = "Strongly Disagree", 2 = "Disagree", 3 = "Agree" and 4 = "Strongly Agree".

The Quality of School Life Scale was tested in two pilot studies prior to initial administration. In the first pilot the scale was administered to 15 students from Grades Two, Five and Seven in a school in Stirling, Scotland. The purpose of this administration was to control for any item-meaning problems. The scale was then administered to 68 randomly selected students in Grades One, Four and Five in a secondary school in Stirling, Scotland. During this administration, the open-ended question was added as a means of identifying items that had not already been included in the scale. Student responses indicated that all relevant items were included in the original scale. Chronbach's alpha for the pilot study was .892.

Proceeding the two pilot studies was the initial administration, which took place in two schools in Stirling. The sample consisted of 197 students from

school A and 228 students from school B for a total sample of 425 students. The scale was administered to randomly selected classes from grades 1 to 6, with a mean age of 14.2. Factor analysis on the scores of the Quality of School Life Scale indicated that each domain had high loadings (>.57) on the quality of school life factor, which indicated high levels of coherence across each of the domains. Chronbach's alpha for the initial administration was .913, indicating high reliability. The validity of the scale was tested through its relationship with various scales. Results indicated that the Quality of School Life Scale and its domains were significantly correlated with the PGI General Well-Being Scale (Verma, Dubey, & Gupta, 1983), significantly negatively correlated with the Student Stress Inventory (Alban Metcalfe, Dobson, Cook, & Michaud, 1982), and significantly correlated with the Hare Self-Esteem Scale (Hare, 1985). In addition, it was found that the Quality of School Life scale was significantly positively correlated with Positive Affectivity, a main component of the quality of life, and significantly negatively correlated with Negative Affectivity.

The adapted version of the Quality of School Life Scale, the School Climate Inventory, is a 48-item scale. The scale consists of five domains which include the following: Curriculum, Assessment, and Achievement; Teaching Methods and Learning; Personal Needs and Support; Sense of Belongingness and Relationships; and Environment. Several of the aforementioned domains were included in the original version, however several were collapsed into one domain and wording of statements was changed. The Curriculum, Assessment, and

Achievement domains were combined to form one domain, as were the Teaching

Methods and Learning domains and the Personal Needs and Support domains.

The Ethos domains were also collapsed and are now called Sense of

Belongingness and Relationships. The Environmental domains were also

combined to form one domain. Each of the items that comprise a domain have a

positive meaning and participants respond to them on a 5-point Likert scale. Each

item is anchored at 1 = "Strongly Disagree", 2 = "Disagree", 3 = "No Strong

Feeling", 4 = "Agree", and 5 = "Strongly Agree". The School Climate Interview

Schedule (See Appendix A) was used to gather qualitative perceptions of school

climate and consisted of six broad-reaching questions.

The School Participation Inventory

The School Participation Inventory was administered to the total sample.

It is an open-ended questionnaire that asks the participant to list the

extracurricular activities that they participate in at school and how often they

participate in each activity, Never, Seldom, Occasionally, Often and Always (See

Appendix A). Responses are grouped into five categories of extracurricular

activities. The categories include: Athletics, Culture/Arts, Student Government,

Intellectual, and Student Life. The scale ranges from 1 = "Never" to 5 =

"Always" and responses are coded accordingly. In scoring the School

Participation Inventory, students who indicate that they often or always

participate in two or more sports or often or always participate in another activity

will be considered to have high levels of participation in extracurricular activities.

Those students who participate less than often in two sports or less than often in another activity will be considered to have moderate to low levels of participation.

The School Climate Interview Schedule

As a means of gathering qualitative data, the School Climate Interview Schedule (See Appendix A) was developed based on the School Climate Inventory items. The interview was semi-structured and consisted of six open-ended questions. The interview was conducted on a volunteer basis from those students who participated in the first part of the study.

C. Reliability & Validity for Quantitative Analysis

The initial administration of the Quality of School Life Scale demonstrated high reliability ($\alpha = .913$). Given that the norms of the original and adapted version of the scale cannot be compared as the standardization sample of the original scale is from a different culture, reliability of the adapted version, the School Climate Inventory, was examined using Chronbach's Alpha. The reliability of the adapted version, the School Climate Inventory, is high ($\alpha = .95$).

The validity of the scale was tested through its relationship with various scales. Results indicated that the Quality of School Life Scale and its domains were significantly correlated with the PGI General Well-Being Scale (Verma, Dubey, & Gupta, 1983), significantly negatively correlated with the Student Stress Inventory (Alban Metcalfe, Dobson, Cook, & Michaud, 1982), and significantly correlated with the Hare Self-Esteem Scale (Hare, 1985). It was also found that the Quality of School Life scale has good face validity. The adapted

School Climate Inventory was reviewed by a panel of experts for clarity of items and suitability for the intended audience.

D. Criteria of Quality for Qualitative Interviews

The purpose of interviewing a small number of students as a follow-up to the survey was to portray school life through the voices of the students themselves. The quality of the interview responses cannot be appropriately judged using the criteria of reliability and validity suited for the quantitative portion to the research. The following questions were generated to judge the quality of the interview accounts:

1. Does the qualitative account add insight to the quantitative analysis?

2. Does the qualitative account humanize the quantitative account?

3. Are students given a voice or the opportunity to express what they feel about school life?

4. Was the qualitative account able to portray the commonalities and differences across schools?

5. Was the interpretation of interviews plausible?

E. Procedure

Following ethics approval from University Research Ethics Board at Mount Saint Vincent University, the Director of Programs and Operations of the Cape Breton-Victoria Regional School Board received a letter (See Appendix B) describing the study and requesting permission to conduct the study within the school board. Upon permission granted by the Director, principals of the selected

schools received an information letter (See Appendix C) describing the study and a copy of the survey. The principal's letter requested that the researcher be granted permission to collect data from randomly selected Grade Seven, Eight and Nine classes in their schools. After receiving permission from the principal's of the selected schools, a Teacher Information Sheet (See Appendix D), Parent/Guardian Information Sheet (See Appendix E) and Parent/Guardian Letter of Permission (See Appendix F) were given to principals to distribute to teachers of selected classes for distribution to all parents and guardians. Parent/guardian consent was understood if the letter of permission was returned and signed. If the letter of permission was not returned by a student it was understood that consent was not granted. After letters of permission were returned, the researcher administered the surveys to those students for whom consent had been granted during class time and in the presence of the classroom teacher or school principal. Students were told that their participation was voluntary and that they were free to stop at any time if they no longer wished to participate. The researcher then distributed the surveys, which contained questions about curriculum and assessment, teaching methods, achievement, support and personal needs, sense of belongingness, and environment and involvement in extracurricular activities. Instructions were then read aloud to students. Specifically, they were told that it was a survey, not a test, and it would in no way affect their grades. Responses were anonymous, with students providing only their age, grade and gender. Upon collection of data in a particular school, the researcher then labeled the group of

questionnaires as "large school" or "small school". Two participants from the

rural school and three students from the urban school were invited to participate

in interviews designed to follow up on the written survey. These students

responded to six broad questions addressing the academic, social and behavioral

aspects of their school, available supports and expectations. Students were also

asked to suggest an artifact or symbol that represented their school and to suggest

improvements for school life (See Appendix A). Participants were interviewed

independently with each interview lasting approximately twenty minutes. The

interview was semi-structured in nature and conversations were audio-taped.

F. Data Analysis

Both quantitative and qualitative methods were employed to examine the

data. At the quantitative level crosstabs, frequencies and percents were tabulated

to describe the sample. To examine the effects of the independent variables

gender, grade level, school location and school size on the dependent variables

school climate and participation in extracurricular activities, a Completely

Randomized Multivariate Analysis of Variance (MANOVA) was conducted. To

examine the effect of the independent variables on each of the individual

dimensions of school climate a second Completely Randomized MANOVA was

conducted. A third Completely Randomized MANOVA was conducted to

examine the effect of the independent variables on participation in each of the

individual categories of extracurricular activities. Pearson correlations were

computed to examine the relationship between the dimensions of school climate

and the categories of extracurricular activities.

Qualitative methods were used to examine the responses to the School Climate Interview Schedule. Responses to the questions were examined by the researcher and common themes were established. The themes were then qualitatively reported for the whole sample.

G. Ethical Considerations

Informed consent was obtained from all adult participants and parents of children. Confidentiality was ensured by having participants complete the survey anonymously. Only the researcher and university supervisors will have access to the surveys. All information collected was kept in a locked file cabinet and only those directly involved in the study had access to the information. The data set and files will be destroyed in accordance to standards set by the Canadian Code of Ethics for Psychologists (2000). Files were shredded and the computerized data set was deleted upon completion of the study.

This study was completely voluntary and participants were able to withdraw at any time throughout the duration of the study. No potential adverse effects were anticipated as a result of participation in this research.

Participants were thanked for their participation in the project. Contact names and telephone numbers of the research supervisor, and the Mount Saint Vincent University Ethics Board Committee Chairperson were provided to

parents/guardians of the participants had they wished to make any comments or inquiries regarding the research.

A final feedback report outlining the findings of the study will be made available to the participants. Upon completion of the project, the researcher will provide copies of the report to schools for participants to review.

CHAPTER IV

Results

A. Introduction

In this chapter, demographic information of participants is summarized. Responses to survey items were examined quantitatively while responses to items on the School Climate Interview Schedule were analyzed qualitatively through the establishment of common themes.

B. Response Rate

A total of one hundred and twenty-four Parent/Guardian consent forms were distributed to Grade Seven, Eight and Nine students. Ninety two consent forms were returned, representing a 74.2% response rate. Specifically, sixty-four consent forms were distributed at the small, rural school and thirty-two were returned representing a 50% response rate. With respect to the large, urban school, a total of sixty consent forms were distributed and all 60 consent forms were returned representing a 100% response rate. Thus, all participants who returned signed consent forms participated in the study.

C. Participants

Of the 92 surveys completed, two participant groups were represented as follows: 34.8% were small school participants (N=32) and 65.2% were large school participants (N=60). Within the small school respondent group, 34.4% were males (N=11) and 59.4% were females (N=19). Two small school participants did not indicate their gender. The large school respondent group was

comprised of 56.7% males (N=34) and 41.7% females (N=25). One large school respondent did not indicate their gender.

With respect to age of participants, seventeen participants were thirteen years of age, twenty-nine participants were fourteen years of age, thirty two participants were fifteen years of age and eleven participants indicated an age other than those listed. Three participants did not indicate their age. With respect to the small, rural school, six participants were thirteen years of age, eight participants were fourteen years of age, twelve participants were fifteen years of age and four participants indicated an age other than those listed. At the large school, eleven participants were thirteen years of age, twenty one participants were fourteen years of age, twenty participants were fifteen years of age and seven participants indicated an age other than those listed.

When asked to identify grade level, thirty two participants indicated they were in Grade Seven, while thirty and twenty six participants indicated that they were in Grade Eight and Nine respectively. These results are summarized in Table 1.

D. Quantitative Analysis

In this section, participant responses to survey items are quantitatively reviewed using Multivariate Analysis of Variances (MANOVA's) and Pearson correlations.

Research Question 1: How similar or different are perceptions of school climate a) for males and females, b) in rural and urban schools, c) at each grade level and d) in small and large schools?

To examine the effects of gender, school location, grade level and school

Table 1. Participants by age, gender and age level.

	Small School Participants			Large School Participants		
	n	Frequency	Percentage	n	Frequency	Percentage
Gender	32	M = 11	34.4%	60	M = 34	56.7%
		F = 19	59.4%		F = 25	41.7%
		Unknown = 2	6.2%		Unknown = 1	1.6%
Age	32	13 yrs = 6	18.8%	60	13 yrs = 11	18.3%
		14 yrs = 8	25.0%		14 yrs = 21	35.0%
		15 yrs = 12	37.5%		15 yrs = 20	33.3%
		Other = 4	12.5%		Other = 7	11.7%
		Unknown = 2	6.25%		Unknown = 1	1.67%
Grade	32	Gr. 7 = 8	25.0%	60	Gr. 7 = 24	40.0%
		Gr. 8 = 14	43.8%		Gr. 8 = 16	26.7%
		Gr. 9 = 8	25.0%		Gr. 9 = 18	30.0%
		Unknown = 2	6.25%		Unknown = 2	3.33%

size on school climate and participation in school extracurricular activities a

Completely Randomized Multivariate Analysis of Variance (MANOVA) was

conducted. Box's Test of Equality of Covariance Matrices was not significant,

Box's M = 52.357, $F(36, 1322.18) = .447$, n.s., indicating that the covariances of

the dependent variables school climate and participation in extracurricular

activities were similar across groups. A multivariate test was done to test for the

significance of the differences among the means for the supervariable (i.e. the

combination of school climate and participation in extracurricular activities and

the interactions among these variables). Pillai's trace was used because it is

robust with respect to deviations from multivariate normality. The analysis

indicated a nonsignificant main effect of school size, Pillai's = .075, $F(2, 49) =$

1.98, n.s., a significant main effect of gender, Pillai's = .171, $F(2, 49) = 5.05$,

$p<.05$, a nonsignificant main effect of grade, Pillai's = .089, $F(4, 100) = .089$, n.s.

and a nonsignificant main effect of age, Pillai's = .106, $F(6, 100) = .936$, n.s.

With regards to interactions among the variables, a significant school size

by grade interaction was found, Pillai's = .127, $F(2, 49) = 3.55$, $p<.05$. Analysis

revealed that no other interactions were significant at the .05 level of significance.

Since F was significant Analysis of Variances (ANOVA's) were conducted on

each dependent variable separately.

To further examine the effect of school size, gender, grade level and age

on school climate, a Completely Randomized ANOVA was conducted. Levene's

test of equality of error variance was significant $F(20, 50) = 1.95$, $p<.05$,

indicating that the variances across the groups were not similar. Analysis of the differences among the means indicated a nonsignificant main effect of school size $F(1, 50) = .024$, n.s. and a significant main effect of gender $F(1, 50) = 10.30$, $p<.05$ with females ($X=174.56$) having significantly higher perceptions of school climate than males ($X=149.14$). A nonsignificant main effect of grade $F(2, 50) = 1.57$, n.s. and a nonsignificant main effect of age $F(3, 50) = .940$, n.s. were also found. These results are summarized in Table 2. A significant school size by grade interaction, $F(1, 50) = 6.91$, $p<.05$ was also found. The interaction was examined using a test of the simple main effect of school size. An orthogonal set of three Tukey's HSD tests was conducted to compare the means of Grade Seven, Eight and Nine students. First it was found that Grade Seven students in the small school ($X = 181$) and Grade Seven students in the large school ($X = 168.08$) did not show a significant difference in their perceptions of school climate ($q(19, 50) = 1.75$). Grade Eight students in small schools, however, and Grade Eight students in the large school showed significant differences in their perception of school climate ($q(19, 50) = 3.49$) with Grade Eight students at the small school ($X = 174.54$) having significantly higher perceptions of school climate than Grade Eight students at the large school ($X = 151.44$). Finally, it was found that Grade Nine students at the small school ($X = 150.78$) and Grade Nine students at the large school ($X = 169.00$) did not show a significant difference in their perceptions of school climate ($q(19, 50) = 2.37$). These results are summarized in Table 3.

Table 2. School Climate Comparisons

Independent Variable	Means Being Contrasted	Significance
School Size	Small school = 166.44 Large school = 161.96	$F(1, 50) = .024$, n.s.
Gender	Male = 149.44 Female = 174.56	$F(1, 50) = 10.30$, $p<.05$
Grade	Grade 7 = 170.66 Grade 8 = 161.71 Grade 9 = 161.19	$F(2, 50) = 1.57$, n.s.
Age	13 years = 33.71 14 years = 33.87 15 years = 37.21 other = 32.08	$F(3, 50) = .940$, n.s.

Table 3. Grade Level by School Size

	Means Being Contrasted		
	Small School	**Large School**	**Significance**
	X	**X**	**X**
Grade 7	181.00	168.08	q(19, 50) = 1.75, n.s.
Grade 8	174.54	151.44	q(19, 50) = 3.49, p<.05
Grade 9	150.78	169.00	q(19, 50) = 2.37, n.s.

Research Question 2: Does participation in extracurricular activities vary a) among males and females, b) in rural and urban schools, c) at each grade level and d) among small and large schools?

Similar to the school climate analysis, the initial MANOVA indicated a nonsignificant main effect of school size, Pillai's = .075, $F(2, 49) = 1.98$, n.s., a significant main effect of gender, Pillai's = .171, $F(2, 49) = 5.05$, p<.05, a nonsignificant main effect of grade, Pillai's = .089, $F(4, 100) = .089$, n.s. and a nonsignificant main effect of age, Pillai's = .106, $F(6, 100) = .936$, n.s. A significant school size by grade interaction was also found, Pillai's = .127, $F(2, 49) = 3.55$, p<.05.

A second Completely Randomized ANOVA was conducted at the univariate level to examine the effect of school size, gender, grade level and age on participation in school extracurricular activities. Levene's test of the equality of error variance was significant $F(20, 50) = 3.43$, p<.05 indicating that the variances across the groups were not similar. Analysis of the differences among the means indicated a significant main effect of school size $F(1, 50) = 4.04$, p = .05, with the small school having significantly higher levels of participation than the large school. A nonsignificant main effect of gender $F(1, 50) = .023$, n.s., a nonsignificant main effect of grade $F(2, 50) = .445$, n.s. and nonsignificant main effect of age $F(3, 50) = .420$, n.s were also found. Analysis indicated no significant interactions among the variables. Therefore, participation in extracurricular activities did not vary among males and females or among grade

levels, but was significantly higher in the small, rural school. These results are summarized in Table 4.

Research Question 3: How similar or different are perceptions of each dimension of school climate a) for males and females, b) in rural and urban schools, c) at each grade level and d) in small and large schools?

To examine the effects of school size, gender, grade and age on each of the dimensions of school climate, a Completely Randomized MANOVA was conducted. Box's Test of Equality of Covariance Matrices was not significant Box's M = 107.26, F(45, 1132.9) = 1.32, n.s. indicating that the covariances of the dependent variables were similar across groups. A multivariate test was done to test for the significance of the differences among the means for the supervariable (i.e. the combination of each of the dimensions of school climate and the interactions among these variables). The analysis indicated a nonsignificant main effect of gender Pillai's = .189, F(5, 47) = 2.20, n.s., a nonsignificant main effect of grade Pillai's = .223, F(10, 96) = 1.20, n.s., a nonsignificant main effect of age Pillai's = .358, F(15, 147) = 1.33, n.s. and a nonsignificant main effect of school size Pillai's = .078, F(5, 47) = .796, n.s. Analysis further indicated that there were no significant interactions among the variables. Since F was nonsignificant, ANOVA's were not conducted on each of the dependent variables separately. This analysis indicates that there are no significant differences in the perceptions in each of the individual dimensions of school climate across the small and large school, gender, grade level and age.

Table 4. Extracurricular Participation Comparisons

Independent Variable	Means Being Contrasted	Significance
School Size	Small School = 38.02 Large School = 32.78	$F(1, 50) = .073$, $p<.05$
Gender	Male = 35.40 Female = 34.31	$F(1, 50) = .023$, n.s.
Grade	Grade 7 = 33.68 Grade 8 = 34.37 Grade 9 = 36.10	$F(2, 50) = .445$, n.s.
Age	13 years = 33.71 14 years = 33.87 15 years = 37.21 other = 32.08	$F(3, 50) = .420$, n.s.

Research Question 4: Does participation in each category of extracurricular activities vary a) among males and females, b) in rural and urban schools, c) at each grade level and d) among small and large schools?

To examine the effects of school size, gender, grade level and age on participation in each individual category of school extracurricular activities, a Completely Randomized MANOVA was conducted. A multivariate test was conducted to test for the significance of the differences among the means for the supervariable (i.e. the combination of each of the categories of extracurricular activities and the interactions among these variables). The analysis indicated a nonsignificant main effect of gender Pillai's = .145, $F(5, 58) = 1.97$, n.s., a nonsignificant main effect of grade Pillai's = .151, $F(10, 118) = .961$, n.s., a nonsignificant main effect of age Pillai's = .187, $F(15, 180) = .799$, n.s., a significant main effect of school size, Pillai's = .197, $F(5, 58) = 2.86$, $p<.05$ and a significant gender by school size interaction, Pillai's = .204, $F(5, 58) = 2.98$, $p<.05$. Since F was significant ANOVA's were conducted on each dependent variable separately.

To examine the effect of school size, gender, grade level and age on students involvement in athletic extracurricular activities a Completely Randomized ANOVA was conducted. Levene's test of equality of error variance was significant $F(23, 62) = 2.84$, $p<.05$ indicating that the variances across the groups were not similar. Analysis of the differences among the means indicated a nonsignificant main effect of gender $F(1, 86) = 1.39$, n.s., a nonsignificant main

effect of grade F(2, 86) = .099, n.s., a nonsignificant main effect of age F(3, 86) =

.238, n.s. and a significant main effect of school size F(1, 86) = 12.44, p<.05, with

there being higher levels of participation in athletics at the small school (X =

22.36) than the large school (X = 17.47). There were no significant interactions

among the variables. These results are summarized in Table 5.

To examine the effect of school size, gender, grade level and age on

participation in cultural extracurricular activities a Completely Randomized

ANOVA was conducted. Levene's test of equality of error variance was

significant F(23, 62) = 10.98, p<.05, indicating that the variances across the

groups were not similar. The analysis indicated a significant main effect of

gender F(1, 86) = 4.74, p<.05, a nonsignificant main effect of grade F(2, 86) =

2.61, n.s., a nonsignificant main effect of age F(3, 86) = .395, n.s., and a

nonsignificant main effect of school size F(1, 86) = 1.23, n.s. These results are

summarized in Table 6. A significant gender by school size interaction F(1, 86) =

10.02, p<.05 was also found. The interaction was examined using a test of the

simple main effect of school size. An orthogonal set of two Tukey's HSD tests

were conducted to compare the means of males and females. It was found that

males (X = 7.07) at the small school had significantly higher levels of

participation in cultural extracurricular activities than males (X = 5.76) at the

large school (q(1, 62) = 4.35, p<.05). There was no significant difference found

among participation in cultural activities among females (X = 5.22) at the small

school and females (X = 5.87) at the large school (q(1, 62) = .390, n.s.). These

Table 5. Athletic Participation Comparisons

Independent Variable	Means Being Contrasted	Significance
Gender	Male = 20.73 Female = 18.84	$F(1, 86) = 1.39$, n.s.
Grade	Grade 7 = 19.75 Grade 8 = 19.56 Grade 9 = 19.87	$F(2, 86) = .099$, n.s.
Age	13 years = 19.29 14 years = 19.98 15 years = 20.61 other = 17.79	$F(3, 86) = .238$, n.s.
School Size	Small = 22.36 Large = 17.47	$F(1, 86) = 12.44$, $p < .05$

Table 6. Cultural Participation Comparisons

Independent Variable	Means Being Contrasted	Significance
Gender	Male = 6.35 Female = 5.57	$F(1, 86) = 4.74$, p<.05
Grade	Grade 7 = 5.68 Grade 8 = 5.24 Grade 9 = 7.11	$F(2, 86) = 2.61$, n.s.
Age	13 years = 5.75 14 years = 5.46 15 years = 6.80 other = 5.44	$F(3, 86) = .395$, n.s.
School Size	Small = 6.06 Large = 5.82	$F(1, 86) = 1.23$, n.s.

results are summarized in Table 7.

To examine the effect of school size, gender, grade level and age on participation in government extracurricular activities a third Completely Randomized ANOVA was conducted. Levene's test of equality of error variance was significant $F_{(23, 62)} = 10.98$, $p<.05$ indicating that the variances across the groups were not similar. Analysis indicated that there was a nonsignificant main effect of gender $F_{(1, 86)} = 3.65$, n.s., a nonsignificant main effect of grade level, $F_{(2, 86)} = 1.63$, n.s., a nonsignificant main effect of age, $F_{(3, 86)} = 2.31$, n.s., and a nonsignificant main effect of school size, $F_{(1, 86)} = 1.26$, n.s. These results are summarized in Table 8. A significant gender by school size interaction $F_{(1, 86)} = 4.15$, $p<.05$ was also found. All other interactions among the variables were nonsignificant. The interaction was examined using a test of the simple main effect of school size. An orthogonal set of two Tukey's HSD tests were conducted to compare the means of males and females. It was found that males ($X = 1.00$) at the small school did not participate significantly more in student government extracurricular activities than males ($X = 1.17$) at the large school ($q_{(1, 62)} = .093$, n.s.). In contrast, females ($X = 2.12$) at the small school participated in student government extracurricular activities at a significantly higher level than females ($X = 1.19$) at the large school ($q_{(1, 62)} = 4.55$, $p<.05$). These results are summarized in Table 9.

Research Question 5: Is there a relationship between the five categories of extracurricular activities and the five dimensions of school climate?

Table 7. School Size by Participation in Cultural Activities Comparisons

	Means Being Contrasted		
	Small School	Large School	Significance
	X	X	
Males	7.07	5.22	q(1, 62) = 4.35, p<.05
Females	5.22	5.87	q(1, 62) = .390, n.s.

Table 8. Participation in Government Activities Comparisons

Independent Variable	Means Being Contrasted	Significance
Gender	Male = 1.09 Female = 1.62	$F(1, 86) = 3.65$, n.s.
Grade	Grade 7 = 1.38 Grade 8 = 1.67 Grade 9 = 1.00	$F(2, 86) = 1.63$, n.s.
Age	13 years = 1.00 14 years = 1.54 15 years = 1.59 other = 1.00	$F(3, 86) = 2.31$, n.s.
School Size	Small = 1.61 Large = 1.80	$F(1, 86) = 1.26$, n.s.

Table 9. Gender by Participation in Government Activities Comparisons

| | Means Being Contrasted | | |
	Small School	Large School	Significance
	X	X	
Males	1.00	1.17	$q(1, 62) = .093$, n.s.
Females	2.12	1.19	$q(1, 62) = 4.55$, $p<.05$

To examine the relationships between the five categories of extracurricular activities and the five dimensions of school climate Pearson correlations were conducted. It was found that perceptions of Curriculum, Achievement and Assessment were significantly correlated with perceptions of Teaching Methods and Learning ($r = .765$, $p<.05$), perceptions of Personal Needs and Support ($r = .577$, $p<.05$), perceptions of Sense of Belongingness and Relationships ($r = .722$, $p<.05$) and perceptions of Environment ($r = .518$). Perceptions of Teaching Methods and Learning were found to be significantly correlated with perceptions of Personal Needs and Support ($r = .698$, $p<.05$), perceptions of Sense of Belongingness and Relationships ($r = .769$, $p<.05$) and perceptions of Environment ($r = .547$, $p<.05$). Perceptions of Sense of Belongingness and Relationships were found to be significantly correlated with perceptions of Environment ($r = .686$, $p<.05$) and participation in intellectual extracurricular activities ($r = .227$, $p<.05$). Perceptions of Environment were found to be significantly correlated with participation in intellectual extracurricular activities ($r = .214$, $p<.05$). Participation in cultural/artistic extracurricular activities was found to be approaching correlational significance with participation in intellectual ($r = .192$, n.s.) and participation in student life extracurricular activities ($r = .189$, n.s.). Correlations are summarized in Table 10.

E. Summary

With respect to school climate perceptions, quantitative analysis indicated that female participants have significantly more positive perceptions of their

Table 10

Pearson Correlations Among School Climate Dimensions and Categories of Extracurricular Activities

	CAA	TML	PNS	SBR	EVMT	ATHLT	CLT	GVMT	INT	STLF
CAA	1	.765*	.577*	.722*	.518*	.045	.143	-.045	.157	.009
TML	.765*	1	.698*	.769*	.547*	.060	.097	.019	.120	.054
PNS	.577*	.698*	1	.738*	.577*	.260*	.002	.133	.155	-.033
SBR	.722*	.769*	.738*	1	.686*	.109	.101	.108	.227*	-.034
EVMT	.518*	.547*	.577*	.686*	1	-.021	.007	.130	.214*	-.102
ATHLT	.045	.060	.260	.109	-.021	1	.064	.103	-.108	-.093
CLT	.143	.097	.002	.101	.007	.064	1	-.147	.192	.189
GVMT	-.045	.019	.133	.108	.130	.103	-.147	1	-.056	-.033
INT	.157	.120	.155	.227*	.214*	-.108	.192	-.056	1	-.019
STLF	.009	.054	-.033	-.034	-.102	-.093	.189	-.033	-.019	1

* significant at the .05 level

School climate dimensions:
CAA – Curriculum, Achievement & Assessment
TML – Teaching Methods & Learning
SBR – Sense of Belongingness & Relationships
PNS – Personal Needs & Support
EVMT – Environment

Categories of extracurricular activities:
ATHLT – Athletics
CLT – Cultural/Artistic
GVMT – Governance
INT – Intellectual
STLF – Student Life

school climate than male participants. It is important to note that the higher ratio of females to males at the small school may have contributed to somewhat more positive perceptions of school climate at the small school than at the large school where the ratio of males to females was more balanced. Furthermore, it was found that small school Grade Eight participants have significantly more positive perceptions of their school climate than large school Grade Eight participants.

Participation in athletic extracurricular activities was found to be significantly higher in the small school than the large school. With regards to participation in cultural extracurricular activities, small school males participated at a significantly higher rate. Small school females participated significantly more in student government extracurricular activities. No gender differences were found with respect to participation in athletic extracurricular activities at the small school.

F. Qualitative Interview Responses

In this section, participant responses to interview questions are reviewed. Two participants from the rural school and three students from the urban school were invited to participate in interviews designed to follow up on the written survey. These students responded to six broad questions addressing the academic, social and behavioral aspects of their school, available supports and expectations. Students were also asked to suggest an artifact or symbol that represented their school and to suggest improvements for school life (See Appendix A). Participants were interviewed independently with each interview lasting

approximately twenty minutes. The interview was semi-structured in nature and conversations were audio-taped. The audiotapes were transcribed and written transcriptions were read and reread to capture the highlights of the conversations.

Rather than analyze on a question by question basis, conversations were considered as a whole and recurrent patterns or themes were identified. The four themes that emerged were: 1) Extracurricular activities are important, 2) We have support, 3) Our school and staff are okay and 4) No particular place to go.

Student Voice

Before exploring each of the four themes, the notion of student voice should be considered. The intention of including the interviews as a portion of this research was to give students a "voice" or opportunity to express their impressions about their school lives and the school climate. Student conversations give a human touch to the numbers of the quantitatively-analyzed survey data. Although the ideas shared by these five participants cannot be considered representative of any particular student cohort in the school or of the school as a whole, they do represent individual members of the school community talking about their school and the interviews provide further insight into life in the schools as it is experienced and perceived by students themselves.

Research Question 10: Are students satisfied with the academic, social and behavioral expectations at their school?

1. Extracurricular Activities are Important

In the context of describing the academic and social aspects of their school

and the expectations surrounding these, participants stressed the importance of extracurricular activities as an integral part of school life.

One large school participant explained the high standards of performance as follows:

> *Like our band for instance, we get gold like every time, so now it's*
>
> *expected. We want to keep it up. Our sports teams do pretty good. Like*
>
> *we're expected to win a lot of games.*

Another participant conceptualized the expectations as:

> *...pretty high for sports, because our school is usually pretty up there.*

Small school participants also stressed the importance of extracurricular activities, but they focused on the recreational aspects emphasis was placed on the recreational aspects. One participant shared the following viewpoint regarding these expectations:

> *High expectations, but the emphasis is not on where we place in a*
>
> *tournament. It's all about having fun.*

Similarly, another small school student commented on participation in athletic extracurricular activities stating:

> *...they're just for fun.*

Another participant made reference to the necessity for students at small schools to be involved in several extracurricular activities and the opportunity for all interested students to participate in such activities, stating:

> *...because it's such a small school, a lot of people are involved in a lot of*

things; pretty much anyone who wants to play on a team can play.

2. We Have Support

Participants portrayed their schools as being supportive environments. Teachers were identified by all participants as the main providers of academic Support, while guidance counselors were identified as providers of personal support. Large school participants gave the impression of a negative stigma associated with receiving support from the guidance counselor. Interestingly, school psychologists were not mentioned as providers of support by any participants.

One participant shared their feelings about the provision of support:

> *The teachers are there for support, like if you had a question about a*
>
> *test.*

Another participant also identified teachers as someone to whom they could go to for support:

> *If it was help with work I would probably go to one of my teachers.*

One participant described the provision of support by the guidance counselor as follows:

> *...I've never been to the guidance counselor, but they're always around.*
>
> *I know they're there.*

Another participant also identified the guidance counselor as a provider of personal support, but was again associated with a negative stigma:

> *The guidance counselor is also here. I haven't personally gone to see*

her.

A small school participant identified the guidance counselor as the main provider of personal support in the past, someone who they respected:

Any time I needed to talk to someone she was always there.

The same participant also expressed dissatisfaction with the small percentage of time that the guidance counselor actually spends in the school given the current cyclical model of service delivery, stating:

This year we only have our guidance counselor on day 3 and day 5, so if we need to talk to someone when it's not one of our days we have to wait.

The principal of the small school was also identified as a provider of personal support by one participant:

When I was going through some hard times, our principal was always there for me, she always checked up on me.

3. Our School and Staff are Okay

Across both the small and large schools, participants exuded a sense of satisfaction with how they are taught and with school personnel. Participants had difficulty identifying an artifact or symbol that they would consider to be representative of their schools, although the words that were shared during the interviews serve as artifacts themselves. One large school participant described the academic aspects of their school as follows:

I would say our school is very good for academics. I think we do a lot of

work, like even in comparison to other schools. The expectations for

academics are high.

Another participant commented on the need for more group work within the class:

For the most part, I'm satisfied with the way things are taught, but we

need more group work. In grade seven and eight there was a lot and this

year there is not as much.

The need for more group work was further identified by participants as an area for school improvement. A small school participant described the academic aspects of their school in a somewhat different manner:

Most teachers know what every student is capable of, they're tuned into

the needs. We are told to do our best and not everyone is marked the

same way.

4. No Particular Place to Go

Both small and large school participants emphasized the importance of socializing and expressed dissatisfaction with the lack of physical space for hanging out with their friends during break times. Large school participants further stressed the need for longer lunch periods. These were areas that were identified by participants as needing improvement. The idea of increasing the amount of group work during class time, could be a means of compensating for the lack of space and time for socializing during the school day. One small school participant shared his or her input regarding social time and places at school:

We have an hour to spend with our friends at lunch, plus recess. There's

only the lobby to socialize and if you want to talk about something private

with a friend, then there's no place to go.

A large school participant stated:

We have a very short lunch and recess, so we don't have a lot of time to

socialize. We only have a half hour for lunch and by the time you go to

your locker and stand in the lunch line your lunch is almost over.

Another large school participant also expressed dissatisfaction:

When you go into the cafeteria it's crowded like crazy. Things like

lunch, they just shortened that this year. That kind of sucks cause it used

to be 45 minutes and now it's like 30 minutes.

G. Summary

During the conversations, both small school and large school participants

expressed basic satisfaction with the academic aspects and personal support

provided at their schools, although a negative stigma was attached to guidance

counselors by some participants and school psychologists were not identified as

providers of support. It is likely that the school psychologist was not mentioned

as a provider of support at the large school because the large school interview

participants were unlikely to have received support from the school psychologist.

Considering that the school psychologist often works with individual students to

address learning needs, it is not alarming that these participants did not mention

the school psychologist as a provider of support as they never would have had a

need to be in contact with the psychologist. Dissatisfaction was also expressed

by both small school and large school participants in relation to the lack of social areas within their respective schools. All participants also emphasized the importance of extracurricular activities. Interestingly, large school participants emphasized high standards of performance while the small school respondents emphasized the recreational aspects of participating in extracurricular activities. Furthermore, a small school participant commented on the opportunity for all students to participate in extracurricular activities, particularly athletics. In addition, greater familiarity with all students was mentioned among small school participants. The nature of the responses provided during the interviews portray the small school participants as having somewhat more positive perceptions of their school climate, particularly with respect to their opportunity to participate more often in extracurricular activities.

CHAPTER V

Discussion

A. Introduction

Grade Seven, Eight and Nine students shared their perspectives on school climate and participation in extracurricular activities using quantitative and qualitative methods. Students attending both large, urban schools and small, rural schools completed the School Climate Inventory and School Participation Inventory. A subset of volunteer students were interviewed via the School Climate Interview Schedule, which more fully explored the survey items. Quantitative results indicated that Grade Eight small school participants had significantly more positive perceptions of school climate than all other participants. Females also had significantly more positive perceptions of school climate than males. Results further indicated that small school respondents participate significantly more in extracurricular activities, specifically athletics, cultural activities and student government activities. Qualitative responses indicated that participants feel supported in school and for the most part, enjoy the manner in which they are taught. Interview participants did express dissatisfaction with the social space and time that is available during the school day.

B. School Climate & School Size

There is much discussion surrounding the big school-small school

controversy and the impact of school size on positive student outcomes. Empirical evidence suggests that small schools are, at the very least, socially and developmentally superior to large schools, and may even be academically superior (Fowler & Walberg, 1991; Mok & Flynn, 1997). A guiding question of the present study was whether school size impacts school climate.

Quantitative results indicate that perceptions of school climate were significantly more positive among Grade Eight small school participants than Grade Eight large school participants. Grade Seven and Nine participants in both the small and large school did not differ significantly in their perceptions of school climate.

Osterman (2000) examined students' need for belonging in the school community, an aspect of school climate. The author proposed that people have psychological needs and whether or not those needs are satisfied will determine their perceptions. Futhermore, McMillan and Chavis (1986) found that the strongest predictors of a sense of community and belongingness were the expected length of community residency, satisfaction with the community and the ability to function competently in the community. McMillan and Chavis (1986) further identified familiarity with community residents as contributing to a sense of community and belongingness. Qualitative responses indicated that there is a high sense of community and familiarity with all students at the small school, whereas, large school participants emphasized size as being a barrier to social relationships. Therefore, it appears that small school participants have a greater

opportunity to become more familiar with each other than large school participants and this opportunity results in a greater familiarity with all students. This familiarity then results in a stronger sense of belongingness and, in turn, more positive perceptions of school climate are expressed by Grade Eight participants at the small school.

Interestingly, Grade Seven and Grade Nine small and large school participants did not differ significantly in their perceptions of school climate. This could be explained by the Stage-Environment Fit Theory (Eccles, Midgley, Wigfield, Buchanan, Reuman, Flanagan and MacIver, 1993) which proposes that behaviour, motivation and mental health are influenced by the fit between the characteristics individuals bring to their social environments and the characteristics of these social environments. Thus, it is possible that the change in the nature of the learning environment associated with the junior high school transition resulted in a mismatch between the psychological and academic needs of Grade Seven participants, thereby affecting their perceptions of school climate. Further affecting Grade Seven participants' perceptions of school climate may be the lack of visible support staff, specifically guidance counsellors and school psychologists, as expressed by small school participants and the stigma associated with guidance counsellors as expressed by large school participants. Similarly, a mismatch between the psychological and academic needs of Grade Nine participants and the characteristics of their social environment may have occurred, also affecting their perceptions of school climate. In addition, the mismatch may

have been further compounded by Grade Nine participants psychological preparation for moving on to Grade Ten.

Quantitative analysis also revealed that, in addition to Grade Eight small school participants perceiving their climate more positively, females also embodied more positive perceptions of school climate. This finding is consistent with empirical evidence from previous studies indicating that rates of student satisfaction are often higher among females (Barker, 1960; Goodenow, 1993; Lindsay, 1982).

Interestingly, perceptions of each of the individual dimensions of school climate did not differ significantly. According to Sergiovanni and Starratt (2002), characteristics that describe the psychological makeup of a particular school is known as climate. Thus, it is a combination of dimensions that go into what we refer to as school climate. Other researchers have proposed recipes for effective schools (Ma & Klinger, 2000; Purkey & Smith, 1983), implying that the whole is greater than the sum of its parts in relation to school climate. Operating under these conceptualizations of school climate, results from the present study provide further empirical support for the evidence that school climate encompasses several dimensions. Each of the dimensions of school climate were found to be significantly correlated indicating one dimension affects another and together, not in isolation, they form the climate of a school.

C. School Size & Student Participation in Extracurricular Activities

Barker's Theory of Behavior Settings (1960) postulates that there will be higher rates of participation in settings where there are fewer people available than the number required for the successful completion of an activity. Researchers have found support for this theory in the context of student participation rates in smaller schools. Specifically, it has been found that rates of participation in extracurricular activities in smaller schools is significantly higher than that at larger schools and this participation is strongly correlated with feelings of self-worth and overall satisfaction (Grabe, 1981; Holland & Andre, 1987; Lindsay, 1982). Correlational results from the present study provide further support for this evidence as it was found that there is a significant correlation among sense of belongingness, an aspect of school climate, and participation in extracurricular activities. Thus, as participation in extracurricular activities increases, sense of belongingness simultaneously increases.

Consistent with previous findings, quantitative analysis revealed significantly higher levels of participation in extracurricular activities among small school participants. Qualitative data provided further support and clarification of this finding. Small school participants emphasized the need for each student to be involved in more than one extracurricular activity to ensure the successful operation of all activities. Research has found that rates of participation in athletic extracurricular activities is significantly higher among males, while females have been found to participate significantly more in cultural

and artistic types of extracurricular activities (Lindsay, 1982). Quantitative

results from the present study revealed that participation in athletic extracurricular

activities was significantly higher among small school males and females. Also

of interest, is the finding that small school males participated significantly more in

cultural extracurricular activities, while females participated significantly more in

student government extracurricular activities. Thus, it appears that males and

females must diversify their participation experiences in small schools, to ensure

the continual operation of an activity. In addition, males, when participating in

less stereotypical activities, may become more well-rounded as a result of such

experiences. Similarly, participation in student government activities by females

may help them to develop stronger leadership skills and other potentialities.

D. Implications for the Role of the School Psychologist

Research has expressed that schools have a critical role in meeting both

the social and academic needs of students within a larger network of integrated

service delivery (Ross, Pavell & Elias, 2002). The school psychologist, therefore,

plays a critical role in ensuring that the social and academic needs of students are

met. School psychologists are in a position to learn and understand the dynamics

of schools, that is, to understand the climate of a particular school. They can use

this knowledge to ensure that the social and academic needs of students are met.

The reality of large schools is ever-increasing and this trend will likely continue.

Although the results of the present study did not reveal a stark difference in the

perceptions of climate among the small and large school, both positive and negative findings have a critical far-reaching implication in working toward school climate improvement regardless of setting:

1. **School psychologists have a role to play in school culture and climate improvement.**

   It is evident that school climate improvement is critical if the school consolidation movement continues. During the earlier discussion of school climate and culture, it is apparent that school culture is a broad umbrella under which is its quantifiable counterpart, school climate. Thus, school climate improvement cannot occur in the absence of school culture improvement. That is, there needs to be a positive change in the underlying assumptions and values (i.e. culture) before there can be positive change in the behaviours and perceptions of students and staff (i.e. climate). A positive change at the deepest level of culture will take time and open-mindedness from the people who inhabit a school. The school psychologist is in a unique position to assist with school climate improvement and school culture improvement. We work as a part of schools, but also a part from schools and this allows us to keep an open mind more easily than those completely immersed in a particular culture and climate. By working towards school climate improvement we are given the chance to become more a part of the school. To work at changing the assumptions and values that are so entrenched in any one

school, is an important role for the school psychologist. They can assist in breaking down assumptions and rebuilding new ones, ultimately resulting in school culture and in turn, school climate improvement. This overarching recommendation has implications for the university preparation of school psychologists. Courses could focus on helping future school psychologists to assume the role of school climate and school culture enhancers and negotiators.

a) **School psychologists need to be flexible in their models of service delivery.**

As the size of a school has the potential to affect the climate of the school, then student academic achievement, engagement and behaviour are simultaneously impacted as these are aspects of school climate. Therefore, as the reality of large schools grows, school psychologists will need to alter the model of service delivery under which they operate. In the past there has been a tendency to operate according to a tertiary prevention model of service delivery, which involves directly working with individual students whose problems significantly interfere with their adaptation to school (Cole & Siegel, 2003). In large schools, however, a tertiary model of service delivery may not be feasible, particularly with respect to improving school climate. It would be essential for the school psychologist working within a large school to operate under a primary prevention model of service delivery. Under such a model the school

psychologist would work in collaboration with school administration and personnel to identify areas of school climate that require improvement. A program could then be developed, via a collaborative effort that would target school climate improvement. Thus, the direct recipient of service in this case is not the student, but rather the school. The students are indirectly affected through school climate improvement.

b) Increase awareness of the role of the school psychologist to students.

School psychologists were not identified as providers of support during the interview portion of the study. This finding implies that the existence of psychologists within schools is not a well-known fact. Given that their existence is not known, the role of the school psychologist by way of association is also unknown. Thus, school psychologists must increase student awareness of their existence so that students, in both small and large schools, feel they have someone whom they can turn to when in need of personal support. It is critical that school psychologists expand their role to include counselling and therapeutic interventions for students in need and to educate students and teachers about the referral process to receive these supports from the school psychologist.

c) Collaborate with school personnel to ensure that the characteristics of the school setting match the characteristics of the students.

According to Stage-Environment Fit Theory (Eccles et al., 1993),

motivation, behaviour and mental health are negatively impacted when

there is a mismatch between the characteristics of the individual and the

characteristics of the setting. School psychologists play a critical role in

ensuring that the academic needs of students are met through the

development of program adaptations and Individual Program Plans

(IPP's). The Stage-Environment Fit Theory, has critical implications for

the role of the school psychologist in programming for whole classes to

ensure that the classroom matches the social and academic needs of

students.

In addition, the present study may suggest that the needs of Grade

Seven and Nine students are not being optimally met, given their lower

perceptions of school climate than Grade Eight students. This has critical

implications for transition planning that takes place at each of these levels.

School psychologists, in collaboration with guidance counsellors, teachers

and administration, must ensure that adequate transition plans are in place,

to ensure that students' social and academic needs are being optimally

met.

d) Provision of educational workshops on school climate

improvement.

School psychologists are in a critical role to understand the dynamics of

schools by way of their training, but also by way of the unique position

they have within a school. School psychologists are not fully immersed into any one school culture to the extent that individuals working within the same school on a daily basis are. They are in a position to step back and identify areas that require school climate improvement and to then share this knowledge in the form of educational workshops on school climate improvement.

e) Provision of social skills training groups.

The present study revealed that the small school better met the social needs of its students. In the large school, it was apparent that social needs were not being met, due either to lack of open positions in extracurricular activities or to the existence of cliques. Some students may not be given the opportunity to participate in extracurricular activities, while for others they may not understand the process of social relationships. For the latter students, school psychologists can form social skills training group that will better equip these students with the knowledge of how to enter social situations and how to function in social situations once they have entered. The formation of such groups would also boost student perceptions of the available supports within their school and in large schools, would perhaps increase student participation in extracurricular activities.

f) Work collaboratively with guidance counsellors.

The present study revealed that small school participants did not feel supported by their guidance counsellor and a negative stigma was

associated with receiving support from the guidance counsellor at the large school. This implies that there is a necessity for school psychologists to collaborate with guidance counsellors as means of maximizing service time to small, rural schools and to erase the negative stigma associated with guidance counsellors at large schools.

E. Limitations

1. Due to the small number of participants and the higher participation rates among large school participants, the generalization of these results is somewhat limited. In addition, the results were not analysed according to ethnicity, at the request of the Cape Breton-Victoria Regional School Board.

2. The surveys were administered immediately prior to a strike within the Cape Breton-Victoria Regional School Board, therefore, it is possible that the impending strike altered participants' perceptions of their school climate.

3. While a great deal of time was spent developing unbiased and non-threatening questions for interviewing and a sufficient level of rapport is felt to have been established prior to commencing each interview, it remains possible that interviewees may not have revealed their honest perceptions in response to all questions.

4. At the request of the Cape Breton-Victoria Regional School Board, qualitative comments by school principals on the role of the school psychologist in improving school climate, was not permitted.

F. Suggestions for Future Research

1. Future research should include a larger sample size, reflect equal numbers of small school and large school participants and include ethnicity as a demographic factor.

2. Future research should also aim to gather administrators' and teachers' perceptions on the role of the school psychologist in improving school climate.

3. Given the small subset of students that participated in the interview portion of the present study, future research should focus on gathering more in-depth perceptions of school climate from students and teachers.

4. Examination of the varying perceptions of school climate among high and low achievers is also an area for future research.

5. Future research should also aim to gather school psychologists' perceptions on their role in school climate improvement.

6. Exploring the existence of cliques within various sized schools and the role that cliques play in participation in extracurricular activities.

CHAPTER VI

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Appendix A

School Climate Inventory

Below there are a number of statements about your school life. Please circle the number which best describes how strongly you agree or disagree with each statement, using the scale below. Try to keep in mind that all **the statements refer to the school year you are in now**. There are no right or wrong answers. Please be sure you answer all the statements. There is an example below.

> 1 = **Strongly Disagree**
> 2 = **Disagree**
> 3 = **No Strong Feeling**
> 4 = **Agree**
> 5 = **Strongly Agree**

Example
For example if you were to reply to the item "I enjoy the class work".
If you circle **1** this means that you **strongly disagree** with the statement that class work is enjoyable to you.
If you circle **2** this means that you **disagree** with the statement that class work is enjoyable to you.
If you circle **3** this means that you have **no strong feeling** about the statement that class work is enjoyable to you.
If you circle **4** this means that you **agree** with the statement that class work is enjoyable to you.
If you circle **5** this means that you **strongly agree** with the statement that class work is enjoyable to you.

1. I am satisfied with the variety of subjects being taught at school   1   2   3   4   5

2. I am satisfied with the number of subjects I take at school   1   2   3   4   5

3. I am satisfied with the timetable at school   1   2   3   4   5

4. I enjoy the day to day activities in the class   1   2   3   4   5

5. I feel that tests and exams are the proper way of assessing my performance at school   1   2   3   4   5

6. I feel that I get the grades I deserve at school   1   2   3   4   5

7. I feel that teacher's comments given with my grades help me to improve my work at school   1   2   3   4   5

1 = Strongly Disagree
2 = Disagree
3 = No Strong Feeling
4 = Agree
5 = Strongly Agree

8. I am satisfied with my performance in my courses   1   2   3   4   5

9. I feel I get praised enough when I achieve something at school   1   2   3   4   5

10. I am satisfied with the opportunities I have to participate in class   1   2   3   4   5

11. I feel I can deal with the tasks set in class work by teachers   1   2   3   4   5

12. I enjoy the way I am taught during class   1   2   3   4   5

13. I am satisfied with the answers to my questions given by teachers   1   2   3   4   5

14. I enjoy talking with teachers during class   1   2   3   4   5

15. I enjoy the homework set by teachers   1   2   3   4   5

16. I like the way that tasks move from topic to topic during class   1   2   3   4   5

17. I like the chance that teachers give me to explore in depth
different topics   1   2   3   4   5

18. When I leave class I feel that all my questions have been
answered   1   2   3   4   5

19. I am satisfied with the amount of time spent on different tasks
during class work at school   1   2   3   4   5

20. Classes at school make me think a lot   1   2   3   4   5

21. I enjoy learning new and different things at school   1   2   3   4   5

22. I feel that knowledge I gain at school makes me think about
things   1   2   3   4   5

23. I believe I have the chance to exchange knowledge with others
during class   1   2   3   4   5

24. I feel free to choose between different tasks and activities at
school   1   2   3   4   5

25. I find the experiences of school interesting for me as a person   1   2   3   4   5

1 = Strongly Disagree
2 = Disagree
3 = No Strong Feeling
4 = Agree
5 = Strongly Agree

26. I feel that teaching at school fits in with my own way of learning new things   1   2   3   4   5

27. I feel that my own expectations are well met at school   1   2   3   4   5

28. I am satisfied with the out-of-class activities at my school   1   2   3   4   5

29. I feel that my teacher/other school staff are there for me when I have problems at school   1   2   3   4   5

30. I feel that my friends are there for me when I have problems at school   1   2   3   4   5

31. I am satisfied with the support services that school provides me when I have problems   1   2   3   4   5

32. I feel that I am treated with respect by the staff at school   1   2   3   4   5

33. I feel that school rules leave me space to express myself   1   2   3   4   5

34. I feel welcome at school   1   2   3   4   5

35. I enjoy being a student   1   2   3   4   5

36. I am proud of my school   1   2   3   4   5

37. I am satisfied with the relationship I have with my teachers, in general   1   2   3   4   5

38. I am satisfied with the relationship I have with non teaching school staff   1   2   3   4   5

39. I am satisfied with the relationship I have with other pupils at school   1   2   3   4   5

40. I am satisfied with the relationship I have with my friends at school   1   2   3   4   5

41. I am satisfied with the sport facilities at my school   1   2   3   4   5

42. I feel that my school is adequately furnished   1   2   3   4   5

1 = Strongly Disagree
2 = Disagree
3 = No Strong Feeling
4 = Agree
5 = Strongly Agree

43. I am satisfied with the availability of social areas to meet with
friends at break times   1   2   3   4   5

44. I feel that food services at my school are satisfactory   1   2   3   4   5

45. I find decoration at my school pleasant   1   2   3   4   5

46. I find the equipment at school adequate   1   2   3   4   5

47. I feel that my school is quite near my home   1   2   3   4   5

48. I feel safe at school   1   2   3   4   5

School Participation Inventory

On the following scale please circle the number that best describes your level of participation in each of the extracurricular activities at your school:

1 = Never
2 = Seldom
3 = Occasionally
4 = Often
5 = Always

Athletics

1. Badmington	1	2	3	4	5
2. Baseball	1	2	3	4	5
3. Basketball	1	2	3	4	5
4. Cheerleading	1	2	3	4	5
5. Cricket	1	2	3	4	5
6. Cross Country Running	1	2	3	4	5
7. Football	1	2	3	4	5
8. Hockey	1	2	3	4	5
9. Intramurals (Specify: _____)	1	2	3	4	5
10. Rugby	1	2	3	4	5
11. Soccer	1	2	3	4	5
12. Swimming	1	2	3	4	5
13. Tennis	1	2	3	4	5
14. Track	1	2	3	4	5
15. Volleyball	1	2	3	4	5
16. Wrestling	1	2	3	4	5
17. Other (Specify: _____)	1	2	3	4	5

Culture/Arts

18. Band	1	2	3	4	5
19. Dance	1	2	3	4	5
20. Drama	1	2	3	4	5
21. Photography	1	2	3	4	5
22. Multicultural/Cultural Awareness	1	2	3	4	5
23. Other (Specify: _____)	1	2	3	4	5

Governance

24. Student Council/Government	1	2	3	4	5
25. Other (Specify: _____)	1	2	3	4	5

1 = **Never**
2 = **Seldom**
3 = **Occasionally**
4 = **Often**
5 = **Always**

Intellectual

26. Chess Club	1	2	3	4	5
27. Debating	1	2	3	4	5
28. Peer Tutoring	1	2	3	4	5
29. Other (Specify: _____)	1	2	3	4	5

Student Life

30. Awards Night	1	2	3	4	5
31. Newspaper	1	2	3	4	5
32. Peer Mediation	1	2	3	4	5
33. Winter Carnival	1	2	3	4	5
34. Yearbook	1	2	3	4	5
35. Other (Specify: _____)	1	2	3	4	5

Personal Information

Please check or fill in the appropriate response.

Gender: Male ____   Female ____

Grade: 7 ____   8 ____   9 ____

Age: 11 ____   12 ____   13 ____   14 ____   Other: ____

Ethnicity: Caucasian   ____
           African Nova Scotian   ____
           Native Nova Scotian   ____
           Asian Nova Scotian   ____
           Middle Eastern   ____
           French Acadian   ____
           Other (Please specify _____)   ____

School Climate Interview Schedule

1. How would you describe the academic aspects of your school?

2. How would you describe the social aspects of your school?

3. Do you feel supported in your school? Who provides you with the support?

4. What expectations exist at your school for behavior, academics, and social relationships?

5. What do you see as being an artifact (a symbol) of your school?

6. What do you think could make your life at school better?

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Appendix B

Dear Director:

My name is Nadine Maxner and I am a graduate student in the Master of Arts in School Psychology program at Mount Saint Vincent University. I am gathering information about the relationship between school size and school climate (i.e. various aspects of school life and participation in extracurricular activities) under the supervision of my thesis supervisor, Dr. Anne MacCleave.

I am requesting permission to survey a sample of grade seven, eight, and nine students from two large, urban junior high schools and three small, rural junior high schools in your school board. The study involves students completing a questionnaire, followed by an interview with a small number of volunteer students. The principal of each school who chooses to participate will receive a letter explaining the study along with the survey and interview questions. Teacher Information Sheets, Parent/Guardian Information Sheets and Parent/Guardian Letters of Permission will be given to the principal to distribute to teachers of the selected classes for distribution to parents. Only those students who return a signed letter of permission will be permitted to participate in the study. The researcher will administer the survey during class time (completion time is approximately ten minutes) and upon completion the surveys will be collected by the researcher. A sub-sample of students will be selected to participate in an audio-taped interview with me, which will take approximately ten minutes per interview. Letters of permission for participation in the interview will be sent home with interested students for distribution to parents. Upon return of the forms, interview times that are of convenience to the school will be organized. Participants will not be asked to indicate any identifying information on the survey or in the interview and all information will be kept confidential.

As part of the masters thesis in School Psychology program, this study has been reviewed and granted approval by the university ethics committee. By the beginning of the 2005-2006 school year, the results of the study will be mailed to you and all of the schools who participated in the study.

I would like to take this opportunity to thank you for your consideration of this request. If you have any questions and/or concerns regarding the research or survey itself, please contact my thesis supervisor, Dr. Anne MacCleave (902) 457-6182. If Dr. MacCleave cannot deal with concerns in a way you deem satisfactory or if you wish to speak to

someone not directly involved in this project you are invited to contact the Chair of the Mount Saint Vincent University Research Ethics Board, at (902) 457-6337.

Sincerely,

Nadine Maxner, BA
Graduate Student School Psychology Program
Mount Saint Vincent University

Anne MacCleave, Ph.D
Thesis Supervisor/Associate
Professor
Faculty of Education
Mount Saint Vincent University

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Appendix C

Dear Principal:

My name is Nadine Maxner and I am a graduate student in the Master of Arts in School Psychology program at Mount Saint Vincent University. I am gathering information on the relationship between school size and school climate (i.e. satisfaction with various aspects of school life and participation in extracurricular activities) under the supervision of my thesis supervisor, Dr. Anne MacCleave.

Schools were selected based on current year total enrollments and your school was among those selected. The study involves a sample of grade seven, eight, and nine students completing a brief survey (completion time is approximately 10 minutes), followed by an interview with a small number of volunteer students. It is requested that you distribute the attached Teacher Information Sheets, Parent/Guardian Information Sheets and Parent/Guardian Letter of Permission to homeroom teachers who will send copies home with the students for distribution to parents/guardians. An attached letter on the Parent/Guardian Letter of Permission describes the study and requests that the form be returned to the homeroom teacher by their child. Once all of the letters of permission have been returned the researcher will administer the survey during class time. Only those students for whom informed consent has been granted are permitted to participate in the study. Completion of the survey is voluntary. A sub-sample of students will be selected to participate in an audio-taped interview with me, which will take approximately ten minutes per interview. Letters of permission for participation in the interview will be sent home with interested students for distribution to parents. Upon return of the forms, interview times that are of convenience to the school will be organized. Participants will not be asked to indicate any identifying information on the survey or in the interview and all information will be kept confidential.

As part of the masters thesis in the School Psychology program, this study has been reviewed and granted approval by the university ethics committee. By the beginning of the 2005-2006 school year, the results of the study will be mailed to you and all of the schools who participated in this study. No individual school will be identified in the study.

I would like to take this opportunity to thank you for your consideration of this request. If you have any questions and/or concerns regarding this research or survey itself, please contact me at 562-8040 or my thesis supervisor, Dr. Anne MacCleave, at (902) 457-6182. If Dr. MacCleave or I cannot deal with concerns in a way you deem satisfactory or if you wish to speak to someone not directly involved in this project you are invited to contact

Dr. Anthony Davis, Acting Chair of the Mount Saint Vincent University Research Ethics
Board, at (902) 457-6296.

Sincerely,

_____
Nadine Maxner, BA
Graduate Student School Psychology Program
Mount Saint Vincent University

Appendix D

Dear Teacher:

My name is Nadine Maxner and I am a graduate student in the Master of Arts in School Psychology program at Mount Saint Vincent University. I am gathering information on the relationship between school size and school climate (i.e. various aspects of school life and participation in extracurricular activities) under the supervision of my thesis supervisor, Dr. Anne MacCleave.

Your class has been randomly selected for participation. The study involves having students in your class, for whom informed consent has been granted, complete a brief survey (completion time is approximately 10 minutes) followed by an interview with a small number of students. It is requested that you distribute the attached Parent/Guardian Information Sheets and Parent/Guardian Letters of Permission to the students for distribution to parents/guardians. An attached letter on the Parent/Guardian Letter of Permission describes the study and requests that the form be returned to you by their child. Once all of the Letters of Permission have been returned the researcher will administer the survey in the selected classes. Only those students for whom informed consent has been granted are permitted to participate in the study. Completion of the survey is voluntary. A sub-sample of students will be selected to participate in an audio-taped interview with me, which will take approximately ten minutes per interview. Letters of permission for participation in the interview will be sent home with interested students for distribution to parents. Upon return of the forms, interview times that are of convenience to the school will be organized. Participants will not be asked to indicate any identifying information on the survey and all information will be kept confidential.

As part of the masters thesis in the School Psychology program, this study has been reviewed and granted approval by the university ethics committee. By the beginning of the 2005-2006 school year, the results of the study will be mailed to all of the schools who participated. No individual school will be identified in the study.

I would like to take this opportunity to thank you for your consideration of this request. If you have any questions and/or concerns regarding this research or survey itself, please contact me at 562-8040 or my thesis supervisor, Dr. Anne MacCleave, at (902) 457-6182. If Dr. MacCleave or I cannot deal with concerns in a way that you deem satisfactory or if you wish to speak to someone not directly involved in this project you are invited to contact Dr. Anthony Davis,

Acting Chair of the Mount Saint Vincent University Research Ethics Board, at (902) 457-6296.

Sincerely,

_____
Nadine Maxner, BA
Graduate Student School Psychology Program
Mount Saint Vincent University

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Appendix E

Dear Parent/Guardian:

My name is Nadine Maxner and I am a graduate student in the Master of Arts in School Psychology program at Mount Saint Vincent University. I am gathering information on school size, that is, the total number of students attending a school, and your child's satisfaction with different areas of his or her school life under the supervision of my thesis supervisor, Dr. Anne MacCleave. Results of the study will be summarized into a report, which will be helpful in understanding whether satisfaction differs depending on school size. While no person or school will be identified in the report the results may help with providing recommendations for improving different areas of school life in both large and small schools.

Your child's class was one of several chosen to participate. The study involves having your child complete a brief survey (completion time is approximately 10 minutes) during class time. If you consent to your child participating in the study it is requested that you complete the attached Letter of Permission and have your child return it to their homeroom teacher. A small number of volunteer students will be selected to participate in an audio-taped interview with me. The interview will take approximately 10 minutes. If your child is interested in participating in the interview a second letter of permission will be sent home with him or her. Only those students for whom informed consent has been granted are permitted to participate in the study. Completion of the survey is voluntary. Participants will not be asked to indicate any identifying information on the survey and all information will be kept confidential.

As part of the masters thesis in the School Psychology program, this study has been reviewed and granted approval by the university ethics committee. By the beginning of the 2005-2006 school year, the results of the study will be mailed to all of the schools who participated in this study and additional copies will be available. No individual school will be identified in the study.

I would like to take this opportunity to thank you for your consideration of this request. If you have any questions and/or concerns regarding this research or survey itself, please contact my thesis supervisor, Dr. Anne MacCleave, at (902) 457-6182. If Dr. MacCleave cannot deal with concerns in a way you deem satisfactory or if you wish to speak to

someone not directly involved in this project you are invited to contact Dr. Anthony Davis, Acting Chair of the Mount Saint Vincent University Research Ethics Board, at (902) 457-6296.

Sincerely,

_____
Nadine Maxner, BA
Graduate Student School Psychology Program
Mount Saint Vincent University

_____
Anne MacCleave, Ph.D
Thesis Supervisor/Associate
Professor
Faculty of Education
Mount Saint Vincent University

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Appendix F

Letter of Permission

I _____, give permission for my child,
_____, to participate in this study on
school size and student satisfaction with different areas of school life by Nadine
Maxner.

I understand that my child will complete a questionnaire which involves
children's satisfaction with different areas of their school life and how often they
participate in different extracurricular activities at their school. I understand that
my child has the right to refuse to participate at any time throughout the study
without being subject to any negative consequences.

I also consent to the reporting of the results of the study, with the understanding
that information will be anonymous and confidential.

By signing below, I acknowledge that I have read the above statement and
agreement to allow my child to participate in this study.

Thank you very much for allowing your child to participate in this study.

Parent/Guardian Signature: _____

Date: _____

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Appendix G

Dear Student:

You are invited to take part in a study exploring different areas of your school life and participation in extracurricular activities at your school. You can participate by completing the attached survey. Results of the study will be included in a report, which will be helpful in understanding the good and bad aspects of your school life. You and your school will not be identified in the report.

Participation in this study is voluntary and you do not have to reveal your identity. The survey will take approximately 10 minutes to complete. You may stop your participation at any time. **Please do not put your name anywhere on this survey.**

A summary of the results will be sent to your school. Thank you for your participation in this study.

Sincerely,

_____
Nadine Maxner, BA
Graduate Student School Psychology Program
Mount Saint Vincent University

_____
Anne MacCleave, Ph.D
Thesis Supervisor/ Associate
Professor
Faculty of Education
Mount Saint Vincent University

Appendix H

"My name is Nadine Maxner and I am a graduate student at Mount Saint Vincent University and I am presently working on my thesis. I am examining student perceptions of different aspects of their school life, for example, your relationships with different people at your school and how often you participate in different extracurricular activities at your school. This is a survey, not a test, and it will in no way affect your grades. Your responses will be private, so please do not put your name on your survey. You are free to withdraw your participation at any point during the study. Does anyone have any questions? If you feel comfortable you can begin filling out the survey."

"Thank you for your participation in this portion of the study. I would like to extend an invitation to any students who would like to participate in an individual interview portion of the study. The interview would take approximately ten minutes and would involve answering six questions. Your responses would be audio-taped. For anyone who is interested I have Letters of Permission that you can take home to your parents/guardians. In order to participate in the interview you need to have this form signed by your parents and return it to your homeroom teacher."

"Thank you again for your time and your participation in the study. A summary of the results will be mailed to your school principal at the beginning of the next school year and additional copies will be made available if you wish to see the results."

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Appendix I

Letter of Permission

I _____, give permission for my child,
_____, to participate in an interview
based on the questions that were answered in the survey by Nadine Maxner.

I understand that my child will answer six questions and that the responses will be
audio-taped. The interview will take approximately ten minutes. I understand
that my child has the right to refuse to participate at any time throughout the study
without being subject to any negative consequences.

I also consent to the reporting of the results of the study, with the understanding
that information will be anonymous and confidential.

By signing below, I acknowledge that I have read the above statement and
agreement to allow my child to participate in the interview.

Thank you very much for allowing your child to participate in the interview.

Parent/Guardian Signature: _____

Date: _____