Enhancing family functioning to buffer risk during middle school transition: Development of the Multiple Family Group Weekend Retreat.

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Enhancing family functioning to buffer risk during middle school transition: 
Development of the Multiple Family Group Weekend Retreat.

A dissertation submitted in partial fulfillment of the requirements for the degree of 
Doctor of Philosophy at Virginia Commonwealth University.

by

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Acknowledgement

This work is dedicated to all those in my extensive network of support, both past and present, without whom I would not have had the courage, resources, or strength to complete it.

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Abstract

ENHANCING FAMILY FUNCTIONING TO BUFFER RISK DURING MIDDLE SCHOOL TRANSITION: DEVELOPMENT OF THE MULTIPLE FAMILY GROUP WEEKEND RETREAT

By Robert S. Broce, Ph.D.

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

Virginia Commonwealth University, 2011.

Major Director: Dr. Melissa L. Abell
Associate Professor, Social Work

Children experience changes in multiple levels of their social ecologies when they transition into middle school (Eccles, 1999; Jozefowicz-Simbeni, 2008). These biological, psychological, social, and environmental changes create increased risk for dropout and other factors related to academic adjustment (Cataldi, Laird & KewalRamani, 2009). For low-income minority children these risks can be magnified by environmental and social factors (Ge et al., 2002). Healthy family functioning, including balanced levels of cohesion and flexibility, has been shown to buffer these risks (Burchinal, Roberts, Zeisel & Rowley, 2008; Olson, 2010; Wampler, Munsch, & Adams, 2002) and was targeted by a Multiple Family Group (MFG) intervention.

The Multiple Family Group Weekend Retreat intervention, adapted from a previous version to address the family support needs of children transitioning to middle school, was tested in a feasibility study as a method for increasing family functioning. 14 families of rising 6th grade students from public schools on the South side of Richmond, VA participated in one of three MFG retreats. The intervention consisted of a series of group components focused on
building knowledge and skills in areas of trust, communication, stress and coping, family organization, and family unity. Key evaluation objectives included measuring changes in children’s family functioning and academic adjustment and collecting fidelity data to assess feasibility and further clarify the intervention. No significant outcomes were found between pretest and follow-up.
Chapter 1: Introduction

Rationale for Topic Selection

Community Identified Need

Communities in Schools of Richmond (CISR), Virginia provides services designed to reduce dropout rates to students in 24 of the highest risk Richmond Public Schools (RPS). Within each school, CISR staff compiles a comprehensive needs assessment and work with a team of stakeholders to coordinate both school-wide programs and intensive individual services. CISR provides intensive services to over 1300 students each year that are identified as having high risk for dropout due to poor academic performance, behavioral problems, or poor attendance (CISR Facts and Stats, 2008).

CISR has identified the transition period from elementary to middle school as the target of a new program. Children entering middle school are at increased risk for academic decline associated with the overlap of school and developmental changes (Akos & Galassi, 2004b; Gutman & Midgeley, 2000). CISR has recognized that an inclusive transition program should consist of direct school-level support for students before and after the transition, as well as family level support (Bronstein, Ginsburg & Hererra, 2005; Elias, Patrikakou & Weissberg, 2007; Stevens & Patel, 2007). It is hoped that adding a family-focused component to the existing school support efforts will help to positively align parents with their children andheighten their success.
**Practice Based Themes**

During a period of seven years of clinical social work practice experience with youth and families, I observed two themes that have helped to shape the direction of this dissertation. The first theme is that families, while most often not the target of treatment, can play a protective and supportive role in the lives of children who are struggling with development. Anecdotally, youth who entered residential treatment for antisocial behavioral problems seemed more likely to succeed and return home if their families were functioning well, especially when the families were engaged in treatment. This practitioner observation is supported by several studies in the middle school transition literature, demonstrating that adolescents whose families function in a healthy way are much more likely to be able to negotiate the multi-systemic challenges that they face (Eccles, 1999; Schneider, Tomada, Normand, Tonci & de Domini, 2008). A more thorough review of this literature is presented in Chapter 2.

The second theme is that younger children seem to be more open and malleable to intervention than those who have become more established in problem behavior. Along with this observation, older adolescents who have become dependent on substances, dropped out of school, run away from home, or become involved in criminal behavior often began experiencing problems many years earlier during pre-adolescence. According to many, early intervention is a key to preventing more severe problem behavior from developing (Jozefowicz-Simbeni, 2008; Langberg, Epstein, Atlaye, Molina, Arnold & Vitiello, 2008). These themes will be reflected in the theoretical, methodological, and development choices of the dissertation.

**University-Community Partnering**

To develop a family-oriented transition service for rising middle school children, CISR formed a partnership with faculty and student researchers at Virginia Commonwealth University
Through a series of conversations about the feasibility and goals of different family programs, the university and community partners decided to modify and then implement a Multiple Family Group (MFG) intervention. The Multiple Family Group Weekend Retreat had previously been used with other parents of at-risk children to increase family functioning (Abell, Davey, & Leisey, in press; Davey & Abell, 2004), and it was proposed as a method of increasing the level of family support for rising sixth graders. The partnership was seen as mutually beneficial. CISR benefits by adding a research-based family-focused intervention to its program offerings as well as obtaining some initial outcomes that can be used to solicit additional funding. VCU partners benefit from increased community engagement, networking contacts, and potential for scholarship including this dissertation. This project also furthers a line of inquiry about the effectiveness of the MFG intervention delivered as a weekend retreat in a natural setting that has been pursued by Abell and her colleagues (in press) in the VCU school of Social Work for several years.

Forming and maintaining university-community partnerships has become an important part of fulfilling the community service mission of many colleges and universities (Jenson, 2006). Since social work investigators have historically emphasized community collaboration in activities such as program development, service delivery, and program evaluation, we have a unique potential for leadership in campus-wide movements toward community engagement. In support of practice, conducting studies that demonstrate rigor in theory, method, and analysis are part of the social work researchers’ responsibility (Fraser, 2004), leading to scholarship that will provide long-term measurable benefits to communities.
Intervention Research in Social Work

Intervention research in social work is the method of defining and testing new strategies for reducing social problems. It is the process through which practice knowledge, empirical theory, and research findings are brought together to inform a new or adapted program (Fraser, Richman, Galinsky & Day, 2009). Intervention model development research has been encouraged in social work because it produces knowledge with practical utility, attempts to answer the “so what” question, and is focused on making a difference (Fraser et al.). According to Fortune and Proctor (2001), intervention research is the least frequently conducted type of social work research, even though it may be the most necessary.

As an applied profession, social work emphasizes the connection between research and practice, and social workers have an ethical obligation to contribute to the relevant knowledge base of the profession (NASW, 2010; Thyer, 2001). The process of developing or adapting novel interventions brings research findings to bear on practice methods and uses practice expertise to guide intervention development. Thyer (2001) has argued that interventions used in social work should be based in strong empirical findings, or be evidence-based.

Outline of the Dissertation

Goal of the Dissertation

The goal of this dissertation is to respond to a community identified need and build on previous practice experience with at-risk youth by developing a well described and manualized treatment model that can be further tested and disseminated as an intervention for early adolescents and their families. This goal will be accomplished by adapting the Multiple Family Group Weekend Retreat intervention for a population of at-risk children transitioning to middle school. The adapted intervention will then be implemented with families to assess its feasibility...
and efficacy. Information from the data analysis will be used to refine the intervention.

Chapter 1 Summary

The first chapter of the dissertation began with an introduction to the community identified need of strengthening families to help children transition successfully to middle school, and related practice-based themes. A university-community partnership was formed to address this need and through collaborative efforts determined to engage in a model development process to modify and test a Multiple Family Group Weekend Retreat intervention with the rising middle school population. Intervention research in social work was framed as a method for building the knowledge base of the profession by producing results with practical utility. Finally, an overarching goal for the dissertation was established. Chapter 1 will also review the significance of the middle school transition for children, the prevalence of transition problems, and the increased risk for school dropout. A discussion and critique of the current practices used for supporting rising middle school students will conclude the chapter.

Chapter 2 Summary

Chapter 2 begins by applying an ecological perspective and a risk and resilience framework to changes associated with middle school transition. A review of literature related to risk and protective factors at different levels of the early adolescent social ecology is then reported. Individual level factors, peer and school factors, and overarching contextual factors are reviewed, along with an emphasis on protective factors at the family level. A conceptual model is used to illustrate the interaction of these risk and protective factors in relation to academic adjustment outcomes for new middle school students. The chapter concludes by detailing the theoretical background, development, and key components of the Multiple Family Group Weekend Retreat intervention.
Chapter 3 Summary

The model development research design is explicated in Chapter 3, following Rothman and Thomas’ (1994) phases, with specific emphasis on the first four phases that bound the scope of the model development dissertation in social work. Phase I consists of problem analysis and project planning, Phase II details the process of information gathering and synthesis, Phase III discusses the design of the intervention through adaptation, and Phase IV includes the research design for the early pilot test. Important variables and the methods for measurement are detailed. Quantitative measurement includes factors of family functioning and aspects of school adjustment, while qualitative methods are used to gather and analyze information on feasibility and treatment fidelity.

Chapter 4 Summary

Outcomes for family functioning variables are evaluated with nonparametric statistical tests and differences in scores are examined with case level analyses. Academic adjustment variables from 5th and 6th grade are then compared to school means. The results of these analyses are presented. Key clarifications are made to the activity and training protocols of the intervention manual based on the results of the qualitative fidelity tracking data.

Chapter 5 Summary

Results of the quantitative analyses are explained in relation to theory. Next, the process of using fidelity tracking data to clarify the intervention is reviewed and critiqued. Methodological limitations of the study are then reviewed, including discussions about power, design, sampling, retention, measurement, provider competence, and the structure of the manual. Future research directions, including a larger pilot test and using the MFG retreat intervention
with other populations, are suggested. Practice implications related to family focused and preventive practice are discussed followed by a conclusion of the dissertation.

**Significance of Middle School Transition**

The transition period from elementary school to middle school has been given significant attention recently due to the recognition of increased risks associated with the changes in this phase of childhood (Adams, 2008; Akos, Creamer & Masina, 2004; Akos & Galassi, 2004b; Barber & Olsen, 2004; Bronstein et al., 2005; Holler, 2008; Koppang, 2004). These studies suggest that the middle school transition is a key point in determining ongoing academic and life success. The patterns of coping and the resources that are developed in multiple system levels during this transition to middle school can significantly impact a child’s future (Jozefowicz-Simbeni, 2008).

**Prevalence of Transition Problems**

Several studies have found negative psychosocial outcomes for students as they enter middle school and continue through their transition year. Some studies have shown a decline in academic achievement directly, while others have measured declines relative to drops in various domains of self-concept, including academic, parent relations, and peer relations (Hymel, Lemare, Ditner & Woody, 1999). Children’s emotional health has also been targeted as a special concern during the transition. Vander Stoep and colleagues (2005) found during a screening of a large sample of children entering 6th grade that 15 percent demonstrated some type of emotional or mental health problem, and that 71 percent of those were categorized as significantly distressed.

Gutman and Midgeley (2000) studied 257 students from a low-income inner city school district in Southeast Michigan with a high minority population. Overall they found that children
had significant declines in their grade-point average (GPA) from fifth to sixth grade. Similarly, Blyth, Simmons, and Carlton-Ford (1983) found a general decline in GPA for students across grades six through ten. Barber and Olsen (2004) found that students reported significant drops in GPA each year beginning in 6th grade and continuing through high school, with the most significant declines between 6th and 7th grade when students in that district experience a shift to a more traditional middle school environment, and when they transitioned to high school. They demonstrated that drop in GPA was the result of complex interactions between several different variables including those related to changes in school structures, and developmental changes occurring in students.

Despite the demonstrated negative effects associated with school transition, there are disagreements in the literature about the prevalence of transition problems. Some studies have found in fact that the transition is not difficult, and can even yield some positive opportunity (Akos & Galassi, 2004a; Fenzel, 1989; Langberg et al., 2004). Whether a student experiences problems or not seems to depend on a variety of risk and protective factors. While all children are exposed to the challenges associated with the middle school transition, those with higher risk and those without the benefit of protective factors show the worst outcomes.

**Significance to Dropout**

One of the significant concerns about poor adjustment to middle school is the eventual contribution this may have to school dropout. School dropout can be defined and measured in several different ways as shown below, but generally refers to the status of a person who has stopped attending high school without a diploma or equivalency, or is in the typical age range to attend high school (16-24) but is not. School dropout is a serious problem for individuals, families, and society in general. Students who do not complete high school education earn lower
wages than those that graduate and are more likely to be unemployed (US Department of Labor, 2007). They, and their dependents, are at higher risk for homelessness. Ties have also been found between dropout and higher criminal involvement, use of illegal drugs, and health and marital problems (Cataldi et al., 2009; Jozefowicz-Simbeni, 2008; Pleis & Lethbridge-Çejku, 2006).

Rather than referring to a specific event, school dropout can be seen as an eventual process that begins much earlier than when the student actually leaves school (Baker, 1991). Since many risk factors begin in childhood and early adolescence, it is important for dropout prevention efforts to focus on identifying the indicators of early school disengagement (Jozefowicz-Simbeni, 2008). Cataldi et al., (2009) report that dropout rates have decreased since 1972, yet the dropout rate remains at level. Despite these encouraging trends however, dropout prevention remains a high national, state, and local priority (Allen-Mears & Fraser, 2004).

The event dropout rate is a measure of recent dropout occurrences (Cataldi et al., 2009). It is reported as a percentage of students who had been attending high school who dropped out of grades 10-12 in the past year. In a report of 2007 data, event dropout rates were 3.5 percent nationally. In a comparison of children by family income, those in the lowest 20 percent of the income range were about 10 times as likely to dropout as their peers in the highest 20 percent (8.8% compared to 0.9%). The status dropout rate, that is calculated as the percentage of 16-24 year old individuals who are dropouts (without high school completion who are not currently enrolled), regardless of when they dropped out, was 8.7 percent nationally in 2007. Blacks (8.4%) and Hispanics (21.4%) reported significantly higher rates than Whites (5.3%) or Asians (6.1%). On a third measure related to dropout, the Averaged Freshman Graduation Rate (AFGR), which is an “estimate of the percentage of public high school students who graduate on
time” (in four years with a regular diploma) for the class of 2005-06 was only 73.2 percent (Cataldi et al., p. 9).

Regional estimates indicate that more than 33,500 students did not graduate from Virginia public high schools in 2009, at a lifetime earnings cost of $8.7 billion dollars, and significantly increased health care costs (RPS Fast-facts, n.d.). While Richmond public schools has demonstrated an increase in retaining students through graduation (four-year cohort dropout rate declined from 16.2 percent for 2004-2008 to 14.8 percent for 2005-2009), a large number of students in this urban district continue to be at high risk. A multi-point dropout prevention initiative is underway to help address student needs. This program involves staffing a one-stop career development center with trained recovery specialists, designing individualized learning plans for returning students, door to door visits, mentoring, community partnerships, and a “get in, stay in” media campaign (RPS Fast-facts, n.d.).

**Current Practice Environment**

While the strength of the family system and the quality of parenting have been closely tied to transition success (Bronstein et al., 2005; Elias et al., 2007; Stevens & Patel, 2007), school transition programs rarely include a family component. The role of the school is most often emphasized and may not connect with other parts of the child’s environment. Programs designed to increase student success across the middle school transition typically focus on preparing students during their fifth grade year, summer orientation programs, providing enhanced services during the sixth grade year, or modifying the structure of the curriculum such as family pods of single-sex education (Adams & Caralee, 2008; Akos et al., 2004; Holler, 2008; Hubbard & Datnow, 2005; Koppang, 2004; Olsen, 2004).
**School and Peer Oriented Programs**

Examples of these school and peer oriented programs highlight the lack of family inclusion. Akos and his colleagues (Akos, Creamer & Masina, 2004) noted three target aspects of their three week transition program including organizational aspects like acclimation to procedures, personal/social aspects like building peer networks, and academic aspects such as organization and study skills. In another program incoming students were assigned to home rooms to provide stability to students that moved throughout the day from classroom to classroom (Vanlede, Little & Card, 2006), and Kingery & Erdley (2007) emphasized the development of a positive peer network.

**Curriculum Modification**

Many studies suggest that children’s experiences in education differ significantly by gender across and within categories of race and ethnicity (Hubbard & Datnow, 2005). These findings, along with changes in US education policy including the No Child Left Behind Act of 2001, and amendments to the Title IX regulations in 2006 (US Department of Education, 2008), have spurred a controversial surge of interest in single-sex education programs, especially for middle grades. School districts now have more authority and flexibility in providing single-sex programs to meet the needs of their students, however existing literature on the topic is largely theoretical and empirical results are mixed as to the efficacy of such programs (US Department of Education, 2008).

In their review Hubbard and Datnow (2005) found inconsistent and conflicting results about the effect of single-sex schools. Several supportive studies show that sex-separated schools were most beneficial for males from low-income and minority backgrounds and somewhat beneficial for all girls regardless of socioeconomic status, however white males did
not benefit (Riordan, 1994). On the other hand, separating students by sex was not significantly related to higher test scores for low-income minority students Harker (2000). Critics of the idea of separating students by sex argue that there are too few studies to draw any firm conclusions (many of those measured were private Catholic schools), and that socioeconomic factors and social factors such as teacher-student interaction likely play a more important role than the structure of the school. In their own study of single-sex schools in California, Hubbard and Datnow (2005) found generally positive reports related to decreased distraction, increased financial benefits (the schools had received additional funding from the state), and the influence of positive teachers.

Some of the most critical arguments of single-sex schooling raise fears about segregating the school population and ignoring the multiple layers of difference found in students. Jackson (2010) argues that “because single-sex schooling ignores the complexity of sex, gender, and sexuality, it sets up a "separate but equal" system that is anything but” (p. 227). There is also a concern that separating boys and girls by class or by school will distract from the underlying concern about existing gender disparities in education (Sadker, 1999). Despite these critiques however, the major reviews find no evidence that separation is harmful to students and suggest that more effort be placed on determining the efficacy of single sex education (US Department of Education, 2008).

**Family Inclusive Intervention**

While many transition programs focus on the role of the schools, several rely on multi-component interventions that include support for families (Lochman & Wells, 2004; Stormshak, Dishion, Light, & Yasui, 2005). Schools can play an important role in partnering with parents for support in the educational process (Akos, 2005; Elias et al., 2007; Grolnick, Kurowski,
Dunlap & Hevey, 2000). Parental support of children is more effective when school personnel support parents (Gutman & Midgeley, 1999).

**Parent inclusion.**

Educational interventions and programs for children and adolescents that do not address parenting practices are limited in their ability to create sustainable change (Stormshak et al., 2005). Several studies point to the importance of parent inclusion in interventions for problem behavior during middle school and for including parents as supports for children during their transition from elementary school (Spoth, Kavanagh & Dishion, 2002). One longitudinal study reported that over the course of three years, a family-based program designed to increase contact with the school’s Family Resource Center was able to reduce the incidence of problem behavior and provide services for a higher number of high-risk children (Stormshak et al., 2005). Koppang (2004), also included parents in middle school orientation activities after recognizing through a survey of student and parent concerns that their traditional orientation program was not meeting the developmental needs of the children. MacIver (1990) found that parents were more actively involved in their children’s middle school education if they were included in meaningful ways with transition activities.

**Challenges to family involvement.**

While parent and family involvement in school programs may be helpful to students, it is necessary to consider the challenges and barriers to participation (Spoth et al., 2002). Contextual factors, including high work demands, demands of multiple children, and transportation problems may be barriers to participation (Stormshak & Dishion, 2002). Owens and her colleagues (Owens, Richerson, Murphy, Jagelewski, & Rossi, 2007) found that an important practical barrier to participation in a parenting group was time constraint related to work and
family demands. Similar findings about the impact of busy family schedules on school based parent participation have been noted (Cunningham et al., 2000; Sanderson & Richards, 2010), especially in single parent households and where parents have less education (Barkley et al., 2000). As a possible solution, Mendez (2010) found that programs involving parents were more successful when dinner and transportation were provided.

Some researchers have also pointed to issues of mistrust between parents and the school, or general mistrust of intervention or research processes (Owens et al, 2007; Sanderson & Richards, 2010). For this reason, collaboration with organizations that already serve community members is especially important when designing and implementing evidence-based interventions for minority populations (Dobransky-Fasiska et al., 2009). Existing service systems are more likely to be sensitive to the cultural environment and have access to the community stakeholders (Hoagwood & Koretz, 1996; Stormshak & Dishion, 2002).

Chapter 1 Summary

The middle school transition has been identified in the early adolescent literature as a critical intervention point for high risk children. While school level support is important, support from healthy families has also been shown to sustain children as they negotiate this challenging stage of life. Practice experience bore out similar themes, including the benefits of intervening early and the benefits of involving families in interventions. To address a local need identified by the partnering community agency (CISR), an intervention development research project was initiated within the context of a university-community partnership. The goal of the partnership was to develop a family-focused intervention that could be added to the existing school-level supports for new middle school students in Richmond Public Schools.
Chapter 2. An Ecological Framework for Understanding Middle School Transition

Ecological Perspective

Fenzel (1989) suggested that the challenges stemming from a school transition can be seen as relating to a role change, or an ecological transition (Bronfenbrenner, 1986) experienced by the student. Children entering middle school have to renegotiate most of their significant relationships and adjust to new expectations. Relationships with teachers and other adults in the school setting are not only with different people, but have a different quality. Students must function with much more independence, from navigating their new hallways, lockers, and classrooms, to following behavioral expectations and completing work. Relationships with peers change as students work to find meaningful friendships based more on common interest than proximity. Social status is elusive, based on different qualities, and more competitive. Relationships with parents and family change as children spend more time away from home and become more independent, often creating conflict as the duality of playing both child and adult roles develops. As a result, family cohesion may deteriorate as children move into adolescence (Baer, 2002; Olson, 2000).

Children face challenges to healthy adjustment throughout their multi-layered ecology as they transition to middle school and simultaneously experience developmental changes. An ecological framework that emphasizes the role that social contexts play in human development is useful for understanding the interaction between the child and their environment. A multi-
systemic view of social problems also helps to illuminate potential targets for prevention and intervention efforts (Jozefowicz-Simbeni & Allen-Meares, 2002).

**Ecological Systems Theory**

Briefly, the ecological model (Bronfenbrenner, 1986; 2005) describes the “joint function of the characteristics of the environment and of the person” in determining developmental processes and outcomes (2005, p. 115). The typical application of this model in social work practice and research is the person-in-environment perspective that is built on the understanding that development, coping, risk, and resilience are all driven by the interaction between personal and environmental characteristics (Germain, 1991). Ecological systems theory outlines several nested systems, including microsystem, mesosystem, exosystem, macrosystem, and more recently chronosystem, that delineate the complex pathways through which individuals interact with their environment (Bronfenbrenner, 2005).

The microsystem is made up of a person’s interaction with those systems, and the unique people in them, most close to him/her in proximity, including persons in the family, school, neighborhood, peer groups, and church congregations. The next layer, the mesosystem, deals with the linkages between micro-systems so that the mesosystem is made up of a “system of Microsystems” (Bronfenbrenner, 2005, p. 148). As an example, adolescents who have positive experiences during school with teachers and peers may be better able to cope with the difficulties of parental conflict in their home. A strong home on the other hand, could act as a support for students who feel rejected and discouraged in their academic work (Zastrow & Kirst-Ashman, 1997).

The exosystem is the next layer, composed of linkages between systems that do not directly contain the individual, but exert indirect influences (Bronfenbrenner, 2005). For
instance, a parent’s increased stress level from being unable to find employment may lead to marital discord. This in-turn may contribute to a lack of stability and positive feeling in the home that affects the child’s ability to obtain homework help. The macrosystem consists of the patterns of social interchange between the micro, meso, and exo systems that make up the broadest layer of environmental characteristics influencing a person. This system includes, for instance, the cultural norms, expectations, and collective attitudes of the general society that influence individual and family development. These larger social concerns have a strong effect, although not always directly, on a person in their environment (Bronfenbrenner). Issues related to low socio-economic status, poverty, and institutionalized racism would be examples of influences in the macro layer.

Whether influences at each system level are helpful to individual development and functioning or detrimental depends upon the complex interactions between human beings and their environments. People are not all affected in the same way by stressors in their micro, meso, exo, and macro systems. To comprehend the intricacies of human behavior, a framework is needed that accounts for influences throughout the social ecology.

**Risk and Protection Framework**

Understanding the variation in children’s experiences with middle school adjustment requires a framework that accounts for a wide variety of factors throughout a student’s ecology. Fraser (2004) has described the goodness of fit between ecological theory for social work and a risk and resilience perspective for child development. The risk and resilience framework provides the structure that is needed to study the influences in each system that contribute to successful coping in children or place them at-risk for future problems. In children, risk factors
are those influences that increase the probability of developing or maintaining a problem condition, or problem behavior, while protective factors buffer the effects of those risks (Fraser).

Problem behavior is a general term used to describe the multiple types of conduct or problems in functioning that can interfere with healthy adaptation and development in children (Jessor, Van Den Bos, Vanderryn, Costa & Turbin, 1995). In children and adolescents, examples might include overt delinquent behaviors like abusing substances, running away, engaging in aggressive or violent behavior, or truancy. Other problems are more related to functioning such as poor school performance or dropout, not engaging with the family, poor self-care, or symptoms of mental illness. Maintaining antisocial attitudes and beliefs can also be considered risk factors, or the result of increased risk, depending on their place in the predictive model.

An example of measuring risk for problem behavior during the middle school transition can be found in a study by Vanlede and colleagues (Vanlede, Little & Card, 2006). They measured change in children’s inter- and intra-individual stability across the transition to middle school. They found that on the average, students who moved into middle school had no significant change, positive or negative, in their stability, however there was wide variation between children. Several different factors were explored to determine what might be contributing to this disparity between children that were able to maintain stability in the face of change and those who were not. One important risk factor that was identified was an increase in antisocial coping, or responding with antisocial behavior to problem situations. Children who used more antisocial coping were more likely to be aggressive, and showed declines in their levels of stability.

Risk and protective variables can be categorized broadly according to their ecological level (Fraser, 2004; Garmezy, 1993), although there is some disagreement in the exact
categorical definitions (Fraser uses individual, family, school and neighborhood, and broad environmental conditions, while Garmezy uses individual, family milieu, and extrafamilial levels). Following Garmezy (1993), the first category of variables are the individual level biological and psychological traits, including dispositional attributes such as temperament, coping skills, cognitive abilities, responsiveness to change, and social orientation. The second category consists of the family variables that might include cohesion, flexibility, communication, structure, supervision, warmth, and absence of neglect (Olson, 2000). The third category are those external to the family, including both school and neighborhood influences, social supports, and broad social and environmental conditions such as racism and poverty.

Gutman and Midgeley (2000) for example, found in their study of 257 poor African American students that protective factors in all three categories of Garmezy’s model (1993) significantly influenced academic success. At the individual level, academic self-efficacy, or the belief in one’s ability to perform well in school, was an important factor. At the family level they found that students were more successful when parents were involved both at home and at school, demonstrated higher expectations, and emphasized the importance of education. School factors included feelings of school belonging and positive student-teacher relationships.

Defining risk.

One way to conceptualize risk is to see it as cumulative (Fraser, 2004). Children with exposure to the most risk factors are less likely to form adaptive behaviors and are considered to be high risk, while those that are exposed to fewer risks are less likely to have behavioral problems (Smokowski, Mann, Reynolds & Frazier, 2004). From this perspective, the number of different risks that a child faces, not specifically the category of risk, is the most important (Stouthamer-Loeber, Loeber, Wei, Farrington & Wikstrom, 2002). Loeber and colleagues
(Loeber, Pardini, Stouthamer-loeber & Raine, 2007) refer to this as a dose-response relationship between risk factors and problem behavior. Understanding that risk is cumulative helps researchers to account for the long term exposure that many children have had to broad social and environmental conditions (Smokowski et al.). Burchinal and her associates (Burchinal et al., 2008) used a longitudinal analysis to explore the relationship between severity and timing of risk exposure with academic outcomes in 74 African American children from the 4th to 6th grade. They found that the severity of risk exposure over time, measured as consistent social pressure, was negatively related to reading and math scores, social skills, and problem behaviors. Their findings did not show that the specific timing of risks was significant.

Frick (2006) has clarified that risk is not simply additive however, and has argued that the effect of multiple risk factors is more likely to be interactive. He points to a cohort study conducted in Denmark (Raine, Brennan & Mednick, 1994) that found that the risk factors of birth complications and maternal rejection individually could not predict a child’s violent offending at age 18, but the combination of the two factors significantly increased risk. Viewing risk factors from multiple system layers as interactive allows for researchers to go beyond identifying lists of individual risk factors for children and identify the pathways through that problem behaviors are developed. Fraser (2004) also pointed out that the probability of risk is nonlinear and that although risk is cumulative, this does not explain the complexity of how risk and protection interrelate.

**Developmental pathways.**

Although no child experiences an identical set of risks and protections, and children respond in a variety of ways to risk exposure, there is some indication that there may be common identifiable pathways by which risk leads to behavioral problems (Frick, 2006). Fraser (2004)
suggests that while identifying risk factors has been prominent in health and social science research, determining important risk mechanisms is a better way to understand children’s vulnerability. A risk mechanism refers to the process by which an individual risk factor contributes to increased child vulnerability (Fraser).

The developmental-pathways approach integrates research that has identified factors of risk with research on the normal developmental processes of children to determine chains of risk mechanisms that increase vulnerability for specific problems. This allows for the identification of the specific pathway in which risk factors interfere with children’s development. While it would be helpful to know for instance that living in a disorganized low income neighborhood increases risk for academic failure, it is even more important to understand exactly how the environmental influence is tied to academic work. Stronger implications for practice in terms of planning interventions come from research that indicates the factors that are more proximally located to, or have a more direct influence on, the individual in their ecology versus factors that are more distally located, or further away. For example, distal risks in the macro system, such as neighborhood poverty, have been commonly shown to be mediated through risks that are more proximal to the individual, like micro system family processes (Frick, 2006).

Defining risk for problem behavior is only one aspect of the risk and resilience model. Researchers have also become increasingly interested in studying the factors that contribute to resilience in children, or protective factors. An illustration of the relationship between risk and protective factors can be found in a longitudinal study of children’s school completion (Smokowski et al., 2004). In these findings, children’s accumulation of family risk during childhood predicted a decrease in the rate of high school completion, while preschool
intervention, parent school involvement, and the child’s ability to be task oriented provided a buffering effect against risk and increased the likelihood of finishing high school.

**Defining resilience.**

Growing out of the early research on developmental risk, interest in resilience was a result of the observation that some children seemed unaffected by high risk exposure. Fraser (2004) has clarified that these children are not immune or invulnerable to risk in some way, but that instead they show increased resilience to its effects. Resilient children’s exposure to risk seems to be mitigated or buffered by combinations of individual or environmental factors. Individual characteristics, such as intelligence, motivation, and humor are often complemented by strong environmental resources such as families, schools, and neighborhoods in resilient children (Reynolds, 1998). Resilience has been characterized in the stress and coping literature as “sustained competence under stress,” where competence refers to the ability of a child to function in their ecological context at a specific developmental point (Fraser, p.23). Children who live in disrupted families, for instance, face additional challenges related to their psychosocial development as they transition to middle school. They would demonstrate resilience in their ability to cope, or maintain equilibrium, reasonably well socially and academically.

It is becoming increasingly popular for social work researchers to focus on understanding the factors and chains of influence that contribute to resilience, rather than risk (Fraser, 2004). Social workers emphasizing a strengths perspective with underprivileged and oppressed groups find value in recognizing and attempting to enhance influences that encourage resilience in the face of risk (NASW, 2010). Fraser cautions however that children are most likely to successfully adapt to challenges when risk is lower, and that children who are exposed to high
levels of risk from trauma or abuse are much less likely to show adaptation in interpersonal behavior and school success. Additional supports may be needed by these children.

**Protection.**

Protective factors are often conceptualized in terms of their polar relationship to risk factors. For instance, poor parent-child communication may be a risk factor for poor academic adjustment, while positive parent-child communication may be a protective factor. Another view suggests that factors of resilience are not simply the opposite of risk factors, but can directly influence behavior on their own. In this case, protective factors, those that decrease developmental problems in the face of risk, are distinguished from promotive factors, those that positively influence developmental outcomes regardless of risk. While this is a promising distinction, Fraser (2004) warns that the concept of promotive factors remains underdeveloped.

Protective factors consist of internal and external resources that modify the influence of risk. Understanding the processes by which risk is modified guides the development of interventions for high risk populations. Reducing the impact of ongoing risk due to broad environmental factors is one process of protection. For example, consistent parental supervision can reduce the risk of substance abuse for adolescents living in high poverty inner city neighborhoods. Another protective process involves interrupting the connection between major life stressors and their negative outcomes. Children entering middle school face additional risk related to the stress of transitioning to new schools and social systems. Educating parents about the developmental needs of their children so that they can offer more empathy and support help children maintain a sense of equilibrium. Development of self-esteem and self-efficacy can also act as a protective process for children. Programs such as tutoring, that strengthen children’s
relationships with adults and provide opportunities for accomplishment, help modify risk exposure (Fraser, 2004).

Specific to the likelihood of engaging in problem behavior, risk is modified through several different protective mechanisms. If children have strong commitments to religious beliefs or to family or cultural codes, they will be less likely to engage in problem behavior because of this direct personal control. They may be similarly protected if there are strong social controls such as consistent discipline from parents. Many protective factors function through a commitment to an institution, such as a school, or an orientation toward adult society more generally. Other protections are formed through involvement in activities that take the place of, or serve as alternatives to, the problem behavior (Jessor et al., 1995).

**Risks at Middle School Transition**

Students who are unable to successfully negotiate the changes they face during the middle school transition often exhibit a multitude of problems and are at even higher risk of failure in later transitions, such as the move to high school. Students who are academically unsuccessful fail to develop meaningful peer and adult relationships, have decreased self-esteem, and lose interest in education during middle school. They are more likely to drop out, develop anti-social behavioral problems in adolescence, and ultimately have difficulty contributing meaningfully to society as young adults (Eccles, 1999). Risk and protective factors at many ecological levels interact to contribute to the success or failure of students in coping with their shifting roles and responsibilities. After conducting a series of in-depth qualitative inquiries with transitioning students, San Antonio (2004) summarized the influences that seem to affect adjustment: Adjustment was the result of “…community and family cultures and educational and social values; the environments and resources of sending and receiving schools; the social,
cognitive, emotional, and physical needs and resources of students; and the economic conditions of their lives” (p. 249). The interaction between children’s individual resources and their contextual influences determines how successfully they will transition.

Barber and Olsen (2004) measured multiple change factors in students as they transitioned to different grades across middle and high school. They found that during the shift to middle school, students reported more negative changes than they did moving to other grades within the same school. Similarly, students that experienced two school transitions (elementary to middle, and middle to high) had consistently lower GPAs in high school than did those that transitioned only once (directly from a K-8th grade elementary to high school; Crockett, Petersen, Graber, Schulenberg & Ebata, 1989). This earlier finding is supported by a later study where achievement test scores were shown to be lower for students who had multiple transitions (Gronna, 1998), suggesting that negative transition effects may be cumulative (Eccles, 1999).

Changes at Middle School Transition

Some researchers have suggested that understanding the nature of the changes that occur during the middle school transition is the key to appreciating why the process can be difficult for students (Eccles & Midgley, 1989; Eccles, Midgley & Lord, 1991). Children experience several simultaneous changes around the time they enter middle school, and these changes can act as risk factors that can overwhelm students who lack coping and supportive resources. These risk factors include individual level developmental changes in cognitive, social, emotional, and physical functioning, changes in the school ecology including the schools’ physical environment, adult supports and level of competition, and changes in peer groups and social status.
Developmental changes.

The transition to middle school is seen as especially difficult because the timing of the move to a new school environment co-occurs with some of the developmental changes associated with early adolescence (Akos & Galassi, 2004b). While each child must face the challenges created by shifts in educational and social structures, the variability in how well they adapt can be attributed to factors relating to their inter-individual stability, or their level of within-person change (Vanlede, Little & Card, 2006). The pace of children’s physical, emotional, and cognitive development in comparison to their peers can greatly affect their success in negotiating the transition (Eccles, 1999).

Powerful physical, cognitive, and psychological changes are a part of the developmental experience of young adolescents aged 10-14 (Rice & Dolgin, 2005). Many developmental theories indicate that young people typically must master certain steps or stages to move ahead. Although most agree that this is not a lock-step process, understanding that development generally occurs in a progressive fashion can help to illuminate how a life transition such as a major shift in the school environment could interact with developmental processes to create increased risk (Fraser, 2004; Walsh, 2010).

There is significant individual variation in how quickly children move through developmental stages, due to a host of biological, psychological, social, and contextual factors (Fraser, 2004; Zastrow & Kirst-Ashman, 1997). This section will review several pertinent developmental models and discuss how they relate to the middle school transition. A common point is that the typical age of children when they enter grade 6, age 11, closely corresponds with the age at which children move into a more advanced developmental phase (Eccles, 1999).
Cognitive development.

According to Piaget’s (1952) theory of cognitive development, children transitioning from 5th to 6th grade (typically age 11-13) should be completing the period of concrete operations and beginning the period of formal operations. Near the end of concrete operations children are mastering earlier skills and beginning to think more logically. They have experienced a host of cognitive transformations including increased self-awareness, reasoning skills, and empathy and have become capable of solving novel problems. Children in this phase also show increased use of language and capability to appraise situations from multiple points of view (Zastrow & Kirst-Ashman, 1997).

These cognitive abilities provide the framework upon which further cognitive developments (i.e. formal operations) and key social and emotional changes are built (Eccles, 1999). Of concern are those children who do not meet those “normal” developmental milestones because their cognitive development has been hindered in some way by biological, social, or environmental influences. These children face the same increasing expectations as their peers in the new school setting, but are less prepared to meet the challenges. In a school environment this delay can lead to lower achievement that may affect self-esteem and competence as children are increasingly measured against their peers (Langberg et al., 2008). So, even while children are in the tenuous process of building the cognitive skills necessary for their successful development, they are moved into a school setting that may not meet their developmental needs. On the other hand, advanced cognitive development can act as a protective factor in school adjustment (Eccles).
**Social development.**

Erikson (1950) theorized that children in middle childhood (age 7-11) develop a sense of industry and begin to shift from a primarily home environment to increased exposure to the outside world. If they are unable to master new social roles, children can develop a sense of inferiority that leads to social isolation, anger, behavioral problems and a negative attitude towards school. These new social roles are characterized by a growing desire for independence and an increased emphasis on peer relationships, but also a need for close relationships with adults (Eccles, 1999; Eccles & Midgeley, 1989; Rice & Dolgin, 2005). As children transition to middle school they are given more autonomy, but also given more responsibility, the combination of which may create tension. This is especially true when the roles children play in their family cultures do not match the roles they are expected to play in the school setting. This concept of home-school dissonance will be discussed further later in the chapter as an increased risk factor for minority children. Students who have difficulty with their new social roles in the larger, more competitive, and often less supportive middle school setting may be unprepared to begin establishing a healthy identity (Eccles).

**Emotional development.**

Children typically develop emotional competence, or the skills necessary for negotiating the challenges they face in their immediate environments, as they move from childhood to adolescence. These adaptive skills include discerning the emotional states of self and others, capacity for empathy, self-control of emotional response, ability to cope with emotion, and the capacity for emotional self-efficacy (Saarni, 1999). Unlike the narrower construct of emotional intelligence, that does not consider the roles of culture, contextual influences, or moral character (Alegre, 2011), emotional competence is considered to be dependent upon relationship
attachments, cognitive development, the individual’s system of beliefs, and the immediate social and environmental context (Buckley, Storino & Saarni, 2003).

Emotional competence skills, viewed from a strengths-based paradigm, have been shown to be the foundation for positive youth development (Garbarino, 1999; Roth, Brooks-Gunn, Murray & Foster, 1998). Lack of emotional skill development has been shown to increase childhood risk for aggression and bullying, decrease the ability to cope with being bullied, and limit the range of emotional expression, (Shields & Cicchetti, 2001) leading to internalizing and externalizing problems in adolescence (Alegre & Perez, 2009). As children face challenges related to their cognitive, social and physical development and move into a larger and generally different school setting (Eccles, 1999), a high level of emotional development can be a strong protective factor (Garbarino, 1999). On the other hand, since emotional competence is dependent on the context and experiences of children, those lacking positive skills may be at increased risk for a host of personal and interpersonal problems (Buckley et al., 2003).

Several studies have explored the connections between school transition and the deterioration of academic achievement through the change in self-concept. Self-concept can be discussed as a general sense of self, and includes components of self-esteem and mastery. While self-esteem is a judgment of self-worth, mastery is the control over forces affecting one’s life (Pearlin, Menaghan, Lieberman & Mullan, 1980). Self-concept is also domain-specific, or tied to a person’s belief in his ability in a specific area of his life. Academic self-concept is especially susceptible to the changes and influences associated with the transition to middle school (Eccles & Midgeley, 1989; Zanobini & Usai, 2002). As children experience changes in their school environment when they transition to middle school they are increasingly compared to their peers, which often increases the threat to both self-esteem and sense of competence.
Where once they had been confident in their abilities in a mastery based setting, middle school children must now measure up to a competitive level of performance. These decreases in academic self-concept have been correlated with declining academic achievement (Barber & Olsen, 2004; Wampler et al., 2002).

Aspects of the social domains of self-concept including perceptions of relationships with parents, teachers, and peers have also been found to significantly impact academic outcomes. In a study of 434 Italian children, researchers found that many students’ academic motivation decreased pointedly at the beginning of their first year of middle school and did not recover at a one-year follow up. This motivation for school engagement was tied most closely to the level of social support that students said they received from their parents, including affection, reliable alliance, reassurance of worth, instrumental aid, companionship, intimacy, and nurturance. As parents supported their children in these ways, their sense of self-esteem and confidence in their ability was bolstered. Children who had a strong sense of social support from their parents were also more likely to have good school bonding that included positive teacher relationships and perception of the school environment (Schenider, Tomada, Normand, Tonci & de Domini, 2008). While schools and social systems can vary significantly between countries, this Italian finding is similar to those from studies of US children that suggest a link between school success and perception of parent involvement (Burchinal et al., 2008; Gutman & Midgley, 2000).

**Physical development.**

One of the most important changes that occurs in early adolescence is the onset of puberty, and with it the development of secondary sex characteristics. While not all 11 and 12-year-old children are experiencing physical development, those that are may be at increased risk for psychosocial problems through several different pathways. The differential rate of pubertal
timing itself may create additional risk, especially for girls, who vary from the real or perceived norm (Eccles, 1999). For example, early maturation in girls has been significantly associated with problem behavior, including dropping out, sexual risk, and substance abuse, as well as low self-esteem and risk for depression (Carter, Jaccard, Siverman, & Pina, 2009; Eccles & Midgeley, 1989; Rice & Dolgin, 2005; Steinberg, 2008).

Researchers have attempted to explain the connection between early, and less often late, maturation and increased risk with several different theoretical approaches. While Eccles (1999) hypothesized that the pathway to risk for early maturing girls is in part through body image concerns, others have suggested that increased risk stems from the attention early maturing girls receive from older and often deviant male peers (Carter et al., 2009; Caspi & Moffitt, 1991). Carter and colleagues (2009) delineated two hypotheses from the literature that have some empirical support. The stage-termination hypothesis (Petersen & Taylor, 1980) focuses on the idea that early maturing girls have not had time to complete their previous normative developmental tasks before having to face the additional pressures of adolescence. There is also a concern that their supportive others may view them as more mature than they really are (Caspi, 1995). The social deviance hypothesis (Alsaker, 1995) suggests that any difference in pubertal timing, early or late, can increase vulnerability because children may perceive a lack of shared experience with their peers. This theoretical approach may have the most meaning for late-maturing boys (Michael & Eccles, 2003).

In one study of 102 African American adolescent girls attending an urban school, significant effects were found for early pubertal timing (using both age of menarche and development of breasts as independent indicators) on several indicators of psychosocial adjustment. Teachers reported significantly greater deviant behavior and internalizing behavior
in girls who perceived that they had developed breasts earlier than their peers. Teacher reports also indicated however that late maturing African American girls, those who perceived that they had not developed breasts as early as their peers, also showed more internalizing behavior. The authors note that this risk from late maturation seems to be unique to African American girls and may be the result of cultural factors related to lacking the perceived social and status benefits of breast development (Carter et al., 2009).

In another current study, Belsky and his colleagues (Belsky, Steinberg, Houts & Halpern-Felsher, 2010) used an evolutionary theory of socialization to increase understanding of the connection between early influences on pubertal timing and risk behavior in adolescence. They analyzed longitudinal data from 526 female children and found that girls who experienced early harsh parenting (at 54 months) had earlier menarche that in turn increased their sexual risk-taking behavior, mostly in the form of increased sexual experiences. They found however that early menarche did not significantly predict other forms of risk behavior.

Unlike their female peers, boys’ pubertal timing seems to have less impact on psychosocial functioning although a few studies address differences in boy’s maturation. Shelton and van den Bree (2010), found no effects for early or late maturing boys between the quality of parent-child relationships and substance abuse, where early maturing girls’ relationship quality was related to earlier alcohol abuse. A few studies have found detrimental effects for late pubertal timing in boys. Natsuaki and colleagues (Natsuaki, Biehl & Xiaoja, 2009) found that at age 12, late maturing boys and girls were at higher risk for depressed mood. In another study of 73 adolescent boys, those who experienced puberty later were less psychologically mature and had negative feelings about their sexuality (Lindfors et al., 2007).
Perceiving themselves as different from peers may be the most significant concern for young adolescent boys related to their physical development.

**Change in peer groups and social status.**

Social adjustment can make middle school transition even more difficult for some students. As students move to a larger and more diverse peer environment, those who have difficulty forming and maintaining friendships are at increased risk (Eccles, Lord & Buchanan, 1996). Wentzel (2003), used measures of sociometric status to determine the relationship between students’ accepted or rejected status and their level of adjustment problems in middle school. Even after controlling for existing behavioral deficits, she found that peer rejection in 6th grade increased the likelihood of irresponsible behavior in 8th grade, and that rejected students demonstrated less prosocial behavior. Kingery and Erdley (2007) found that peer acceptance and the number and quality of friendships that a student endorsed predicted their social adjustment in terms of loneliness and school involvement. These social adjustment variables have been linked to school achievement (Berndt & Keefe, 1995; Wentzel & Caldwell, 1997).

Kingery and Erdley (2007) also found that earlier peer experiences were predictive of adjustment across the transition to middle school. They followed 146 students from 5th grade to 6th grade and found that nearly half (47%) of the sample did not choose any of the same best friends in middle school that they had chosen in elementary school. Children who had no mutual friends across the transition, compared to those who had at least one, endorsed significantly more loneliness, less school involvement, poorer friendship quality, and lower peer acceptance rates. They also found that peer acceptance, number of friends, and friendship quality successfully predicted loneliness and school involvement across the transition to middle school.
Change in the school ecology.

School changes are characterized by moving to a more complex environment that may mean less school connectedness, less emotional support from teachers, and for minority students, reduced access to adult mentoring and role models (Burchinal et al., 2008; Gutman & Midgeley, 1999). Most often, students from several feeder elementary schools are brought together into one larger middle school. The large and unfamiliar surroundings may be stressful to young teens after mastering the more secure environment of the elementary school. Negotiating aspects of the new physical environment, from learning to open lockers, to trying to find and get to classes within the passing period, to memorizing shifting block schedules, can seem overwhelming to even the most prepared student (Koppang, 2004).

Changes to the physical environment may be accompanied by organizational discontinuity. Students had become familiar with and had built relationships not only with their elementary teachers, but the administrative, counseling, and support staff at the school. In cases where students were receiving enhanced services through a special education or gifted program, or were connected with resources to support emotional or behavioral problems, this shift in providers can create additional challenges (Langberg et al., 2008; Merlone & Moran, 2008; Shirtcliff & Essex, 2008). A pertinent example of this for the current study is related to the structure of how services are coordinated through Communities in Schools (CISR) of Richmond, Virginia.

Organizationally, the Director of Elementary Schools at CISR supervises only the Site Coordinators at each elementary school. Providers contract with each schools’ administration to provide mental and behavioral health services, including day treatment, home visiting, mentoring, and group and individual therapy. The middle school director is responsible for a
separate set of Site Coordinators and may contract services through a completely different set of providers. For students, this means that they not only experience change in their school environment, but also have to build new trusting relationships with their mentors and therapists.

New middle school students have traditionally been faced with increased social and academic competition and a lessening of support in the learning context due to curriculum shifts from elementary school (McEwin, 1996). According to a review by Kumar (2006), many elementary education programs were task oriented, with a focus on goal attainment. Academic success was based on improvement, engagement in challenging activities, and mastery of individualized student goals. Lessons were taught in small groups with an emphasis on close student-teacher relationships. In middle schools, they found that education was generally performance based, with a focus on academic success relative to others. Lessons were taught to the whole class in a more didactic fashion, and more emphasis was placed on letter grades and honor rolls (Kumar, 2006). While this more competitive system can be very rewarding and validating for high performing students after their initial adjustment, students who already have a low self-concept and may not adjust well socially can demonstrate increased loneliness and isolation. Increased competition can also contribute to declines in school identification, a factor in academic motivation, and in increased home-school dissonance (Kumar, 2006). When children receive relatively positive messages relating to their performance in elementary school and at home and they then receive conflicting messages stemming from a comparison to their peers in middle school, it can lead to a drop in general self-confidence (Eccles, 1999), and decreased help-seeking behavior (Marchand & Skinner, 2007). Whether this drop in confidence, or impact on self-esteem, has an effect on school performance is debated in the literature (Baumeister, Campbell, Krueger, & Vohs, 2003).
Amplification of Risk due to Contextual Factors

The individual, peer, school, and family risks that stem from the transition to middle school are amplified by the accumulated influences of broader environmental and social factors. These may include neighborhood structural disadvantages including low-income, high unemployment, poverty, lower availability, quality, and accessibility of community resources, and social disadvantages of eroding social ties, and decreasing informal social controls (Ge, 2002). Attar, Guerra, and Tolan (1994) for example found in their sample of urban minority children that those in highly disadvantaged neighborhoods experienced significantly more stressful life events than those living in less disadvantaged areas. They also found that increased stressful life events were linked to increased externalizing behavior.

At-risk youth in today’s postindustrial urban environments face systemic barriers to successful development, making it even more critical to understand the stress of their psychosocial challenges. These systematized influences include race, class, and gender role barriers that may inhibit developmental progress (Bowman, 2006). In a comprehensive review of development research on 6-14 year old children, Eccles (1999) found that developmental risks were much greater for poor minority children due to increased social pressure and lack of resources.

Two major extra-familial contextual risk factors emerge in studies focusing on the effect of middle school transition; low-income and minority race; often specifically poor African American children. Congruent with an interactional view of risk (Fraser, 2004), studies usually either reported the risks of poverty and minority race together (see Burchinal et al., 2008 and Gutman & Midgeley, 1999 as examples), or reported the effects of minority race while failing to control for income or SES (Kumar, 2006; Wampler et al., 2002). Only a few studies reported the
risk of poverty (Battistich, Solomon, Kim, & Watson, 1995; Grolnick et al., 2000) without minority race. This trend seems to recognize that the impact of each separate risk factor is less than the cumulative and interactional effect (Acevedo-Garcia, McArdle, Osypuk, Lefkowitz & Krimgold, 2007).

Poverty.

Poverty has been negatively associated with student outcomes including academic attitudes and motives, social and personal attitudes and motives, and cognitive and academic performance (Battistich et al., 1995; Grolnick et al, 2000). National data reveal that students from low-income families are 2.4 times more likely to drop out of school than are children from middle-income families, and 10.5 times more likely than students from high-income families (National Center for Education Statistics, 2002). Statistics from the Richmond Public Schools (RPS) district (Fast-facts, n.d.) from where the current sample is drawn show a correlation between low income and dropout rates. Where 74 percent of RPS students receive free or reduced lunch compared with a 33 percent statewide average, and the median income for families is $28,714 compared to $54,169 statewide, they also have a graduation rate of 46 percent compared with a statewide average of 75 percent.

Gutman and Midgeley (2000) followed 257 students from fifth to sixth grade and found that students’ socioeconomic status (SES), of which income is a major factor, moderated several important outcomes. Children in the low-mid SES category had the sharpest declines in self-worth, along with lower reading and math scores than their peers who were in higher SES categories. Grolnick and her colleagues (2000) similarly found in a study of parental involvement at the middle school transition, that several child factors were impacted by SES. SES moderated perceived competence, control understanding (knowing actions are connected to
success and failure), self worth, and reading grades. Children whose parents were in the high SES group had higher test scores than children whose parents were in the mid-low SES group (Grolnick, et al.).

**Race and ethnic minority status.**

Wampler and his colleagues (2002) used both a curve estimation procedure and a Structural Equation Model (SEM) to explore the potential racial/ethnic differences in grade trajectories across multiple points in seventh grade, that was the transition year in that school district. The sample consisted of 473 students; 245 Anglo, 171 Hispanic, and 57 Black, from a Southwestern city, where the students were highly segregated by ethnicity in their schools. The clearest results from the study were the differences in trajectory across categories of race. The curve estimation indicated that across the seventh grade year (transition year), Anglo students showed some initial decline in GPA with recovery by the end of the year. African American students started significantly lower, with an average for boys in the C range compared to Anglo boys in high B range, but showed a relatively flat trajectory. Hispanic students in this sample showed the most problematic pattern, with a steep downward curve and minimal recovery. The SEM showed a similar result, with minority children starting with a lower GPA and either not changing or dropping sharply with little recovery.

Kumar (2006) also suggested that minority status may be an important risk influence through home-school dissonance. Home-school dissonance is a construct that involves a child’s perceptions about the differences between what is valued in the home and what is valued in school. These differences may be physical characteristics, cultural values and beliefs, or behavioral expectations. Parents’ attitudes about handling social problems may differ from those at school for some urban African American families. While families may stress the importance
of standing up for oneself, independence, and not getting pushed around, school bullying programs often encourage students to seek help when handling interpersonal conflict (Espalage, Bosworth & Simon, 2000). The anxiety that results from the discrepancy in these messages and how to cope with it creates dissonance for students. Further anxiety created by the anticipation of rejection due to the perceived differences has been linked to low self-esteem, hopelessness, and anger. The result of the study indicated that students of minority status were more likely to experience home-school dissonance.

**Specific risk for African American children.**

Low-income African American students have been shown to be at a higher risk of failing, completing fewer years of school, and having lower test scores compared to their low income peers from other racial backgrounds (Acevedo-Garcia et al., 2007). Environmental variables such as fewer school resources and decreased academic opportunities are partially to blame. These combine with social pressures such as racism, discrimination, stereotypes and prejudice to create a significant risk disparity (Burchinal et al., 2008; Gutman & Midgeley, 1999; Steele, 1997). For example, Malaspina and Rimm-Kaufman (2008) found that non-white students’ (mostly African American) quantity of discipline infractions increased significantly more than white students’ quantity of discipline infractions as shown by a significant interaction between year and ethnicity from grade 4 to grade 5—transition year to middle school. Akos and Galassi (2004b) similarly found that high performing white students and their parents viewed transition to middle school as relatively easy, while minority children and their parents often expressed considerable difficulty with the transition.

In a recent study (Burchinal et al., 2008) a longitudinal analysis was conducted to identify several contextual factors that influenced the way that risks associated with the transition to
middle school affected child outcomes. Seventy-four African American children were followed from the 4th to 6th grade to determine the interactions between parent and family risk variables, the social risk factor of expectation of racism, and child academic, social and behavioral outcomes. One of the significant findings showed that children who experienced a higher level of social risk due to expected racial discrimination were more susceptible to the negative effects of the transition to middle school. These children had lower math scores and more externalizing problems than their classmates who had less social risk. Having a high expectation of racial discrimination acted as a vulnerability factor and intensified the effects of the risk of transition.

Steele (1997) has written extensively about a related risk termed ‘stereotype threat’ that may affect even the most resilient African American students. This social-psychological threat of being negatively stereotyped stems from personal interactions with pervasive social stereotypes in particular situations. Different from the internalization of stereotypes, or a belief that the stereotype is true, which may occur in large portions of the affected group (for example African American youth), stereotype threat occurs when students are not conforming to the negative stereotype. For example, academically high functioning African American students are not conforming to the historical (and often contemporary) stereotype that African American children do not perform as well in school or on standardized tests as white children. These high performing students are at-risk of conforming to the negative stereotype, which will affect achievement, through two pathways. Students may experience anxiety directly from the stereotype threat that limits their performance in school testing and presentation situations, and the threat may lead to misidentification with school performance. The latter pathway is based on a theoretical assumption that students must adopt school achievement as a part of their identity through a perception that they possess skills, resources and opportunities to achieve, a perception
of belonging in the school setting, and a perceived sense of acceptance and value. In order to maintain academic success over time, students must resist conforming to the limiting stereotype and continue to identify themselves with school-related achievement. Steele and his colleagues have demonstrated the potency of this stereotyped threat in a number of experiments with young African American students and argue that it can be a significant factor in the achievement gap between white and African American students (Steele & Aronson, 2000).

Restrictive cultural factors may also play a significant role in explaining the underachievement of African American students (Steele, 1997). Ryan, Shim, Lampkins-uThando, Keifer and Thompson (2009) summarized the research on school help avoidance for African American and European American adolescents. Help seeking is seen as adaptive and helpful to school adjustment, therefore help avoidance is seen as maladaptive and detrimental. African American girls were significantly more likely than European American girls to maintain independence and attempt to solve problems on their own. While these qualities of independence are adaptive in some contexts, the self-reliance and independence of young African American females may contribute to help avoidance in a classroom setting. European American girls were less likely to develop this strong level of independence that socially permitted them to seek help in school. This disparity is hypothesized to stem from historical influences of racist and economic conditions on gender role development that led African American females to develop both traditionally feminine qualities; “nurturing-communal” roles, as well as traditionally masculine “independent-agentic” roles.

**Role of Family Functioning**

Healthy family functioning is likely to decrease the risk of poor academic adjustment as children experience increased support and stability in the inward-most layer of their ecology
Various aspects of healthy family functioning have been empirically established as protective factors for children adjusting to middle school. In the review of literature later in this chapter, studies targeting parenting and family behavior variables suggest that if children are supported by families who function in healthy ways, their risk for poor academic adjustment during the transition to middle school may be mitigated. Some of the family system variables that have been tested as protective factors during adjustment to middle school include several aspects of parent involvement (Duchesne, Ratelle, Poitras & Drouin, 2009), parent expectations (Reynolds, 1998), positive parenting (Burchinal et al., 2008), parental warmth (Olson, Sprenkle & Russell, 1979), low parental strain (Aikens & Barbarin, 2008), autonomy support (Loeber et al. 2007), attachment (Duchesne et al., 2009), communication (Olson, 2000), problem solving (Akos, 2005), nurturant-involved parenting style (Ge, Brody, Conger, Simons & Murry, 2002), and supervision and acceptance (Kurdek, Fine & Sinclair, 1995). While all of these variables are related to family functioning, they are drawn from multiple literatures and involve many aspects of family and parenting. A clearly defined model of family functioning is needed to guide intervention development work.

**Circumplex Model of Family Functioning**

Olson and his colleagues first published the theoretical foundation for the Circumplex Model in 1979 (Olson et al.). The model, designed to guide empirical study and clinical assessment with families, combined the dimensions of cohesion and adaptability to yield 16 unique types of marital and family systems. They believed that family functioning could be captured by measuring the balance of cohesion, the balance of adaptability, and the interaction between them. Since that time, Olson and other researchers have created a large base of support for the empirical significance of the adaptability (later changed to flexibility) and cohesion
dimensions as well as the overall model (Olson, 2000; Olson, 2010; Olson, Gorall & Tiesel, 2007). The FACES-IV instrument for measuring family functioning according to these dimensions was published in 2010 (Olson) and contains additional scales of communication and family satisfaction. The Circumplex model was attractive as a guide for this study involving family support during the middle school transition due to its parallel with the themes of parent involvement and increased autonomy that are emphasized in the literature (Duchesne et al., 2009; Loeber et al., 2007). These connections are clarified in the following sections.

**Family cohesion.**

Family cohesion is an important component of family functioning and can be defined as the emotional bond that holds family members together. The strength of this emotional bond is related to the degree of individual autonomy a person experiences within the family system. Cohesion includes factors of emotional bonding, individual independence, boundaries, coalitions, time, space, outside social contacts, decision-making, interests, and recreation within a family system (Olson, 2010).

Family cohesion falls along a continuum that runs from disengaged (extremely low/unbalanced cohesion), to balanced cohesion (moderate level of cohesion), to enmeshment (extremely high/unbalanced cohesion). Finding a balance in family cohesion represents the struggle to find equilibrium between separateness and togetherness. Significant research by Olson and his colleagues has demonstrated that the goal of family cohesion should be increased balance in the level of autonomy, rather than simply to increase cohesion. (Olson, 2000; Olson, 2010; Olson et al., 2007). Low family cohesion is problematic because as family members disengage from each other, the level of support available to individuals is decreased. Family support that stems from high quality bonding has been shown to protect against ecological risk.
(Burchinal et al., 2008; Duchesne et al., 2009). On the other side of the balance, families with extremely high levels of cohesion are considered to be enmeshed. Enmeshed relationships within the family system are characterized by over-identification with the family and lack of individual autonomy. Extremely high levels of cohesion in parent-child relationships can stifle developmental progress (Olson, 2010). Training parents to grant more autonomy to their children and intrude less on their problem solving processes may reduce anxiety in some elementary and middle school children (Wood, Piacentini, Southam-Gerow, Chu & Sigman, 2006).

Parents who are engaged with their children and support their growing child’s autonomy by providing increased opportunities to exert self-control and participate in decision-making (translating to more balanced cohesion in the family structure) encourage healthy development (Olson, 2000). Higher levels of autonomy support from parents for middle school children has been tied to greater self-reliance, self-esteem, and satisfaction with school (Elias et al., 2007; Grolnick et al., 2000). When cohesion is balanced, families cope better with situational stress and developmental change (Olson et al., 2007).

**Family flexibility.**

Family flexibility is another important construct that helps to determine overall family functioning. Flexibility describes the quality and expression of leadership and organization within a family. Whereas cohesion is the emotional bonding between family members, flexibility deals with family structure, the balance between maintaining stability and allowing change. Flexibility is the amount of change allowed in families’ role relationships and relationship rules, and the level of accepted negotiation within the family. Leadership, including control and discipline, negotiating styles, role relationships, and relationship rules contribute to
the level of flexibility present within a family system. As with family cohesiveness, family flexibility is assessed on a continuum, with the ideal being a balance. Extremely high flexibility in a family’s structure may be considered chaotic, and is characterized by low consistency, poor boundaries, and the absence of a strong parental subsystem where decisions are made by parents. Families with elevated flexibility often make decisions impulsively and demonstrate erratic behavior. The inability to organize and apply consistent efforts toward problem solving interferes with healthy functioning. Risks associated with social and environmental pressures can be exacerbated by extreme flexibility, leading to long periods of crisis (Olson, 2000).

On the opposite end of the continuum, extremely low flexibility, or rigidity, is characterized by parents who are controlling and lack adjustment to child and family development. Roles that were assigned to family members, such as caregiver, provider, scapegoat, etc., that were functional during one phase of development are maintained despite changes to the family circumstances. As an example, children growing into early adolescence begin to assert increasing levels of independence from the family. In a rigid family structure, their attempts to participate in decision-making, to question family rules, or to play a new family role would be seen as rebellion and met with strict disciplinary measures meant to keep them in their place. Harsh and controlling parenting would lead to increased conflict around child development that often contributes to problem behaviors (Eccles, 1999; Lord, Eccles & McCarthy, 1994). Families who develop behavioral and coping patterns at one stage of life, but fail to modify those strategies to handle new challenges demonstrate poor levels of functioning.

Although families can be functional at a variety of levels of flexibility, finding a balance is healthier than operating at either extreme. Families who fall into the categories of “structured,” or “flexible” on the flexibility continuum (as measured by the FACES IV)
demonstrate democratic decision-making, open negotiation, and fluid role change when necessary. According to Olson (2000), the “ability to change when appropriate distinguishes functional couples and families from dysfunctional ones” (Olson, p.149).

**Communication.**

Olson and Barnes (n.d.) define family communication as “the act of making information, ideas, thoughts and feelings known among members of a family unit,” therefore communication is determined to be either poor or effective based on the quantity and quality of exchanges between family members. Positive communication skills allow family members to effectively share and negotiate their changing needs and desires related to cohesion and flexibility (Olson, n.d.). Negative communication messages, such as criticism, sarcasm, and inattention, decrease the sharing of feelings between family members (Devito, 2009). Within the Circumplex model, communication is considered the “facilitating dimension” of family functioning (Olson, 2010, p.149). Movement toward balance, or improved functioning, on the cohesion and flexibility continua relies on family communication. Balanced families, for instance, tend to have very good communication, while unbalanced family systems show more communication deficits (Olson).

Olson (2010) has suggested that the quality of communication at the overall family level (as opposed to the communication between two individuals) can be assessed in the categories of listening, speaking, self-disclosure, clarity, continuity tracking, and respect and regard. These categories imply that good communication within a family includes not only behavioral skills, such as speaking and active listening through clarification and yielding attention, but also the attitude and meaning behind the messages (Olson). Parents who engage in conversation with their children about daily events, including stories of success and struggle for instance,
demonstrate interest and involvement in their children’s lives and establish positive patterns of communication. Families that develop such patterns of open exchange will be better equipped to negotiate ongoing developmental and systemic changes and function in a healthier manner.

**Family Protective Factors**

**Positive parenting.**

Positive parenting involves both parental involvement and autonomy support (Grolnick et al., 2000), and is influenced by the style of parenting and the interaction patterns that are established. Parental involvement can occur at multiple levels, and includes both direct and indirect influences. Parents engage in autonomy support when they respond appropriately to the developmental needs of their children and encourage them to be increasingly motivated by internal deterrence. Parent involvement and autonomy support are discussed in more detail below.

Parent involvement can change distinctively from elementary to middle school, with parents typically becoming less involved and teachers communicating less with families (Elias et al., 2007; Deslandes, 2003; Grolnick et al., 2000; Stevens & Patel, 2009). Cooper, Lindsay and Nye (2000) describe this general shift in parent involvement from elementary school to middle school as relating to the level of autonomy granted the student. Parents of elementary school student were more directly involved in providing homework help and supervising homework time, while parents of older students allowed their children more autonomy, focusing efforts on providing an environment where students could complete homework independently. In higher grades (i.e. high school), increased autonomy support was positively related to good grades, standardized test scores, and homework completion, and seems to be a necessary component of development.
Research results imply that students who are doing well can benefit from continued encouragement to be autonomous learners, but leaves to question how to help those that may not be as well developed. Elementary students clearly need more direct support from parents, and high school students need to be encouraged to complete tasks autonomously, however students in the middle grades may need something of a hybrid approach to address their individual level of development. The research by Xu and Corno (2003) suggests that in middle school, adolescents are more autonomous and take on more responsibility but still benefit from clear expectations on how to arrange their environment and how to cope with difficulties and distractions. Children also have varying levels of parenting support related to demographic factors. One study found that parents who were poor provided less support for child autonomy; were more likely to interfere with their children during homework time, and less likely to be able to provide a conducive environment for study (Cooper et al., 2000). Another study found that parental school involvement decreased more for girls than boys as mothers maintained their level of autonomy support for their daughters, or expected them to function at a higher developmental level (Gutman & Midgeley, 2000).

Burchinal and colleagues (2008), in a study of seventy four African American families, found that where the transition to middle school increased the association between social risks and negative psychosocial outcomes (decreased academic efficacy and performance, decreased prosocial behavior, externalizing problems), positive parenting acted as both a promotive (better academic adjustment in all samples) and protective (mediated between social risk and problem behavior in high-risk samples) factor. Parenting acted as a buffer by increasing children’s motivational resources. Aikens and Barbarin (2008) similarly found that the interaction between socioeconomic status (SES) and initial reading competence is mediated by several home factors,
including parental school involvement, parental warmth, and parental strain. They suggest that while SES is relatively challenging to modify, interventions that focus on these family mediators can be very effective.

Due to their high risk exposure, low income African American children need parents who are attentive and supportive in order to succeed as they transition to middle school (Burchinal et al., 2008). It is difficult to compensate for a low level of parental support. Even peer friendships that are of increasing importance to early adolescents fail to make up for a lack of involvement by a parent or other positive adult (Gutman & Midgeley, 1999; Schneider et al., 2008). One study found that sixth grade students whose families functioned better and who had more adults in their social support network had higher average grades than their peers (Wampler et al., 2002). Both of these supports help to provide stability at a time characterized by multiple changes. Although not all adults in the support network need to be family related, those that fill professional roles, such as teachers and coaches may not be as consistent as family members (Sharpe, 2008). For African Americans, sources of support often include extended family, or ‘fictive kin’ who are those considered to be family. An African American participant quoted in the report of a study by Sharpe (p. 206) stated: “There is a very strong concept of the extended family and so whether that extended family is immediate family, blood family, family through gangs, or family through friends, we will seek that out…” Stewart (2007) notes that families are defined differently across cultural groups. In her ethnographic study of urban African American families, she found a strong commitment to extended family and a reliance on fictive kin relationships that offered family-like support. These additional members were said to have been “grafted” into families most often through romantic relationships and to fill gaps in support systems following moving to new communities (p. 172).
**Parent involvement.**

Parents can influence their children’s academic success through direct or indirect involvement. Direct parent involvement includes attempts to help children increase academic skills through providing more exposure to learning materials and opportunities to practice. This might involve homework help, providing stimulating educational materials in the home, or signing up for after school or summer programs. Indirectly, parents can enhance academic motivation through helping children learn to self-regulate (intrinsic motivation), connect their actions to outcomes, and experience success in other areas of life (Grolnick, et al., 2000). Cooper et al. (2000) surveyed 709 students, parents, and teachers about the ways that parents can effectively help with homework. They found that responses included both direct involvement as well as indirect involvement through autonomy support and elimination of distractions.

The findings from a study by Duchesne and her colleagues (2009) illustrated the importance of the parent-child relationship to 636 Canadian adolescents (mean 11.8 years). Believing that the influence of parental involvement begins in early childhood, they based their research on attachment theory, which posits that secure attachment to parents, or the confidence a child feels in his/her relationship with his/her primary caretaker, provides a model for other future relationships. A secure attachment allows him/her to explore the environment and work to overcome challenges (Bowlby, 1988). They found that a secure attachment with the mother predicted fewer symptoms of anxiety and further, it decreased the level of school worry for the child about transitioning to middle school (Duchesne et al., 2009).

Akos et al. (2005) argued that continued parent involvement is important to academic success after a child enters middle school, showing lower rates of dropout, higher achievement, and increased adjustment. They also found that if parents remained involved with their children
through the transition to middle school, they were significantly more likely to continue involvement after the high school transition. This finding has important implications for addressing dropout. Parent involvement seemed to help shift the negative trajectory of children’s academic adjustment.

In a relatively small study ($N=60$) of families of 7th grade students (Grolnick et al., 2000), parent involvement was found to generally buffer against declines in reading grades, perceived competence, learning problems, acting out, grades and test performance, and was associated with increases in behavioral adjustment, self-reliance, and satisfaction with school. In a more specific analysis, researchers identified and tested the effect of three types of parental resources including school involvement (attending activities and events), cognitive involvement (engaging in intellectually stimulating events such as library visits and discussing current events), and personal involvement (staying connected with children’s lives and knowing what is going on with them). Cognitive involvement, that can be a link between home and school, increased children’s confidence and protected them from declines in cognitive outcomes like grades and test scores. Personal involvement also helped children to maintain their reading scores, and contributed to the support and encouragement necessary for them to meet the demands of their new school environment. Parents’ involvement with the school was actually related to increased behavioral problems. The authors hypothesized that this may be due to the nature of the school involvement, where parents have increased contact with the school for student behavioral problems, or that their involvement is seen by their children as overbearing (Grolnick et al.).

**Autonomy support.**

Developmentally, children entering early adolescence are beginning to assert independence; confirming their own sense of industry and developing a unique identity (Erikson,
As they make the gradual transition from childhood to adolescence, they shift from externally imposed controls to more mature internal controls. Rather than relying solely on parents, teachers, and other peers and adults for behavioral inhibition, early adolescents begin to rely on their own sense of morality (Loeber et al., 2007). Families that adapt to the changing developmental needs of children with little conflict, such as providing increased opportunities to exert self-control and participate in family decision making, help children adjust to their environments and increase self-reliance, self-esteem, and satisfaction with school (Elias et al., 2007; Grolnick et al., 2000; Lord et al., 1994). Olson (2000), in his Circumplex Model of Family Functioning argued that children’s autonomy is supported both by a moderate level of family cohesion and a moderate level of family flexibility.

Children are at increased risk when their families do not solve problems well, are unsupportive, or communicate poorly (Akos et al., 2005, Olson, 2000). On the other hand, they experience improved academic adjustment and independence when their families function better and are responsive to their developmental needs (Burchinal et al., 2008; Grolnick et al., 2000; Wampler et al., 2002). Intervention designed to support a student’s transition to middle school then, could target elements of family functioning, education about early adolescent development, and patterns of interaction that allow for increased autonomy.

**Parenting style.**

Parents often need to re-negotiate the power structure in their home as children develop more autonomy (Olson et al., 2007). After reviewing the developmental literature written about children ages 6 to 14, Eccles (1999) suggests that parents should try to adjust to their changing needs with minimal conflict by avoiding power struggles and harsh practices. Parenting style should give opportunities for autonomy and participation, avoiding either coercion or apathy.
Kochanska and Murray (2000) assert that children are more likely to develop a healthy conscience when parents focus on the positive qualities of their relationship rather than relying on punishment-related practices.

Lord et al. (1994) found that a parenting style that offered children increased opportunity for personal autonomy and decision-making versus a coercive, authoritative, or inattentive style led to significant school-related benefits. Children whose parents used these more helpful practices showed increases in school adjustment, self-esteem, and mastery orientation toward problem solving in the classroom. Children who believed that their parents were attuned to their developmental needs, by having a more democratic decision-making style, also showed increased self-esteem and confidence, and better adjustment to junior high.

Ge and his colleagues (Ge et al., 2002) found in a large sample of 867 urban African American 10-12 year olds that parenting practices can influence academic adjustment by intensifying the negative effects of early maturation. They delineated two important parenting styles to use as variables that each combined several practices. The first was ‘nurturant-involved’ that included scales of caregiver warmth, inductive reasoning and communication, and monitoring. The second parenting style they measured was ‘harsh-inconsistent,’ that combined scales of caregiver hostility, use of harsh discipline, and inconsistency in the use of discipline. Results of the study showed that harsh-inconsistent parenting practices increased the likelihood of early maturation leading to externalizing behavior and affiliation with deviant peers and that when parents were supportive and involved (nurturant-involved) the risks from early maturation were significantly decreased.

In a study of 641 German adolescents, Juang and Silbereisen (2002) also found that a parenting style similar to that framed as ‘nurturant-involved,’ impacted academic outcomes by
influencing capability beliefs. Engaging in school-related discussions, demonstrating warmth, being involved at the school, and having high achievement expectations positively correlated with higher capability beliefs in 6th grade students, and higher grades in 9th grade. This positive connection with parents around school-related issues seems to instill in children a higher level of confidence about being able to succeed. Parenting children as they enter into early adolescence requires flexibility and balance, and could be compared to walking a tight rope. Leaning too far in any one direction might upset the balance with potentially disastrous outcomes. As an example, so far in this review of family protective factors it has been suggested that parents maintain involvement with their children at home and at school, but not get so involved that they interfere with autonomy development. Parents should also maintain consistency in their family structure, but provide enough flexibility for child growth. These balances can be even more difficult when a child is having discipline problems, is delayed in their development, or when parents have limited resources (Olson et al., 1979).

Kurdek et al. (1995) suggested four areas of family climate that can be helpful when framing the aspects of parenting that may best protect children from risk as they transition to middle school. These areas include;

1. Supervision- control and monitoring
2. Acceptance- warmth and support
3. Autonomy granting- making decisions and self-sufficiency
4. Conflict- level of fighting and discord

Research findings suggest that supervision, though very important to maintaining involvement with children and providing consistent structure, should be balanced with efforts to allow appropriate opportunities for building autonomy. An example could be allowing children
to choose which part of the afternoon or evening they will use for homework time. This choice presupposes that the homework will get done, but allows the child the flexibility to work homework time around other needs and wants. Balance in school involvement might include attending conferences with teachers without monitoring the daily scores of the student without a necessary trigger.

**Family structure.**

Successful negotiation of academic and other transitions for adolescents can be influenced by family structure. Experiencing parents’ divorce, for instance, has been shown to negatively affect school engagement, although this is more salient for boys than for girls. Hines (2007) found that children from divorced families were less well adjusted after transition to middle school than those from non-divorced families. In another study, students who experienced more parent transitions from divorce, separation, or custody change had lower middle school grades, did poorer on achievement scores, and exhibited more disruptive behavior (Kurdek et al., 1995).

Barrett and Turner (2005) found a strong connection between family structure and child mental health outcomes. In their sample of 1,751 young adults, they found that growing up in a single parent home significantly increased risk for depression compared to growing up in a two-parent family. This was especially true in low-income families, who were found to have less resources and experience more stressful events. In a study of single African American mothers (Shook, Jones, Forehand, Dorsey & Brody, 2010), investigators found that the risk to both mothers and children was modified by the quality of co-parenting relationships including those with boyfriends, grandmothers, etc. When the co-parent relationship contained a high level of conflict, mothers were less likely to monitor, engage with, or show warmth toward their children.
and children had more internalizing and externalizing behavior problems. When the co-parenting relationship was defined by support, mothers monitored their children more and children developed higher levels of social and cognitive competence. Disrupted family structure and single parenting may be important risk influences for developing children; however, these risks are lessened when families have more financial resources and when supportive co-parenting relationships exist.

**Conceptual Model**

Developing a conceptual model that demonstrates how risk and protective factors function with children and their families is an important aspect of the research process (Fraser et al., 2009). The conceptual model is based on research-informed theory, empirical research, and practice expertise and provides an outline for examining the interaction among variables. The model in Figure 1 depicts the risk and protective influences that children may experience as they transition to middle school. Children experience changes in both micro and meso-system layers of their social ecology during this transition including developmental changes (cognitive, social, emotional, and physical), changes to their school ecology, and changes in their peer groups and social status. These changes increase the risk of poor academic adjustment that may have long-term impacts on school dropout and other adolescent problem behaviors. Risk for poor academic adjustment is amplified by contextual factors such as poverty and social pressure associated with minority race. Poverty, in and of itself, does not create poor academic adjustment, but stresses associated lack of resources may interfere with the process of adjustment. These combined risks have been shown to be buffered in resilient children by healthy family functioning in the general areas of cohesion, flexibility, and communication (Olson, 2010).
Figure 1: Risk and Resilience Model for Middle School Transition

Risk Influences

Developmental Changes:
- Cognitive
- Social
- Emotional
- Physical

Changes in School Ecology:
- Physical Environment
- Adult Supports
- Competition

Changes in Peers:
- Peer groups
- Social status

Protective Influence

Healthy Family Functioning

Positive Outcomes

Long-Term:
- Graduation
- Pro-social Behavior
- Lowered Risk

Short-Term:
Academic Adjustment

Contextual Risks

- Poverty & Lack of Resources
- Social Pressure as Racial Minority

Changes in:
- Peer groups
- Social status
- Physical Environment
- Adult Supports
- Competition
- Cognitive
- Social
- Emotional
- Physical

Developmental Changes:

Healthy Family Functioning

Long-Term:

Graduation
Pro-social Behavior
Lowered Risk

Short-Term:
Academic Adjustment

Contextual Risks

- Poverty & Lack of Resources
- Social Pressure as Racial Minority
Multiple Family Group Intervention

Based on prior research (Abell et al., in press; Davey, 2004) and experience, a brief multiple-family group (MFG) intervention delivered as a weekend retreat in a natural setting is suggested and pilot tested in this study as a way to support the families of some of the high risk children in the Richmond Public Schools. A brief history that has led up to the current model development is given, along with an outline of the intervention components. A more detailed description of the significant adaptations of the weekend retreat model used by Davey and Abell (2004) is given in Chapter 3 in the model development section.

Development

The development of the MFG style of intervention spans over 40 years in the United States and has been successfully tested with a wide variety of populations including those with serious psychiatric problems and medical problems. Dennison (2005) proposed using MFG interventions with adolescents that are at high-risk for behavioral problems. Multiple Family Groups (MFG) have also been proposed as a responsive intervention modality for low income, minority children and families given their increased risk for a number of psychosocial problems (Aponte, Zarski, Bixenstene & Cibik, 1991; Boyd-Franklin, 1993; Foley, 1982; McKay, Gonzales, Stone, Ryland, & Kohner, 1995).

MFG theory.

Theoretically, MFG intervention draws both from family therapy and group therapy. It combines elements of structural, systems, and strategic family theories with social learning theory and social group work theory. Although MFG is an eclectic approach and a concrete definition has not been agreed upon, typical MFGs include two or more families, with members of at least two generations present in most of the sessions. A key aspect of MFG is that in
addition to intra-familial interaction, families are strongly encouraged to relate to and network with other families based upon common struggles or concerns. The family focus sets MFG apart from other group modalities, such as a parenting group where both parents may be in attendance (Dennison, 2005).

While early MFG developmental studies (reviewed by Strelnick, 1977) were grounded with specific therapeutic goals, such as improving communication, clarifying family roles, increasing the social network, and meeting psychoeducational goals, some suggest that in more contemporary MFG studies goals are too general (Dennison, 2005). Similarly, when goals are stated, they vary to meet the needs of the specific population of interest, which while appropriate, does not contribute to clarifying what it is about the MFG process that is curative in itself. Without a connected understanding of the features of treatment, MFG will continue to lack clarity as a unique form of treatment (Dennison).

Based on a review of literature and previous experimentation with MFG intervention, the assumption in this study is that family functioning (balanced cohesion, balanced flexibility, and positive communication; Olson, 2010) is facilitated in MFGs by therapeutic factors in the group process, such as those outlined by Yalom (1995). These key factors were summarized by Reid (1996, p.41-42):

- Individuals are instilled with hope as they observe the growth and progress of other group members.
- Individuals recognize that they are not alone in their struggles as they realize that others have similar, universal, life experiences.
- Group members benefit from the information imparted by leaders through psychoeducation or other instruction.
• Group members feel a sense of altruism as they support fellow group members with reassurance, suggestions, and insights.

• Individuals learn about their relationships with their families of origin through their relational experiences with group leaders and members; termed “corrective recapitulation of the primary family group.”

• Group members develop social skills through attention to process, resolving conflicts, and solving problems.

• Individuals imitative the behavior of other group members with similar problems to apply the insights to their own lives.

• Group members develop self-knowledge through their interpersonal interactions.

• Group members experience support and acceptance from group cohesiveness.

• Individuals engage in catharsis as they express emotion in a positive environment.

• Individuals feel the support of group members as they struggle with the realities of their existence such as death, isolation, freedom and meaning; existential factors.

Yalom further (1995) proposed that a therapeutic group can act as a microcosm of a person’s social sphere. As group members engage with one another, their interactions tend to mimic the social interactions they have outside of the group. This dynamic allows the group leader to work with members of the group to learn and practice different styles of interaction within the safety of the group setting. In an MFG environment, the concept of microcosm encourages the leader to view the family interactions that are demonstrated within the group as typical of the families’ general interaction patterns. The group leader also has some hope that when families demonstrate within-group changes, those changes are likely to generalize to other settings. Although this type of within-group change is often encouraged in family theory as well
(Walsh, 2010), the social learning aspect of the group can support and enhance movement toward therapeutic goals.

Typically, MFGs involve four to five families, with the total size of the group ranging from 10 to 22 members (McKay et al., 1995). Following the traditions of both group and family therapies, MFGs most often meet on a regular weekly or bi-weekly schedule. MFGs can be open or closed, and can be short or long term.

**MFG as a weekend retreat.**

A unique MFG format that has been developed and pilot tested with shelter families over the last several years involves bringing families together for an intensive short-term weekend retreat rather than the typical weekly group. Davey (2004) reported that the weekend retreat MFG format was first developed as a response to concerns about treatment attrition that occurs in regular weekly therapeutic meetings due to the transitory nature of the shelter families that were being targeted. Few families actually received the full dose of treatment and consistency was poor. While the content of the actual group sessions remained relatively consistent with other weekly MFGs, the new format allowed families to be brought together on a single occasion to participate in the full intervention. In this way, obstacles that may interfere with weekly participation, such as childcare and transportation were overcome.

**Weekend retreat format.**

The MFG weekend retreat intervention is designed to take place at a semi-outdoor retreat or camp facility over a 24-hour period. Participant families are transported to the camp, stay overnight in cabins, share meals, and participate in organized and family free time activities in the natural setting. Through a series of planned groups, trained staff encourage the families to
learn important skills to enhance family functioning interact and build relationships with other families, and spend time renewing family bonds.

The MFG intervention protocol focuses on two central themes; “strengthening families” and “families having fun together,” and is structured around five main components: 1) building trust 2) effective communication 3) stress and coping 4) family organization and 5) unity and connection. Each component is addressed through a two-part multiple family group. During the didactic portion of each session, component “a”, parents and children are separately (according to developmental level) presented with information meant to help them meet a specific family objective. For parents, the psycho-educational aspect of the group is meant to increase parenting skills (i.e., communication, decision-making, providing support, etc.) and abilities. For children, parallel concepts of healthy functioning are introduced through experiential activities to encourage positive social and emotional development.

After each education session, families are reunited for an interactional activity, component “b” that is designed to help the family reinforce the new skills through practice. Activities are either metaphorical or reality based and provide families the opportunity for cognitive and behavioral rehearsal (Walsh, 2010). Surrounding the component sessions are additional activities, exercises, and family-choice opportunities that are geared toward building memories through fun family recreation. Ultimately, the goal of the intervention is to use the main treatment components to improve family functioning by encouraging positive communication, balanced levels of cohesion, and balanced levels of flexibility.

Additional benefits of the intervention.

Since the first MFG weekend retreat format was implemented, other significant benefits beyond those specifically targeted by the key components seem to have emerged as a
consequence of the model. First, the retreat format of the MFG required a change in venue from a traditional group room setting to some type of retreat center. Retreats were held in more serene settings often surrounded by nature. This aspect by itself taps into the benefits of spending time in a less crowded more wilderness-type setting. Kaplan and Kaplan (1989) found in several studies of outdoor intervention that the concept of “being away”, or having some physical distance from daily hassles, and the concept of “soft fascination” or the ability to casually focus on some non-stressful stimulus such as a setting sun or running river, can significantly reduce the mental fatigue that builds up in people’s lives.

Another related benefit associated with shifting the MFG to a retreat format was that one of the key aspects of the model became “having fun” as a family (Davey & Abell, 2004). Using family recreation as a therapeutic tool has gathered support over the years and has a small, but significant base of literature. In the form of a “fun-filled” retreat, the intervention not only provides the benefit of group session content, but it also taps the documented benefits of shared family recreation (Hawks, 1991; Hill, 1988; Orthner, Barnett-Morris & Mancini, 1994). One significant benefit of shared family recreation is that it provides a more open format for interacting, communicating, and problem solving (Nelson, Capple, & Adkins, 1995). This is especially true when the activity is conducted outdoors (Holman and Epperson, 1984). Wells and her colleagues (Wells, Widmer & McCoy, 2004), argued that changing families’ beliefs about their ability to solve problems and communicate in a structured recreational setting would generalize to other areas of family functioning. They found that families who participated together in a variety of challenging recreational experiences showed a significant increase in their conflict resolution efficacy.
The increased intensity of the intervention, or the ability to spend a large amount of time together as a family and with other families, seems to have a positive effect on outcomes. During interviews of staff members previously involved in implementing MFG weekend retreats, anecdotal reports indicated that families seemed to most enjoy staying up late visiting with one another, and spending time in interactional fun activities together. This sentiment was reinforced by the results of an evaluative survey collected at the end of the retreat; where family members indicated that they had enjoyed spending time together (Davey & Abell, 2004).

Chapter 2 Summary

An ecological perspective and a risk and resilience framework help to organize the host of risk and protective influences that may affect early adolescent children. Relying on this structure, changes that children experience at the middle school transition can be understood as additional risk factors for poor academic adjustment. Many family level factors relating to healthy family functioning, including balanced cohesion, balanced flexibility, and communication, have been shown to modify these risks and act as protective factors for developing children. An MFG weekend retreat intervention may help to promote the functioning of families who are supporting children that are transitioning to middle school. The following chapter comprises the model development methodology used to assess the feasibility and efficacy of the proposed MFG intervention.
Chapter 3: Methodology

Research Design: Model Development

Model development, as one aspect of intervention research, has become important to social work and other human service areas that seek to find and use research methods that produce practical results. At the core of social work practice is the creed of ‘making a difference,’ that often leads practitioners and researchers to engage in developing or modifying intervention strategies to maximize their impact with clients. Policy makers, administrators, and practitioners rely on this research that contributes to real problem solving (Rothman & Thomas, 1994). Intervention research is the process through which practice knowledge, empirical theory, and research findings are brought together to inform a new or adapted program (Fraser et al., 2009).

Intervention research can be seen as three parallel, but separate important endeavors, including Intervention Knowledge Development, Knowledge Utilization, and Intervention Design and Development. Knowledge Development uses traditional social science research methods to produce knowledge about human behavior and contributes to theory, empirical generalization, and concepts. Knowledge Utilization research applies knowledge of human behavior to specific populations or problems to shape understanding and practice. Design and Development is aimed at producing new human service technology such as interventions or programs. Design and Development is often the culminating aspect of the intervention research
process; drawing on general knowledge of human behavior and theory relevant to a target population to resolve an identified problem (Rothman & Thomas, 1994).

**Design and Development Phases**

Design and Development approaches are varied, however Rothman and Thomas (1994) have outlined the similarities of these methods in an integrative model that has been used as a guide for model development research for several years (ex. Caspi, 1997; Fassler, 2008; Naleppa, 1995). Their six main phases for Design and Development are (a) problem analysis and project planning, including client identification, analysis of problems, and goal setting, (b) information gathering and synthesis of literature and practice experience, (c) design of the intervention including adaptation, (d) early development and procedures used for pilot testing, including research design, training, and sampling, (e) evaluation and advanced development, including efficacy testing, and (f) dissemination. Each phase is further broken down into specific research activities that contribute to fulfilling each piece of the development process.

The comprehensive model development process begins with activities such as identifying and analyzing key problems and determining feasibility, and moves through the phases to an eventual systematic evaluation and dissemination. Rothman and Thomas (1994) acknowledge that the overall process may not be perfectly linear; however it provides a systematic and deliberate method for solving real world, practical problems. This approach to research meshes well with a current push for community engagement in social work and by universities generally by providing a model that researchers can follow to contribute directly to community identified problems. Collaboration with organizations that already serve community members is especially important when designing and implementing evidence-based interventions for minority populations because of challenges with access and mistrust (Dobransky-Fasiska et al., 2009).
It is important to note that Fraser and colleagues (Fraser et al., 2009), in a much more recent publication, have built on the Rothman and Thomas outline to delineate a five step process for creating evidence-based social programs. After a brief comparison of the older and newer models, Fraser’s efforts seem to shift the focus of the intervention research process from early development to formal testing. For example, they condense activities from the “problem analysis and project planning” and “information gathering and synthesis” phases into their first step of “specifying the problem and develop a program theory” (p.37). In their second step they move into completing the initial design and early pilot testing, that had been the third and fourth phases of the previous model. This consolidation allows them to place more emphasis on the later steps that include multiple iterations of formal testing and refining. In the current evidence-based social work practice arena, this stress on multiple efficacy and effectiveness trials matches the increased expectation of rigor required of interventions. As a critique of this model however, the specificity of the earliest procedures for model development are less prominent.

An additional informative model is the “stage model” delineated by Onken, Blaine, and Battjes (1997) for development of new behavioral therapies. Rooted in the process used to develop new medical procedures and pharmacological treatments, the original aim was to guide researchers through challenging early developmental stages in preparation for a large randomized clinical trial (Rounsaville, Carroll & Onken, 2001). The stages in this model have guided some of the funding designations for the National Institute on Drug Abuse (NIDA) and the National Institute on Mental Health (NIMH) in the last decade, where both organizations announced funding for Stage I projects (Carroll & Nuro, 2002).

Similar to the previously mentioned models, the early developmental activities in Stage I consist of writing the initial manual and training programs, testing for feasibility, and measuring
adherence to the manual. Stage II projects move into testing for efficacy in controlled clinical trials and evaluating the active components of the treatment. Stage III involves testing the efficacious treatment for real world effectiveness in less controlled and more diverse treatment settings, and evaluating cost effectiveness (Carroll & Nuro, 2002). Rounsaville et al. (2001) has suggested that Stage I can be further subdivided into parts “a”, therapy development and manual writing, and “b”, pilot testing, noting that a full pilot test may require several smaller test “sessions” to precede it.

An important difference between the Rothman and Thomas Phase model (1994) and the Onken et al. Stage model (1997) is the definition and goal of pilot testing. The pilot test (Stage 1b) in the Stage model is designed specifically to move the behavioral treatment into a Stage II clinical trial and therefore requires a high level of empirical rigor including measuring initial outcomes to show clinically significant improvement, a comparison group, and specifying the likely effect size (Rounsaville et al. 2001). Alternately, in the Phase model the pilot test is more focused on clarifying the process of intervention, as in determining whether the intervention works with the specified population, and may involve several iterations. This feasibility is largely determined through close observation and feedback gathered from the participants rather than from a scaled down quasi-experimental design (Rothman & Thomas, 1994). The activities of the process-oriented pilot test of the Phase model match more closely with Ia of the Stage model. These include testing the treatment on an open series of participants, gathering information from observation and therapist self-monitoring, and adjusting techniques and procedures between sessions (Rothman & Thomas; Rounsaville et al.). In the current study the active testing of the intervention with families will be referred to as a pilot test in line with the
Phase model, acknowledging that not all of the criteria for movement into a clinical trial have been met.

**The Model Development Dissertation**

For the purposes of this dissertation, the phases of the Rothman and Thomas (1994) model allow for an emphasis on the earliest activities of design and development, and are generally consistent with those considered in the first stage of the Onken et al. (1997) model. Following the pattern established by several previous model development dissertations (see Caspi, 1997; Chou, 1992; Donohue, 1996; Fassler, 2008 & Naleppa, 1995) the scope of this study included the first four phases of the design and development process, culminating with pilot testing focused on strengthening the intervention model. The adapted model is presented for further evaluation, as suggested in the steps set forth by Fraser et al. (2009), and Onken et al. (1997). Reid (1979) suggested that dissertation research design in social work focus on systematically collecting data on the processes and initial outcomes of the model rather than on proceeding with a formal trial. The product of an initially developed intervention that is ready for future testing, then, has been recognized as a significant contribution to the knowledge base of social work.

Within each phase of design and development in the Rothman and Thomas (1994) model, several key tasks have been suggested (Fawcett et al., 1994). The fulfillment of each of these will be discussed here to demonstrate the processes that were undertaken specific to this project. Because connecting with community needs through a partnering agency can be challenging and is often overlooked in the research process, it is hoped that this can serve as one example of practical problem-solving.
Design and Development Phases of the Dissertation

Phase I: Problem Analysis and Project Planning

Identifying clients at-risk for a critical problem.

Students who attend public schools in low-income urban neighborhoods have been shown to be more likely to dropout without attaining a high school diploma or GED equivalency (Cataldi et al., 2009). Richmond Public Schools (RPS) is an example of an urban, principally minority (88% African American) district, where most students come from low-income households, live in high poverty neighborhoods, and where school dropout rates continue to be a major administrative priority (Communities in Schools of Richmond, 2008). To understand what type of prevention or intervention programs might be effective in helping to curb the risk for dropout in RPS, VCU engaged in a partnership with Communities in Schools (CISR) of Richmond through the director for elementary schools.

Gaining cooperation from key informants and collaboratively identifying concerns.

Several of the key members of the partnership had worked successfully together before in testing a family weekend retreat program with homeless families, where CISR had facilitated access to some of the families in cooperation with other community agencies. In a series of preliminary discussions, both at VCU and CISR, CISR expressed the need for a program that could enhance family support and parent engagement for their highest risk students transitioning to middle school. CISR was in the preliminary stages of developing a comprehensive means for supporting successful transition; the “signature program” in their strategic plan.

Analyze identified problem.

Drawing on feedback from CISR Site Coordinators in Richmond Public Schools about the lack of parent engagement in the education process, and a preliminary literature review that
had been conducted by CISR for earlier grant funding, the partnership hypothesized that finding a way to increase parent engagement with students as they prepare to enter middle school could help to facilitate school adjustment. Concern about the many changes that children experience during early adolescence and their need for support developed as a theme. A basic theoretical rationale such as this, gathered from practice observations and professional literature is sufficient for justifying a move toward more involved planning activities (Rounsaville et al. 2001).

**Setting goals and objectives.**

Based on the previous success with MFG Weekend Retreats, that had been shown (anecdotally and through preliminary effectiveness outcomes—see Davey & Abell, 2004 and Abell et al., in press) to increase family functioning as a targeted intervention, the partnership decided to modify and then test the program as a targeted preventive intervention with rising 6th graders and their families. Selective, or targeted, preventive interventions (vs. universal programs implemented with an entire at-risk population) focus on specific individuals with greater than average risk for a particular problem with the goal of decreasing risk or enhancing protective factors (Fraser et al., 2009). The goals were to determine if the intervention was feasible to implement with social work intern staff on a limited budget with families from high risk Richmond Public Schools, and to determine if the program would affect family (families’ healthy functioning) and student (academic adjustment during middle school) outcomes. This was supported with the following objectives:

1. Implement the MFG Weekend retreat with a small number of families as a pilot test
2. Gather and analyze data on changes in families’ healthy functioning
3. Gather and analyze data on the academic adjustment of children in 6th grade
4. Gather and analyze informative events to determine treatment fidelity and feasibility
5. Modify the intervention protocol according to data gathered during the pilot test

**Phase II: Information Gathering and Synthesis**

Based on the literature review and theoretical analysis presented in the previous chapter, a conceptual model was established as a guide for this study. Within that model, the improved balance of cohesion and flexibility, along with good communication and high satisfaction in a family system are hypothesized to increase family functioning and buffer against the risks to a child entering middle school. Previous research had already begun to establish that a multiple family group intervention conducted as a weekend retreat could be successful at increasing family functioning. Although some important modification of the intervention protocol was necessary to address the specific needs of middle school transition, an attempt was made to preserve the established functional elements in order to build on previous research. Mullen (1994) suggests that even when interventions have previously been developed, additional design work may be necessary to adapt them to a specific context. The functional elements of the intervention were seen as the core contributors to increasing family functioning; therefore they have been used to address a range of family problems. The specific functional elements of the intervention, as detailed in the previous chapter, were; trust, communication, stress management, decision-making, and spirituality.

**Phase III: Design of the Intervention**

The “Design” phase of the Design and Development process, distinguished from the research design of the pilot test, involves the formulation or clarification of the intervention constructs (Fraser et al., 2009). In this way, the intervention is designed before the procedures are laid out for testing in a study (Mullen, 1994). A clarification of the aspects of innovation, or the new social technology that is being developed, is an important part of this section.
The approach to and elements of design depend upon what technology already exists for addressing the identified problem. If, during the previous tasks of information gathering and synthesis it is determined that a suitable set of constructs or even a well packaged treatment exists, design activities should focus on fitting the intervention to the specified problem or context. Mullen (1994) summarizes that innovation occurs at three levels; origination, adaptation, and borrowing, although all three might exist together.

**Adaptation of the intervention.**

In the current process, since the Multiple Family Group Weekend Retreat intervention already existed in a reasonably well-packaged format (a 2003 version used in Abell, et al., in press), the bulk of the design was on borrowing and then fine-tuning. The intervention package, as with many manualized protocols, was purposefully comprised of principles and functional elements that made it adaptable to a broad range of problems. The novelty of the current design stems from using the information gathered about the challenges associated with middle school transition from literature and observational sources in the community to develop the specific activities for facilitating change in the functional elements of the intervention. In other words, the major design activity in the current study was using information about the specific population and problem area to modify the existing intervention (Fraser et al., 2009).

Adaptation of the manual was completed through three main processes and will be referred to as Steps 1-3 throughout the chapter for clarity. Step 1 of adaptation involved initial changes to the manual by the investigators prior to training the group practitioners (treatment staff for the pilot test) and consisted of new activity suggestions considering the middle school population, the creation of family objectives for each key component, and some structural modifications. Over the course of training, group facilitators were encouraged to further adapt
the intervention by developing specific group activities to meet the family objectives; Step 2. Finally, in Step 3, the structure and activities of the manual were modified to integrate suggestions that were drawn from observation and experiences during the pilot test. Some examples of how the treatment manual was modified to address middle school transition in Steps 1 and 2 are provided in this section to further illustrate the process of adaptation. The adaptations made in Step 3 are discussed under the data analysis section in Chapter 4 as they reflect “findings” from the pilot test. Figure 3, found below in the intervention section, displays the final list of activities for each treatment component in summary form. The accompanying master outline for the intervention is shown in Figure A1.

One of the core parts of the MFG retreat manual was improving communication. This was included in the previous manual used with sheltered families because studies had shown that improved communication has been positively correlated with improved family functioning and communication serves as a facilitating element for other positive change in family systems (Davey & Abell, 2004; Olson, 2010). Communication, as a part of the overall treatment package, had also been shown to improve family functioning (Abell et al., in press). The specific group activities that implemented during the block of time set aside in the adapted manual for improving communication were tailored to the needs of the current study population. In this case, learning to communicate well about issues relating to the support of a child who is moving into 6th grade were the most salient (Olson, 2000). The intervention design activities focused on modifying, refining, and tuning the intervention to children transitioning to middle school (Mullen, 1994).

Another aspect of design innovation in the current project came from synthesizing theoretical models to help clarify how the intervention is facilitating change in the specified
In a previous study for example, the MFG intervention was used in a weekend retreat format to improve the functioning of families living in emergency shelters (Davey & Abell, 2004). The researchers hypothesized that if families participated in a structured retreat with others in similar situations, they would experience improved family functioning that would modify their children’s behavior. The intervention elements of trust building, communication, stress management, decision-making, and spirituality were designed to decrease parental stress and strengthen several family elements including cohesion, family belief systems, and structure. Based on this population and their identified need, the researchers measured the variables of parental stress, family cohesion, beliefs and structure, as well as child internalizing and externalizing behavior (Davey & Abell).

In contrast, the population of interest in the current study was high risk children transitioning to middle school. This new application of an existing intervention necessitated innovative design (Mullen, 2004). Questions such as “how will the intervention produce change important for this population?” and “how will the change be measured?” drove design activities. Rather than hone in on parent stress, as with the shelter families above, the focus turned to the child’s experience as they face changes in multiple layers of their ecology. The risk and resilience framework that has been detailed in chapter II explains how multiple categories of risk can interfere with a child’s successful adjustment, including to a new school setting. Change is produced by buffering this risk with positive family functioning.

Another way the current theoretical model varies from previous studies of the intervention stems from a focus on slightly older children (mean 11 years vs. 9 years). This emphasis on pre-adolescence prompted the use of the Circumplex model of family functioning developed by Olson and his colleagues (1979) that was described in Chapter II. This model
focuses on balance in the aspects of family functioning rather than increasing or decreasing them. This seems to match well with children moving into higher developmental phases since the changes that children experience around the time they enter middle school can create risk to adjustment and parental responses to child development are critical (Eccles, 1999). The following example is offered as clarification.

Family cohesion has been defined differently in the literature. Tolan and colleagues (Tolan, Gorman-Smith, Huesmann & Zelli, 1997), authors of the Family Relationship Scale (FRS) used by Davey and Abell (2004), see family cohesion as emotional closeness and dependability as well as the level of support and clear communication. Olson (2010) defines cohesion simply as “the emotional bonding that family members have toward one another” (p.2). In Olson’s model, communication is seen as a contributing influence to the level of cohesion but not part of the same construct, which prompts communication to be measured separately. If cohesion is seen as a broad construct that includes multiple elements of functioning, such as in the FRS model, then higher family cohesion is viewed positively. When cohesion refers only to the families’ level of emotional bonding, such as in the Circumplex model, then very high or very low cohesion are detrimental. Although family cohesion is important, too much cohesion results in enmeshment and can stifle children’s exploration and independence necessary for moving toward maturity. Rather than measure the increase in cohesiveness, then, there is a need to measure change in the balance of cohesion.

On another dimension, increasing family structure is seen as a positive outcome in the FRS system (Tolan et al., 1997) because this construct captures elements of support, organization, and deviant family beliefs. Alternately, in the Circumplex model (Olson, 2010); the most functional family has a balanced level of flexibility. This includes establishing good
structure, but being flexible enough to accommodate the developmental needs of growing children.

Design changes implemented in the current process have allowed the intervention protocol to be tailored more toward children who are facing the risks and challenges associated with transitioning to middle school. The core functional elements of the intervention remain the same, but the choices in group activities were driven by a modified conceptual model that has a better fit with the needs of the specified population. Selection of the outcome variables and how they are measured reflects this shift in emphasis.

**Phase IV: Early Development and Pilot Testing**

According to Thomas and Rothman (1994), the activities of this phase of the Design and Development process include developing hypotheses, training practitioners, conducting the pilot test (obtaining IRB approval, sampling clients, conducting a pilot test, analyzing the data), and revising the intervention after the pilot test. The Stage development model discussed previously also emphasizes feasibility at this point of development, including attending to issues of recruitment, retention, competence of the chosen level of providers, the setting, possible adverse effects, and preliminary efficacy (Rounsaville et al., 2001). Each of these activities will be addressed as they relate to the research methods employed in the early pilot test.

**Research design.**

The design of the pilot test was meant to address the objectives that had been outlined previously by the members of the university-community partnership (see above). The preliminary outcome objectives (2 & 3), including determining if the families’ functioning and the academic adjustment of the rising 6th graders changed after the intervention, were assessed with quantitative methods. A pre-experimental single-group pretest/posttest design was used to
compare the student’s mean GPAs, attendance percentages, and number of behavioral incidents in 5th grade (baseline) to what they received in the first semester of 6th grade (follow-up).

Children’s GPA and attendance percentage scores were also compared to conglomerate data to determine if the changes they experienced from 5th to 6th grade were typical of their school populations. While pre-experimental designs are subject to serious threats to validity, they are often used in cases where resources are limited to collect early indications of positive outcomes (Rubin & Babbie, 2008).

Indicators of family functioning were assessed using a single group longitudinal design to observe any change in scores from baseline (pretest) to one-month follow-up and one-semester follow-up (5-6 months). Again, while not an experimental design, this method allowed for observation of trends in parents’ perceptions of family functioning. A follow-up period of one month was chosen based on several factors, including that a period of four weeks had been used previously as a follow-up period with a similar intervention (see Davey & Abell, 2004).

Administering the post-test directly after the intervention, only 24 hours after the pre-test, could introduce concerns about pre-test sensitization that would further increase the risk of Type 1 error (Kazdin, 2002) and prevent the family from experiencing the full effect of the intervention as they return home and implement their new skills. Since the emphasis of the intervention is on facilitating adjustment to middle school, obtaining post-test data after the children have entered school also matches well conceptually. Attrition was also not as high at four weeks as it was, for instance, at 5-6 months. A follow-up at five months, about one semester after the intervention, helped to determine the stability of the families functioning over time.

The other evaluative objective (4)--tracking informative events to determine treatment fidelity and feasibility--was assessed with qualitative methods. Investigators and retreat staff
(group facilitators) concurrently recorded their observations of the group processes on narrative forms according to their training. Data were collected for each activity during each of the three retreats, including formal groups, registration time, overnight procedures, and meal times. Qualitative data were collected in order to further clarify the treatment manual. The overall evaluation goal of the pilot test, using both quantitative and qualitative methods, was to determine whether further testing of the adapted intervention was justified.

**Hypotheses.**

Multiple family groups incorporate the benefits of both group and family interventions and have the potential to improve family functioning, which can be constructed as balanced family cohesion, balanced family flexibility, good communication, and family satisfaction. The current MFG model, delivered in a weekend retreat format, was designed to help families build knowledge and skills in five core areas that are salient to middle school transition. It is hypothesized that families who receive the intervention will experience;

1. increased balance in their family cohesion from pretest to 1-month follow-up and maintain that balance through one school semester;
2. increased balance in their family flexibility, from pretest to 1-month follow-up and maintain that balance through one middle school semester;
3. increased family communication, from pretest to 1-month follow-up and maintain that gain through one middle school semester;
4. and increased family satisfaction from pretest to 1-month follow-up and maintain that gain through one middle school semester;

The transitioning middle school participants in this study are at high risk for poor school adjustment that may include poor grades, low attendance, and behavioral problems, due to a
combination of pre-existing social and environmental factors as well as the changes they face in multiple layers of their ecology. Based on the risk and resilience model guiding the study, these risks may be tempered by participating in a multiple family group intervention designed to increase family functioning. It is hypothesized that the children who participate in the intervention will:

5. experience less decline in their grade point average from 5th to 6th grade than their average classmates;
6. experience less decline in their attendance percentage from 5th to 6th grade than their average classmates;
7. and will be referred for no more problem behavioral incidents in 6th grade than they were referred for in 5th grade.

**Sampling.**

A small, purposive, sample was used for the pilot test meaning that potential participant families were sought out because they met certain criteria (Kazdin, 2002). Random sampling is often not used in psychological research due to logistical challenges (Kazdin, 2002), and can be even more challenging in community-based research (Rubin and Babbie, 2008). Pilot testing only requires a small sample size because the results are not intended to assert causality or to be generalizable. Instead, the distinct aim is to make improvements in the intervention to prepare for a trial with a larger sample. Cost and feasibility also limit sample size during early testing. It could be argued that a large test of an underdeveloped intervention would be unethical, since the potential benefit to participants has not adequately been established (Thomas and Rothman, 1994)

Rising 6th graders were identified because they had been categorized by CISR as high risk due to the bio-psycho-social changes they were expected to experience moving into middle
school and the demographics of their neighborhoods and schools. These children’s families were asked to participate in the intervention as a critical part of their support systems. Families included siblings whose ages ranged from 3-18 and custodial parents living in the same household. Children who were in foster care or were legally wards of the state were screened out, as children in those circumstances may have additional family needs and dynamics that could create confounding variables. The sample was also drawn for convenience, rather than for probability.

Rising sixth graders and their families who live in neighborhood corridors on the south side of Richmond are at high risk for many psychosocial problems due to social pressures from racism and discrimination, lack of neighborhood resources, and the effects of poverty. These neighborhoods have recently been targeted, for example, for a major youth violence prevention initiative conducted by the VCU Clark-Hill Institute for Positive Youth Development as an Academic Center for Excellence of the Centers for Disease Control (Kevin Allison, personal communication, 2010). Family support for healthy child development, including education, is hindered due to these systematic stressors and there is an ongoing emphasis in Richmond Public Schools (RPS) on preventing dropout (RPS Balanced Scorecard, 2010). These neighborhoods are some of the most challenged in Richmond, but are often neglected in terms of services.

With input from CISR staff, nine RPS elementary schools on the south side of Richmond were identified as targets for recruitment to the MFG retreat intervention. These schools were grouped into threes by geographical proximity and assigned to one of the three weekend retreats. The intent of this grouping was to provide families with the best opportunity to build connections to other families that might live close to them. An investigator then met with the site coordinators responsible for CISR services in each of the targeted schools to review a letter
outlining the components of the retreats and to seek assistance in recruiting families. The letter provided the screening criteria to be used when recruiting families.

Site coordinators were asked to distribute fliers and registration forms (Figure B1, B2) to rising 6th graders that they believed would “benefit” from the intervention. Although the investigators had intended for the site coordinators to recruit specific individuals from their caseloads, which would focus on a more definable high risk population, this was not made clear in the letter. While some of the children that received fliers were receiving individualized services through CISR (case managed children), much of the recruitment was done generally throughout the school population. The sample, then, can only be described as rising 6th grade students and their families who attended 5th grade in one of the 9 targeted public Richmond elementary schools south of the James River.

IRB approval.

To help protect the rights of human research subjects in this study, especially as many are from vulnerable minority populations and because children are involved, the recruitment and research methods were approved through a review process by the Institutional Review Board (IRB) of Virginia Commonwealth University. The IRB encourages ethical research design that involves respect of persons, justice, and beneficence (VCU Office of Research, 2010). The National Association of Social Workers also calls for a special focus on protecting clients and their rights through ensuring voluntary consent and maintaining confidentiality. Due to the nature of recruitment, where families registered for the weekend retreats before having knowledge of the opportunity to participate in a research study, a special effort was made to protect the privacy of those who had given their contact information to the CISR site coordinators. This procedure is described below.
Recruitment.

The recruitment of participants for the pilot study consisted of several distinct steps including targeted advertising, registering of eligible families for weekend retreats, recruiting registered families as research subjects, and obtaining informed consent/assent. These steps were dictated by issues stemming from the practical challenges of community-based research, where the timelines, desires, and restrictions of community partners and funding sources play a role in the research process. As an example, funding for the pilot test was obtained through a Community Engagement grant from VCU. The monies were distributed according to a fiscal year calendar beginning July 1 and it was expected that the funds were spent and the results reported within 12 months. CISR, the community partner that recruited families, supplied data, and sponsored the program argued that the MFG weekend interventions needed to take place in the summer in order to have the most impact on children moving into 6th grade. CISR staff also had to recruit families before the end of school on July 22, 2010 to have access to families. As a result of the grant funding timeline, the summer window for intervention, and limited opportunities to access potential participants, families were registered for the weekend retreats prior to IRB approval. These restrictions created the need for a unique study recruitment strategy. Site coordinators from CISR of Richmond distributed a flier in their schools announcing a Family Fun Weekend Retreat designed to strengthen families by enhancing discipline, communication, and decision-making skills to families of rising 6th grade students (Figure B1). A contact information sheet was attached to the flier (Figure B2). Families who indicated interest by returning the contact information sheet were registered for their assigned weekend on a first-come, first-served basis. In all, 29 families from eight different schools completed and
returned the contact sheet. The registered participants that eventually attended a retreat comprised the pool of potential subjects.

The names and contact information provided by these 29 families during their registration for the Family Fun Weekend Retreats were provided to the retreat staff (BSW trainees) for the purpose of contacting families prior to the actual retreat. These preliminary contacts were designed to allow staff members to begin building rapport with the families in order to overcome barriers to participation. Twenty-four of the families were visited by BSW students in their homes. As a part of these visits, staff members delivered and discussed packets of information with families that included detailed packing lists, retreat agendas, lists of basic rules, maps, and other information about what to expect. A flier advertising the opportunity to participate in a research study at the weekend retreats was also inserted.

On the day first day of each of the retreats during the bus trip to the retreat site, staff members distributed folders to each family containing informational sheets, a revised agenda, cabin assignments, and paper for notes during the weekend. This folder also contained a second flier about study participation, outlining the time and place of an information session for anyone interested. The third and final recruiting effort was a verbal announcement about the information session made by the investigator during the welcome event.

**Consent and assent.**

To ensure participant privacy, information sessions about study participation were conducted by investigators in a separate and private area during a time when children were supervised and parents were on a break. This allowed potential subjects to choose to participate without scrutiny from their peers or staff members. All of the advertisements clearly indicated to parents that their decision to participate in the study would in no way affect their registration
status in the Family Fun Weekend Retreat (i.e. if a parent chose not to attend the information session or ultimately participate in the study they would remain registered for the family program and would not be approached again regarding study participation) or other CISR services.

During the information session each adult was given a consent form to read as the investigator discussed each point in detail, asking if there were any questions after each section. The form contained information about the study, a consent statement for parents, and a statement indicating that parents were giving permission for their rising 6th grade children to participate in the study. Study participation for parents included attendance at the weekend retreat, completion of a pre-test assessment package, and permission for the investigators to contact them to complete follow-up surveys one month and one school semester after the retreat. Child study participation included permission from parents for the release of confidential educational information to investigators. These data included grades, attendance, and behavior reports for 5th and 6th grades. Parents were informed that they could stop participating at any time by letting the investigators know during the follow-up contacts.

At the end of the information session parents were asked to either sign the form if they wanted to participate or not sign if they had further questions or did not want to participate and leave their forms on the table. Parents were then dismissed for a short break, during which the investigator collected the forms. Since all participants in each of the three retreats had signed the consent forms, they were brought back as a group to complete the packet of assessment forms. Investigators followed similar procedures for obtaining assent from the 6th grade children whose parents had given permission, and all children assented.
Training

Carroll and Nuro (2002) have suggested using a formalized training protocol for therapists who will be involved in delivering new behavioral interventions. They propose that training should include a formal didactic training seminar using a nearly final version of the treatment manual, and involve at least one supervised training case. Because the MFG Retreat preventive-intervention varies on several levels from a therapeutic behavioral intervention conducted by previously trained clinicians, the training procedures took on a somewhat different form. Training consisted of a formal 4-hour session to overview of the structure of the 24-hour retreat and introduce to the nearly finalized treatment manual. Weekly follow-up sessions were also conducted in the two months leading up to the delivery of the intervention, followed by ongoing evaluative sessions during and between retreats.

Implementing a new conceptual model can be challenging for practitioners. Rather than viewing training as a single initial experience, Rothman and Tumblin (1994) suggested that it should be an ongoing, interactive process. They experienced in an early pilot test that practitioners “sometimes had difficulty in conceptualizing their activities in terms of the functional categories of the model,” (p. 231) and therefore needed guidance throughout the planning and implementation process. This was found to be true in the case of the Junior level Bachelor of Social Work (BSW) field students and new Master of Social Work (MSW) graduates that were trained to facilitate the group activities for the retreats. Their general lack of group intervention experience however was reasonably overcome with a consistent and interactive training experience as demonstrated by their competence in the final retreat. There may have even been some advantage to their lack of previous clinical training in that they were

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not committed to other models, allowing for increased willingness to accept the proposed theoretical tenets (Rothman & Tumblin).

**Introductory training.**

A formal 5-hour training meeting was offered in the conference area of a local non-profit agency. The two trainers were the project coordinator, who was also the research supervisor and manual developer, and the retreat director, an experienced LCSW family practitioner who not only had a wealth of experience working with families from the targeted communities but had been the director of several previous MFG retreats with sheltered families. All of the trainees were women, including five BSW Junior field students who were training as group facilitators, and a recent MSW graduate that trained as the lead group facilitator for parent groups. Of the six staff facilitators, three were African American, two were European American, and one was a first generation immigrant from a North African nation. Most of these (4 of the 6) were non-traditional students and had several years of prior work experience in various fields.

Training focused initially on introducing the philosophy of change undergirding the MFG Weekend Retreat (theory of MFG, groups, outdoor recreation, family systems) in a didactic teaching format including justifications for the structure of the manual, its core components, and the background of its development. Insight into the history of the MFG weekend retreat and previous experiences with other populations helped to establish the credibility of the intervention for the trainees and laid the groundwork for the current implementation with children transitioning to middle school. The next stage of training involved reviewing the general schedule and format for the weekend (Figure A1), including roles and expectations of time, behavior, and professionalism. Refer to Table A1 for a summary of the learning points included in the introductory training.
Training staff to provide a 24-hour intervention package differs from what might be typical for 1-2 hour session-length interventions. The goal of the training was to ensure that the intervention team understood the entire treatment package including their roles and the contribution they made to the overall continuity of families’ experiences. A form of the manual, that had been adapted from the earlier Abell et al. (in press) version (dated 2003), to reflect activity suggestions from trainers (adaptation Step 1), was used to provide a baseline overview of the intervention for training. As the intervention was described trainees were encouraged to ask questions and engage in dialogue. Describing the formal nature of the camp (versus a wilderness setting), clarifying overnight responsibilities and facilities, and then encouraging the trainees to discuss their feelings and how they might relate to families’ experiences was important to building acceptance and commitment to the intervention.

Training also included round-table discussions that facilitated group cohesion and peer support. Again, the unique nature of the intensive overnight intervention package called for staff members to work together as a group in order to facilitate a coherent and meaningful experience for the participant families (Davey & Abell, 2004). Framing the formal training as the beginning session of a task group working toward planning for and carrying out the intervention was meaningful because it gave trainees an opportunity to experience the stages of group development firsthand. It also allowed the trainers to take advantage of the wealth of cultural competence that was held within the group. Several of the staff were long time residents of the Richmond African American community, and one staff was an immigrant from an African nation. At this early stage in the development of the intervention this participative group process allowed for significant contributions from the trainees (Rounsaville et al., 2001).
According to Anderson (1997) task group development proceeds through the stages of task orientation (coming together), accommodation (regulating to other members), establishing a functional communication pattern, engaging in problem-solving, and ending the group at task completion. The initial session served its purposes by bringing the group members together around the task, establishing an open atmosphere that encouraged critical thinking, and established the roles and boundaries of members. Evidence of the group moving through the stages of accommodation, communication, and problem-solving were observed in the ongoing weekly trainings, and reflect some of the benefits of group field instruction found by Kittle and Gross (2005).

**Ongoing weekly training.**

Follow-up training was conducted through a series of ten weekly 1-hour skill development sessions prior to the first retreat and two 2-hour sessions between the 1st and 2nd retreats and 2nd and 3rd retreats. Additional contact amongst the team by e-mail and telephone was also encouraged to provide ongoing supervision of activity planning. The content of the training sessions is summarized in Table A2 (weekly training prior to the retreats) and Table A3 (follow-up training). The key learning points, along with the topic and content associated with each point are organized in the order they were presented, with numbering of learning points continuing from introductory training (Table A1).

Before knowledge and skills training could occur however, the four major roles the trainees were asked to play in the overall project needed to be delineated, and their responsibilities clarified. Not only were the student learners asked to prepare themselves to implement the MFG intervention at the end of the training period (role of group facilitator), they were asked to assist in adapting the group activities for middle school transition (adaptation Step
2) and take on administrative responsibilities related to carrying out the retreats (task group members).

**BSW roles.**

Part of these responsibilities included reaching out to a caseload of families prior to the retreat, including telephone calls and home visits, in an effort to minimize barriers to participation in the retreats (role of social worker). In addition to these roles, the trainees were also students enrolled in a for-credit, graded internship through the social work field department at VCU (role of student). As students, they were required to demonstrate their progress toward specified learning objectives and practice competencies. During the IRB approval process the primary investigators were required to protect this student role by ensuring that the trainees’ grades would not be affected by their level of participation in the research process and to clearly identify which roles and responsibilities would be part of the evaluation of their work for the course.

**Theoretical background.**

Providing a theoretical background for the MFG weekend retreat intervention was an important aspect of training. The risk and resilience model (presented in Chapter 2) depicting risk factors for children transitioning to middle school at multiple system levels and suggesting that family functioning is an important protective factor for middle school adjustment was presented as the underpinning for the overall project. Training points related to group theory, including key tasks and group leader actions during beginning, middle, and end group stages were taught, along with major tenets and assessment procedures outlined in MFG theory (group dynamics and intra familial interaction) as outlined earlier in Chapter 2. Trainees were also assigned to read articles about the development of the MFG weekend retreat model (Davey,
Knowledge and skill development.

Although all of the BSW trainees were concurrently enrolled in social work practice courses, the bulk of their experiences had not been in professional human services fields. Training necessarily included several learning points designed to increase foundation knowledge and practice skills, upon which more advanced theory-based skills used in the MFG intervention could be built. Basic knowledge and skills included relationship and rapport building (active listening and empathy), problem-solving, maintaining appropriate boundaries and confidentiality, approaching clients professionally by phone and in their homes, case management, strengths based perspective, and rationale for change. More advanced knowledge and skills from group theory, family theory, and multiple family group theory, as well as training on evaluating practice and selecting appropriate interventions represented the components necessary for acting as multiple family group leaders specifically. These practice skills were developed in training through a process of knowledge building, behavioral rehearsal, and group supervision.

Common factors model.

The process for developing the training materials for the pilot test, especially the identification of the learning points related to basic practice; align with the common factors model outlined by Cameron and Keenan (2009). They suggested that a common factors model, an empirically supported structure of the key “conditions and processes” of direct practice (p. 347), can be used to guide foundation social work instruction. The common factors associated with change in social work practice have been organized under the categories of client/family
factors, social worker/helper factors, relationship factors, social network factors, and practice strategies. An advantage of using this approach as a framework upon which to build more advanced theoretical knowledge is that it can be translated into a set of fundamental skills (Drisko, 2004; Grencavage & Norcross, 1990), such as those outlined as learning points in the current training protocol (see Tables A1-A3). These skills and strategies for approaching practice coordinate with a variety of theoretical approaches and can help students build competency in the 10 core areas outlined by the Council on Social Work Education (CSWE, 2008).

Methods used to assure the fidelity of training, or the extent to which trainees actually developed the intended knowledge and skills, will be discussed later in this chapter as part of a more comprehensive covering of fidelity practices. The process for how the follow-up learning points, those added to the training protocol after the intervention began, will be discussed in Chapter 4 as a part of the research findings. The final training protocol (Tables A1-A3) is a key component of the modified intervention manual, providing a standardized method for training providers in future pilot testing.

**Intervention**

Three different MFG Weekend Retreats were conducted over three consecutive weekends in August of 2010. Of the 29 families that had originally registered, 22 accepted additional information delivered by staff members prior to the retreat, and 14 actually attended a retreat (5 at 1st retreat, 4 at 2nd retreat, and 5 at 3rd retreat). Recognizing the significant gap between when families registered for the retreats and their assigned participation dates (6-8 weeks), pre-retreat contacts were added to the intervention for the purpose of delivering information, building rapport, and increasing participation.
**Pre-retreat contact.**

Five BSW field students training as staff members for the intervention were trained on approaching families (including practice of scripted approaches for phone and door contact), establishing relationships, overcoming barriers, and documentation. Staff members were assigned to contact and document their contacts with a caseload of families. Staff members first contacted families by telephone and attempted to set up appointments for home visits. If they were unable to reach families after several attempts by phone on different days and times, they were instructed to attempt a door approach. If they were still not able to meet with at least one of the parents who had registered, they left the information packet with the families. Follow-up telephone or home visits were offered to families in the weeks leading up to their assigned retreats.

Several observations made about the process of recruiting families to the program and the overall dropout rate offered insight into the practical challenges that were faced. Six of the 29 families that had completed a registration form did not receive the follow-up information necessary for participation because they were unable to be contacted (e.g. they did not know where or when to meet the bus or where the camp was located). Two of these families refused contact with the staff, and four families no longer lived at the same address. The time between when families completed the registration forms and the time retreat staff attempted the first contact was approximately six weeks. In that amount of time, not only had some of the families changed addresses and/or phone numbers, several of them had scheduled other activities. Other reasons given for not attending included children being out of town for the summer, daughter registering the family with a forged signature, not having childcare for the 1-year-old (minimum age at retreats was 3), and family crises.
Significant flexibility was required in order to make contact with families, and there was little consistency in how much contact each family had with staff members prior to the retreat. All families who attended retreats had received at least one visit in their homes; however all of those who received home visits did not necessarily attend. Documentation of staff members’ attempts to contact families revealed multiple unsuccessful phone calls, many missed appointments, and poor success in reaching families at home without an appointment. These same challenges were experienced by investigators in attempting to collect follow-up data from parents. Despite obstacles, in several cases staff members were successful in helping families that ultimately attended to overcome their concerns, specifically regarding the sleeping conditions, equipment needs, camp accessibility (for physical disabilities), attending an alternate retreat, and needing to leave early.

**Retreats.**

Participant families were picked up at their children’s elementary schools and transported by bus to a YMCA Camp, with the exception of two families that chose to drive themselves. Attendance of adults and children varied across the weekends, as shown in Table 1, with the third week having the most overall participants (21). The camp facilities included a large air-conditioned lodge with an open main meeting space for group activities and meals, a basement with classrooms, and a professional kitchen. Balconies and grassy areas surrounding the lodge provided additional shaded group meeting space. Cabins were set apart from the lodge by a 5 to 10-minute walk over sometimes uneven terrain, although vehicles could be driven between them. A large pond in the center of the camp provided opportunities for nature hikes, canoeing, and fishing. Other amenities included an outdoor swimming complex and an amphitheatre with fire pit. Families stayed overnight in rustic bunk-style cabins that had electric lights and outlets for
fans, but had no heat or air conditioning. Daytime temperatures were in the lower 90s with high humidity, cooling only to mid 70s at night. Cabins were built from uncovered wood and furnished with metal bunk frames with plastic covered mats. Restroom and shower facilities were a short walk from the cabins and families provided their own bedding and towels. All meals were served to the participants and served buffet style. Families were encouraged to eat together, but also engaged with others as they began to build connections within the group.

The intervention used at the retreats followed the format that is outlined in Chapter 2. A series of group and family activities around five main components were delivered in a 24-hour weekend format (Saturday night to Sunday night). A family objective developed for each core component, and an overarching theme of middle school transition, guided the choices of specific group activities (adaptation Step 2). Adaptation was also ongoing during the process of the retreats, which led to modification of some of the activities and processing questions (adaptation Step 3). Trained staff consisting of student social workers supervised by social work professionals facilitated the components of the manual. A master schedule for the retreat weekends outlining the timing of key groups and activities is presented as Figure A1.

**Variables and Measurement**

**Measuring the Independent Variable: Fidelity**

**Treatment fidelity practice areas.**

Treatment fidelity can be defined as the set of “methodological procedures for preserving internal validity and enhancing external validity in studies” (Bellg et al., 2004, p.443), and consists of methods used to determine whether an intervention is implemented accurately according a specified protocol. Treatment fidelity is important because accurate conclusions cannot be drawn, nor can a study be replicated when internal and external validity is uncertain.
In a randomized trial, checks of treatment fidelity ensure that the independent variable, the intervention, is being consistently implemented. In early design and development studies, treatment fidelity is used to establish the intervention in a way that can be consistently and reliably replicated in a future trial (Bellg et al. 2004).

Naleppa and Cagle (2010) conducted a systematic review of research studies reported in major social work journals over a five year period to explore the extent to which treatment fidelity was addressed. They found that of 63 outcome studies, less than a third reported the use of control measures for their interventions, or independent variables. They concluded that intervention research in social work is generally inattentive to treatment fidelity, and should be addressed more often in social work intervention research. Consequently, we attended to treatment fidelity in each aspect of the research process as suggested by Bellg and colleagues (2004). These include procedures implemented during study design, provider training, treatment delivery, and participants receiving the treatment. Practices in each area will be considered, followed by a discussion of how each was implemented.

**Study design.**

Treatment fidelity goals during the *design of the study* can include specifying the treatment dose, such as the number and length of contacts, and detailing procedures for dealing with predictable setbacks, such as provider change or changes in group size/makeup (Bellg et al. 2004). In the current development process, treatment dose was relatively standard as the intervention was delivered in one long retreat, minimizing variability in treatment dose. However, one important element that should be addressed is the contact that group facilitators had with participant families prior to the formal weekend retreat.
In previous implementations of the MFG Weekend Retreats, families were recruited into the study during an information meeting where they registered to attend and completed assessment instruments. These families were not contacted again prior to the beginning of the retreat. While this procedure limited the potential variability that might stem from contacting families prior to the retreat, it increased the risk of attrition between the pre and posttests. Consequently, several of the families did not attend the retreat intervention, and it was challenging to predict how many families would arrive to meet the scheduled transportation.

- In the current implementation, registered families were contacted by retreat staff as described above with recruitment. This contact prior to the intervention may have had some effect on the outcomes, and has, therefore, been considered a part of the established treatment package. The frequency, length, and type (phone or face to face) of contact, although intended to be standardized, was quite challenging in practice.

- **Implementation:** A formal protocol was established for pre-retreat contact with families and provided with training to the implementation team. A form was used to track contact with families and included columns for family identification code, date, time, type of contact, reason for contact, person contacted (not by name) and a narrative summary of the interaction.

**Training staff.**

The purpose of treatment fidelity in *provider training* is to standardize the training protocol and assess the skill attainment of the trainees because practitioners come from a variety of backgrounds, and have varying levels of expertise and experience. In an attempt to align the staff with the philosophy and intended practices of the intervention, training was designed to minimize individual bias. As in other areas of fidelity measurement, the goal in the early
intervention development stages was to track any discrepancy between what had been taught and what was observed, and use the information to further strengthen the training protocol. Consistency in trainers, the creation of standardized training materials including handouts and presentation elements, and assessing practitioner knowledge all helped to maintain training fidelity (Bellg et al. 2004).

- **Implementation:** All members of the retreat staff received formal four-hour training on the application of the MFG Weekend Retreat manual according to a specified protocol. Ongoing training emphasized specific learning points as described above, and knowledge and skill acquisition was measured during both the training sessions and in practice during the actual retreats through peer and supervisor observation. Observations recorded during weekly meetings and during the retreats were translated into additional learning points for further training. This feedback loop, of identifying and responding to training needs, was important to maximizing the effectiveness of the providers.

**Delivering treatment.**

Assessing fidelity during *treatment delivery* involves the use of a standardized intervention protocol, or treatment manual, and a process for checking how closely the manual is followed. Treatment manuals are comprised of practice principles, session by session protocols, guidelines, and handouts that are used to guide complex tasks (Bellg et al. 2004). Manualized treatment protocols are important for specifying the treatment so that it can be consistently implemented later during efficacy and effectiveness trials (Fraser et al., 2009).

- **Implementation:** A manual was used to guide the intervention. The manual defines the core elements of the intervention which are addressed with family objectives. Activities for each age group and group type are designed to help families reach these objectives. A
master schedule clarifies the order and length of group sessions and describes the intended flow of the weekend.

The importance of creating a treatment manual has already been established, but if it is not followed prescriptively by the practitioners, error is introduced. A question arises however about how closely the practitioners should really stay to the protocol in early stages of development. Fraser and colleagues (2009) discuss the tension between fidelity (strict adherence to the protocol), and adaptation. They note that whereas fidelity is important to testing a model’s efficacy, adaptation of an established intervention may be necessary to meet the diverse needs of individuals, families and groups.

For instance, if a treatment’s efficacy has been established with one client population, but a practitioner wants to use it with another they have some responsibility to re-engage in the design and development process (Fraser et al., 2009). Perhaps the answer to the fidelity versus adaptation question depends upon the phase of the design process and what the current goals are. Clearly during a trial of efficacy or effectiveness, the goal of checking for treatment adherence would be to strengthen the validity claim. In the early pilot testing however, the goal of checking for adherence is to gather information that can be used to further adapt the model to the population of interest.

In early development, a treatment fidelity technique involving the collection of “informative events” can be used (Reid, 1994, p.247). Informative events are incidents of deviation from the written procedures of a treatment model that provide facts about how the method of intervention worked and to stimulate suggestions for change. Some informative events have value as single incidents, either where there was a failure in a treatment component
or where there was a new and successful innovation that could be explored. In other cases, one incident may not hold meaning but contributes to a pattern that calls for action.

The key is to track and attend to meaningful shifts in the intervention to enhance the consistency with which it is delivered to the specified participants. Informative events can be systematically obtained by reviewing records of sessions or they can be recorded by practitioners on special forms directly after sessions. Outside observers can also track informative events on similar forms, allowing for some triangulation of the data. The analysis of informative events may lead to changes in the protocol or the training process (Reid, 1994).

- Implementation: A form was created to track informative events (Figure C1). A definition and example of an informative event were included to supplement previous training on the use of the form. The tracking form includes columns for date, time, group type (family together or adult/child), group content (one of the five core elements), a section for a narrative description of the incident, and a section for suggested action.
  Practitioners were instructed to take time after each group they facilitated to complete the form. In practice, staff members often completed the records during meals and breaks rather than directly following sessions, however all documents were completed within a four-hour window after activities. Observers were instructed not to collaborate on their responses. A team of two outside observers also recorded informative events while monitoring randomly selected group sessions. After a review of the tracking documents following the first retreat it was determined that more clarity was needed due to inconsistency in how the forms were completed. In response, a supplementary document with additional evaluative questions was provided for each staff members to remind them what types of information were important to record (Figure C2). The limitations of this
tracking method and suggestions for improvement are discussed later in the findings section.

**Receipt of treatment.**

The last treatment fidelity category, *receipt of treatment*, addresses how well the recipients of the intervention actually comprehend and have the ability to use the intended knowledge and skills. Ensuring participant comprehension, cognitive skills, and behavioral skills requires providers to be trained in and use specific techniques in the course of delivery. The major practices involve summarizing and paraphrasing content and working with participants until they can demonstrate the skill. The use of these practices by the providers can be monitored directly by an outside observer, or by monitoring recordings of sessions (Bellg et al. 2004).

- **Implementation:** Outside observers monitored a random selection of group sessions to ensure that providers were consistently summarizing and paraphrasing content, and working with participants until they could demonstrate the knowledge or skill intended for that session. These observations were recorded on the same tracking sheet discussed earlier. In practice this was an active process, rather than just observational. In some cases the investigator gave immediate feedback to the group leaders, encouraging them to follow-up with questions or skill demonstrations as needed. Additional learning points related to evaluating the skill or knowledge acquisition of the participants were also added to the training protocol (Refer to Table A3).
Dependent Variables

Family cohesion.

Family cohesion is the emotional bond that holds family members together (Olson, 2010). The strength of this emotional bond is related to the degree of individual autonomy a person experiences within the family system. The construct of cohesiveness, as measured on the FACES IV instrument (discussed below), is a component of overall family functioning and includes items related to emotional bonding, independence, boundaries, coalitions, time, space, friends, decision-making, interests, and recreation. These items have been drawn from previously tested versions of the FACES instrument and have significantly loaded together in a factor analysis (Olson et al., 2007).

For the FACES IV, cohesion items have been conceptually divided into 3 categories that represent a continuum from disengaged (extremely low/unbalanced cohesion), balanced cohesion (moderate level of cohesion), and enmeshment (extremely high/unbalanced cohesion). This conceptualization was validated with a confirmatory factor analysis, a correlation analysis, and a confirmatory factor analysis with three established validation scales (Self-report Family Inventory, Family Assessment Device, and the Family Satisfaction Scale). Findings from the correlation analysis demonstrate that the categories are highly discreet. There was a high negative correlation between disengaged and balanced cohesion ($r=-.80$), a low negative correlation between enmeshed and balanced cohesion ($r=-.15$), and a positive correlation between the two unbalanced areas or enmeshed and disengaged ($r=.27$). The balanced or unbalanced nature of a families’ functioning on the dimension of cohesion is represented by a ratio score produced by scoring the FACES IV (Olson, 2010).
**Family flexibility.**

Flexibility is a second key dimension of family functioning that describes the quality and expression of leadership and organization within a family. The level of flexibility is reflected in the family's structure, and represents the balance between stability and change. The components of flexibility that are assessed by the items in this dimension on the FACES-IV, include leadership (control and discipline), negotiating styles, role relationships, and relationship rules. As with cohesiveness, the level of family flexibility can be placed on a continuum from chaotic (extremely high/unbalanced flexibility), to flexible (balanced), to rigid (extremely low/unbalanced flexibility) (Olson, 2010).

The conceptualization of the construct of flexibility was also tested for inclusion in the FACES IV. Individual items were tested using factor analysis techniques, and the three factors solution of the two extremes and center of the continuum was found to be significant (Model fit: $\chi^2 = 2058.76 (df = 804, p < .001)$). Mean factor loadings for items on all three of the scales across the continuum were high and consistent with each other (chaotic scale .69, rigid scale .63, and balanced flexibility .65). The correlation analysis testing the relationship between the scales showed a high negative correlation between balanced flexibility and chaotic ($r = -.53$) and very low correlation between balanced flexibility and rigidity ($r = -.05$). There was no significant correlation between rigid and chaotic (Olson, 2010).

**Communication.**

Communication, a third dimension of family functioning, is considered the “facilitating dimension” (pg.149) by Olson in the Circumplex Model of Family Functioning (Olson, 2010). Movement toward balance on the cohesion and flexibility continua relies on positive family communication. Communication is measured at the overall family level in the categories of
listening, speaking, self-disclosure, clarity, continuity tracking, and respect and regard. After decades of family research on the Circumplex model, Olson summarizes that balanced families tend to have very good communication, while unbalanced family systems show communication deficits (Olson).

A separate scale for family communication, the 10-item Family Communications Scale (FCS), is included in the FACES IV package. While the relationship between communication and the other functioning dimensions of cohesion and flexibility is theorized, measuring communication directly is seen as an important aspect of family assessment. In a research context, including the scale allows the relationship of communication to the other model dimensions to be further tested. The FCS is a more generalized and shorter measure of family-level communication than previous versions such as the 20-item Parent-Adolescent Communication Scale.

Satisfaction.

The family satisfaction scale included in the FACES IV instrument is designed as an additional indicator of family functioning. High family satisfaction has been shown to be correlated with better family functioning, or increased balance (Olson, n.d.). Family satisfaction is the extent of happiness with family relationships and the degree that members feel fulfilled within the family. Satisfaction is pertinent to the current study in two ways related to its contribution to assessing family functioning. First, satisfaction varies significantly throughout the life cycle. In a study of 2,465 family members, Olson found that parents' satisfaction declined throughout the child rearing years, bottomed out during children’s adolescence, and then climbed sharply after their launch into early adulthood. Measuring the level of satisfaction in parents of children transitioning into early adolescence can be especially important as part of
understanding the dynamics that may affect school adjustment. Second, in the same study Olson found that family satisfaction accounted for over half of the variance in quality of life. If the stress of parenting can decrease satisfaction and overall quality of life so dramatically, tracking this aspect of family functioning becomes critical.

**School adjustment.**

Adjustment to middle school has been measured in a number of studies by using direct measures of school performance, such as grades and standardized test scores, as well as attendance and behavior (Kurdek et al., 1995; Grolnick et al., 2000). Middle school students in the Richmond Public Schools are graded on an A-F scale in each class, which correlates to a grade point scale (0.0 F to 4.0 A). Calculating the average of students' grade points in all subjects at the end of each semester yielded a standardized Grade Point Average (GPA). This average has been used in previous studies to distinguish between students that were adjusting well to their new environment from those who are not (Gutman & Midgley, 2000). Grades received in classes depends on a number of factors important to school adjustment including the child’s grasp of the course content, relationship with the teacher, classroom behavior, minimized distraction, and the ability to complete homework. GPA then can be seen as a relatively general assessment of the overall school performance.

Directly measuring the percent of attendance and the number of behavioral referrals will also give important clues about children’s level of middle school adjustment. For example, Malaspina and Rimm-Kaufman (2008) used the total number of disciplinary infractions (including aggressive behavior, property destruction and unexcused absences) as an indicator of behavioral adjustment in their study of middle school transition. While attendance percentages do not give a complete picture of adjustment due to the myriad of reasons children can be absent
from school, the data collected for this study from several elementary and middle schools indicated that attendance drops after the transition.

**Instruments**

**Measures of family functioning.**

To measure key dimensions of family functioning, the FACES IV package will be completed by parents. The FACES IV is based on the Circumplex model of Family Functioning and is comprised of a 62 item self-report questionnaire (Olson, 2010). This instrument is an attempt to capture family relationship characteristics and family processes that are difficult to measure in the absence of direct observation (Dishion, Patterson, & Kavanaugh, 1992). The survey will be administered to one or more parents from each family directly before, four weeks after and at five months (or about one public school semester) after the intervention.

The FACES IV instrument assesses the dimensions of family cohesion and family flexibility with 42 items across six scales (four unbalanced or extreme scales, two each on continua, and the two balanced scales) and also includes a 10-item communication scale and a 10-item satisfaction scale. Reported alpha reliabilities of the six FACES IV scales are as follows: Enmeshed = .77, Disengaged = .87, Balanced Cohesion = .89, Chaotic = .86, Balanced Flexibility = .84, Rigid = .82 (Olson et al., 2007). In a correlational analysis, the balanced cohesion and balanced flexibility scales were highly correlated ($r = .60$; shared variance = .36, and the unbalanced scales of disengaged (low cohesion) and chaotic (high flexibility) were highly correlated ($r = .60$) (Olson, 2010).

The scoring protocol for the FACES-IV instrument allows for the calculation of ratio scores for the dimension of cohesion and flexibility as well as an overall ratio score representing the intersection of the two dimensions, the cohesion ratio, the flexibility ratio, and the total
Circumplex ratio. Ratio scores are designed for research, and are helpful because they yield a total of three scores that can be used to determine the health of the family system (Olson, 2010). These ratios represent the perceived level of functional versus dysfunctional behavior in the family system and are calculated by dividing the balanced score by the sum of the unbalanced scores. Lower scores, below 1, indicate an unbalanced system, while progressively higher scores indicate increasing balance. Two supplementary scales, communication and satisfaction, yield percentage scores that can help establish a families’ overall level of functioning (scoring, facesiv.com, n.d.).

**Measures of school adjustment.**

To measure school adjustment, data on the rising 6th grade participants including grade point average, school attendance, and number of behavioral incidents were provided to the research team by CISR staff from their tracking files. First and second semester baseline data from 5th grade and data from a follow-up point after children had completed their first semester of 6th grade (approximately five months post-intervention) were collected. CISR staff also provided conglomerate school-wide mean GPA and attendance percentages for the same baseline and follow-up points. Since the students had attended a total of seven different elementary schools and five different middle schools, these means allowed for some level of comparison between a participant’s adjustment and his/her classmates. The mean number of behavioral incidents at each school was not tracked by CISR and was not provided. CISR was unable to track two students that attended middle schools outside of the city boundary.

**Satisfaction Survey.**

Customer satisfaction surveys are often used by human service providers to invite participant clients to share their perspective on service delivery. “Measuring customer
satisfaction tangibly expresses a client- and family-centered perspective” (p. 696) and views customers as knowledgeable about their own situations (Heubner, Jones, Miller, Custer & Critchfield, 2006). Clients are viewed in this sense as partnering stakeholders in the process of model development, rather than simply research subjects.

Families who participated in the first retreat were asked to complete a brief satisfaction form near the end of the second day (Figure C3). The survey consisted of open-ended questions such as what information was most helpful and what activity did they like the least, followed by seven evaluative statements to assess parents’ overall satisfaction with the weekend retreat experience. The evaluation used a 5-point scale that ranged from strongly agree to strongly disagree. Although the form was intended to be used at the other retreats, miscommunication with the staff about timing of final events (2nd weekend) and complications in transportation (3rd weekend) resulted in the families leaving camp without having the opportunity to complete it. At the second and third retreats however, some feedback was collected from families through a comment card that was added as part of an activity near the end of the second day. These narrative comments contain some data about what was gained from the experience, which activities were appreciated, and some critiques of the venue and process. Both of these methods were designed to solicit feedback about the feasibility and desirability of the intervention.

Informative events.

Data on treatment fidelity were gathered from group leaders and investigators on forms used to track “informative events.” The elements of the form, including date, time, group type, treatment component, event description, and suggested actions, were drawn from suggestions by Reid (p.248, 1994) (Figure C1). The form included an example of an informative event that
served as a reminder of previous training, and contained open space for narrative reporting of observations.

**Intermediate Outcomes**

**Quantitative measurement.**

Case analyses will be reported for all variables to help expose patterns of interest for this and further investigation in the small sample. Qualitative data will be used to help explain these findings. Efficacy is the extent to which an intervention is able to affect change in the expected variables (Kazdin, 2002). While claims of efficacy require much more design rigor than what was used in this study (random assignment to control groups), it is still important to begin collecting some data in order to justify moving to further phases of the design and development process. To begin establishing the validity of the MFG Weekend Retreat for increasing family functioning and increasing child academic adjustment in middle school, the quantitative design described above was followed.

The outcome analysis related to school adjustment and family functioning relied mostly upon comparing the data from the very small samples in tables. Individual youth differences in GPA, attendance, and behavior from base line into 6th grade, as well as differences in the family functioning variables across the three data collection points are formatted for side by side comparison. Wilcoxon signed-rank tests were also used to explore the median differences (Hettmansperger & McKean, 2011). A side by side analysis was also used to compare the individual youth retreat participants’ school adjustment indicators to their overall school means. These tests however are to be interpreted with extreme caution due to violations of key statistical assumptions and threats to validity (Rubin & Babbie, 2008).
**Qualitative measurement.**

The manualized protocol for the MFG Weekend Retreat intervention specifies the order and timing of group activities, the key treatment components, and the family objectives for each component. The manual also includes group activities for three age groups (adult, teen, and child) that are designed to help achieve the family objective for each component. Since the group activities were designed ahead of time to meet the objectives of the treatment components, deviation from these planned activities would, by extension, be a deviation from the manualized protocol and these differences need to be measured (Rothman & Tumblin, 1994).

A challenge to quantitative methods and intervention research comes from the “lack of documentation of the challenges encountered in implementing interventions designed to change or reform existing practice” (Nastasi & Schensul, 2005, p. 186). Measuring and understanding treatment fidelity, or deviation from the protocol, requires the use of qualitative methods that are best suited to answering process-oriented questions such as “why” and “how” (Leech & Onwegbuzie, 2007). Qualitative methods spotlight the cultural and contextual factors that affect the validity and efficacy of the intervention through the use of word data (Nastasi & Schensul, 2005).

Systematically tracking deviations from the planned intervention activities will be accomplished through the completion of informative event tracking sheets (Figure C1). Tracking sheets will be completed after each group activity by both co-facilitators independently, as well as by researchers acting as observers of the group process. By having several individuals record informative events for the same group, data from multiple perspectives can be triangulated in the constant comparison process (Denzin, 1989). In qualitative analysis, triangulation is a useful tool for achieving validity (positivist) or establishing credibility (post-
positivist) of the findings (Lincoln & Guba, 1985; Sands & Roer-Strier, 2006). The triangulated findings may be convergent, complementary, or dissonant, and provide an expanded view of how the group activity was implemented with the specific set of participants (Denzin, 1989).

Word data from the informative event tracking sheets were analyzed using a method of constant comparison. Constant comparison involves data reduction, where each piece, or “chunk”, of data is compared to all other chunks in an effort to develop a set of codes or categories that describe a phenomenon. Each category may consist of multiple chunks of raw data drawn from the analyzed text (Creswell, 2007; Leech & Onwegbuzie, 2007). In this case, the goal of the analysis was to identify categories of deviation from the planned activities to gather clues about increasing the feasibility and appropriateness of the intervention within the sample, as well as inform changes to the training protocol. Since informative events may have value as individual occurrences or contribute to well-developed themes, constant comparison will allow each chunk of data to have an equal representation in the overall analysis (Reid, 1994). In accordance with this perspective, efforts to quantify the word data with methods such as content analysis or determining inter-rater reliability were not used.

**Chapter 3 Summary**

Social workers can contribute to the knowledge base of the profession by engaging in intervention research, including model development. Following the models outlined by Rothman and Thomas (1994), and Onken et al. (1997) this proposal emphasized the first four phases of the development process in adapting a Multiple Family Group Weekend Retreat intervention for use with children who are transitioning to middle school and their families. The procedures used to accomplish the first three phases of development process including problem analysis and project planning, information gathering and synthesis, and intervention design were
discussed in the context of a collaborative university-community partnership. A research design for accomplishing the fourth phase of the model development process, early development and pilot testing, was outlined, including methods for increasing and tracking treatment fidelity and observing initial outcomes, or changes to a set of family functioning and academic adjustment variables. In the following chapter, results of the quantitative and qualitative analyses will be presented, along with key limitations of the study.
Chapter 4: Results

Fourteen families attended one of the three retreats. A breakdown of the attendees according to their relationship with the rising 6th graders is included in Table 1. Two sets of quantitative data were collected, including a set from parents and a set from rising 6th graders. No data were collected from the other participant children. All parents that participated in the intervention completed the FACES IV instrument measuring family functioning, however only one parents’ data from each family was included in the analysis. The rationale and method for this decision are discussed in the next section. Data were collected at pretest, approximately one month post intervention (Time 2), and again approximately one semester or 5-6 months post intervention (Time 3). These data were analyzed by comparing outcome scores from each data collection point. Academic adjustment data on rising 6th grade child participants were collected from school records through CISR staff and analyzed by comparing GPA, attendance, and problem behavior incidents from three semesters (Fall of 5th grade, Spring of 5th grade, & Fall of 6th grade; n=12). Conglomerate mean scores (school means) were also collected for each elementary and middle school where sample students attended for comparison. Qualitative data consisted of observations collected on Informative Event tracking sheets throughout the pilot test.
Results of Family Functioning Measures

Sample Demographics- Parents

Understanding the sample in terms of key demographics of the subjects is a necessary step in preparing for a larger test of the MFG intervention (Fraser et al., 2009). While the current pilot test is not designed to generalize to a larger population, any information or understanding about the interventions’ feasibility must be understood in terms of the subjects on whom it was tested. Although the analysis of family functioning relies on data collected only from the mother of each family, demographic information is reviewed for all parents that participated along with specific details for the mothers that completed surveys. Demographics of the rising 6th graders will be considered separately from their parents in the data analysis.

All of the adults that attended retreats (N=18) lived in the home of one of the 6th grade children and played a parent or step-parent role. Of these parents, 88.9 percent (16) indicated that they were Black/African American, and the remaining two were women and indicated they were White/Caucasian. There was no representation from the growing Hispanic community in Richmond. The mean age of all parents was 36.9 years; however age was spread across a wide range from 28 to 52 years. Sixteen parents had completed at least high school and 10 had completed at least some college. Four of the parents had completed college or had an advanced degree, all of whom were African American women, which is a significantly higher percentage than is found in the Richmond metro for the same demographic (25% vs. 12%) (Richmond, VA, n.d.).

Three of the parents were men, including two step-fathers and one biological father, and 15 were women, including 13 mothers and two step-mothers. All of the men who attended were partnered to one of the mothers. Eleven of the parents were raising their children with a partner.
or spouse, while seven identified themselves as single parents. The number of children per family ranged from one to four, with a mean of three children.
Table 1

*Number of MFG retreat participants by relationship to rising 6*th* grader*

<table>
<thead>
<tr>
<th>Retreat</th>
<th>Parents</th>
<th>Children</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers</td>
<td>Fathers</td>
<td>Younger</td>
<td>6<em>th</em> Grade</td>
<td>Older</td>
<td>Total</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>3</td>
<td>7</td>
<td>14</td>
<td>10</td>
<td>49</td>
</tr>
</tbody>
</table>

* Number of rising 6*th* graders is equal to the number of families
Family Functioning Variables

The FACES IV instrument includes items on family cohesion and flexibility dimensions as well as separate subscales for communication and satisfaction. Ratio scores were computed from raw scores yielding a cohesion ratio, flexibility ratio, and a total Circumplex ratio. Ratio scores represent the perceived level of functional versus dysfunctional behavior in the family system and are calculated by dividing the balanced score (item responses falling in the balanced, or central, range on cohesion and flexibility dimensions) by the sum of the unbalanced scores (item responses at the extremes of either dimension). Lower ratios, below 1, indicate an unbalanced system, while progressively higher ratios above 1 indicate increasing balance, or positive functioning. Raw scores on the communication and satisfaction scales (range 1-50) were translated to percentage scores and levels of functioning were determined by comparing to normative data (scoring facesiv.com, n.d.).

Statistical Hypothesis Testing

Eighteen parents, including four couples, completed the pretest survey, however only one parent was selected to represent each of the 14 families in the analysis because the desired unit of analysis was the family, not the individual. There was also a concern that data from two parents in the same family may be correlated and create additional error. In each of three couples, one parent indicated that [s]he was a step-parent (two step-fathers and a step-mother from a lesbian-headed family), and these were chosen to be excluded from the analysis. In the fourth couple, the father was excluded rather than the mother because all of the other families were represented by mothers (in one case, the step-mother was the only one who attended so her responses represented her family).
One-month after the retreats, only eight of the 14 families were available to complete follow up surveys, and only six responded to requests for follow up after one school semester. The attrition rate from the study, almost half at one-month (43%) and more than half at one semester (57%) is high. An analysis of differences between parents who completed the follow-up survey at one month and those who did not was completed to assess for characteristics that might be helpful in improving follow up efforts. No significant pretest differences were found however between scores on the various dimensions of the FACES-IV, or among several characteristics of those who completed a follow up and those who did not (See Table 2). Overall, completers indicated slightly lower balance in cohesion, flexibility, and total Circumplex, and slightly higher percentages of satisfaction, although these differences were not significant. Completers also had slightly more education, family income, and children than non-completers, but these were also not significant.

The small, non-random, sample of parents who attended weekend retreats cannot be assumed to be normally distributed. The Wilcoxon signed-rank test is a nonparametric alternative to the paired samples T-test and does not rely on the assumption of being normally distributed. It can be used for statistical hypothesis testing on repeated measurements from a single sample (Hettmansperger & McKean, 2011). The Wilcoxon signed-rank test was used to test the statistical significance of differences between each family functioning score before and after the intervention in two series. All tests were run in SPSS 19. The first series tested the null hypothesis that the median of differences between pretest and Time 2 would equal zero (interval A), and the second series tested the null hypothesis that differences between pretest and Time 3 would equal zero (interval B). Ratio scores were used for cohesion, flexibility, and total Circumplex, and percentage scores were used for communication and satisfaction.
Table 2

Pretest differences of completers and non-completers of one-month follow up survey.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Completed follow up</th>
<th></th>
<th></th>
<th>t(12)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>M</td>
<td>SD</td>
<td>Yes</td>
<td>M</td>
</tr>
<tr>
<td>FACES measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohesion</td>
<td>2.76</td>
<td>.52</td>
<td>2.23</td>
<td>.85</td>
<td>1.35</td>
</tr>
<tr>
<td>Flexibility</td>
<td>1.88</td>
<td>.37</td>
<td>1.52</td>
<td>.45</td>
<td>1.57</td>
</tr>
<tr>
<td>Total Circ.</td>
<td>2.32</td>
<td>.27</td>
<td>1.87</td>
<td>.62</td>
<td>1.62</td>
</tr>
<tr>
<td>Communication</td>
<td>76.2</td>
<td>21.81</td>
<td>76.4</td>
<td>28.43</td>
<td>-.02</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>50.3</td>
<td>25.84</td>
<td>57.13</td>
<td>25.03</td>
<td>-.50</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>2.67</td>
<td>1.37</td>
<td>2.88</td>
<td>1.25</td>
<td>-.30</td>
</tr>
<tr>
<td>Family Income</td>
<td>2.5</td>
<td>1.52</td>
<td>2.63</td>
<td>1.41</td>
<td>-.16</td>
</tr>
<tr>
<td>N. of children</td>
<td>2.83</td>
<td>.98</td>
<td>3.0</td>
<td>1.07</td>
<td>-.30</td>
</tr>
<tr>
<td>Family Structure</td>
<td>.50</td>
<td>.55</td>
<td>.50</td>
<td>.53</td>
<td>.000</td>
</tr>
</tbody>
</table>

*Note*. Based on one parent response per family, N=14.
The significance values for both test series are presented in Table 3. The null hypothesis of no median differences was accepted in each case, meaning that no significant outcome results were found ($p \leq .05$) for any of the family variables in either series. Some of the individual scores decreased after the intervention and others increased (which will be explored below), and the overall changes in scores do not indicate that family functioning increased or decreased significantly across the sample.

Cohen’s $d$ effect sizes were calculated to supplement the statistical hypothesis tests. Effect sizes can demonstrate the magnitude of intervention effects and may be helpful in estimating the sample sizes needed for future studies (Becker, 2000). Effect sizes based on the mean differences between pretest and Time 2, and pretest and Time 3 are reported in Table 4. Small effect sizes were found for the Cohesion and total Circumplex variables, however there was no effect for Flexibility, Communication, or Satisfaction (Cohen, 1988). These small effects may suggest that larger sample sizes would be needed to detect effects in future studies.
Table 3

*Wilcoxon Signed Rank Tests from Pretest to Time 2 (Int. A) and Pretest to Time 3 (Int. B)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sig. at Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Cohesion</td>
<td>.575</td>
</tr>
<tr>
<td>Flexibility</td>
<td>.779</td>
</tr>
<tr>
<td>Total Cir.</td>
<td>.889</td>
</tr>
<tr>
<td>Comm.</td>
<td>.400</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>1.0</td>
</tr>
</tbody>
</table>

*Note.* Compare significance to $p \leq .05$
Table 4

Effect sizes between pretest and Time 2, and pretest and Time 3.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pretest</th>
<th></th>
<th>Time 2</th>
<th></th>
<th>Time 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>Cohesion</td>
<td>2.23</td>
<td>.85</td>
<td>2.40</td>
<td>.87</td>
<td>.20</td>
<td>2.42</td>
</tr>
<tr>
<td>Flexibility</td>
<td>1.52</td>
<td>.45</td>
<td>1.53</td>
<td>.23</td>
<td>.03</td>
<td>1.5</td>
</tr>
<tr>
<td>Total Circumplex</td>
<td>1.87</td>
<td>.62</td>
<td>1.96</td>
<td>.51</td>
<td>.16</td>
<td>1.96</td>
</tr>
<tr>
<td>Communication</td>
<td>76.38</td>
<td>28.43</td>
<td>70.38</td>
<td>26.40</td>
<td>-.22</td>
<td>63.17</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>57.13</td>
<td>25.03</td>
<td>57.50</td>
<td>26.22</td>
<td>.01</td>
<td>54.83</td>
</tr>
</tbody>
</table>

Note. Negative effect sizes are associated with a decline in the mean score from pretest to follow-up.
Case Analyses

Ratio scores as well as percentage and level of communication and satisfaction were analyzed through a case by case exploration of changes across the data collection points. Due to the small sample size and the exploratory intent of the study, individual family responses were valued as a part of the overall analysis. The diversity in family scores as well as the varied patterns of change may inform future choices regarding intervention and measurement. Case studies involving comparisons of parents’ scores to their demographics were avoided for two reasons. Confidentiality concerns stemming from making the data too identifiable in the small sample made case study undesirable, as did concerns over making general claims about the population when the design did not yield a representative sample. For example, there were not enough data to conclude that level of income, parent’s gender, race, age, or education were related to changes in family functioning.

Family cohesion.

Table 5 shows the increase (+) or decrease (-) in family cohesion ratios across the three data collection points. According to the FACES IV manual (facesiv.com, n.d.) ratio scores above 1 indicate balance, or healthy functioning, on that dimension and increasing scores indicate even better balance. One score at pretest approached the unbalanced cutoff of 1 (Case 3; 1.02), and the other respondents perceived that their families had balanced, healthy levels of cohesion prior to participating in the intervention (scores above 1). Regarding changes from pretest to Time 2, there was no overall trend toward improvement or decline among the respondents. Five of the cases showed declines in cohesion one month after the retreat (Time 2) and three of the cases showed improvement, which explains the lack of significant statistical findings. There is some indication however, that respondents that scored lower on the cohesion
pretest were more likely to improve at Time 2. While the four highest scorers at pretest had lowered cohesion scores at Time 2, three of the four lowest scorers at pretest (cases 3, 4, 6) showed improvement. In general, the hypothesis that family cohesion would increase after the intervention and then maintain over time was not sustained.

**Family flexibility.**

As with the dimension of cohesion, flexibility was analyzed using ratio scores that indicate the respondents’ level of balance. Scores above 1 represent more balanced or healthier functioning, and those below 1 represent imbalance. These scores are presented in Table 6. Similarly to the cohesion scores, all but one case scored in the balanced range at pretest indicating that respondents endorsed a healthy level of flexibility in their families. Changes in scores from pretest to Time 2 were small and as likely to be in a positive direction as negative (4 cases of improvement, and 4 cases of decline). The largest change was an increase of more than 1 point in case 3 from pretest to Time 2 (0.87 to 1.88). Case 3 showed more improvement in terms of absolute ratio score and also crossed the threshold from an unbalanced to a balanced level of flexibility. Scores between Time 2 and Time 3 were more consistent with the largest change scores in cases 4 and 7 (.25, .21). The hypothesis that family flexibility scores would increase after the intervention was not sustained, however scores remained stable between follow-up data collection points.
### Table 5

**Family Cohesion Ratios at Pretest, Time 2, and Time 3**

<table>
<thead>
<tr>
<th>Case</th>
<th>Pretest</th>
<th>+/−</th>
<th>Time 2</th>
<th>+/−</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.91</td>
<td>−</td>
<td>2.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1.81</td>
<td>−</td>
<td>1.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1.02</td>
<td>+</td>
<td>3.89</td>
<td>−</td>
<td>3.50</td>
</tr>
<tr>
<td>4</td>
<td>2.07</td>
<td>+</td>
<td>2.14</td>
<td>+</td>
<td>2.56</td>
</tr>
<tr>
<td>5</td>
<td>3.88</td>
<td>−</td>
<td>3.50</td>
<td>−</td>
<td>3.24</td>
</tr>
<tr>
<td>6</td>
<td>1.73</td>
<td>+</td>
<td>2.21</td>
<td>−</td>
<td>1.66</td>
</tr>
<tr>
<td>7</td>
<td>2.25</td>
<td>−</td>
<td>2.07</td>
<td>−</td>
<td>1.92</td>
</tr>
<tr>
<td>8</td>
<td>2.14</td>
<td>−</td>
<td>2.00</td>
<td>−</td>
<td>1.61</td>
</tr>
</tbody>
</table>

*Note.* + indicates increase across the interval; − indicates decrease across the interval
Table 6

*Family Flexibility Ratios at Pretest, Time 2, and Time 3*

<table>
<thead>
<tr>
<th>Case</th>
<th>Pretest</th>
<th>+/-</th>
<th>Time 2</th>
<th>+/-</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.00</td>
<td>-</td>
<td>1.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1.44</td>
<td>-</td>
<td>1.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.87</td>
<td>+</td>
<td>1.88</td>
<td>-</td>
<td>1.77</td>
</tr>
<tr>
<td>4</td>
<td>1.89</td>
<td>+</td>
<td>1.94</td>
<td>-</td>
<td>1.69</td>
</tr>
<tr>
<td>5</td>
<td>2.13</td>
<td>-</td>
<td>1.52</td>
<td>+</td>
<td>1.55</td>
</tr>
<tr>
<td>6</td>
<td>1.35</td>
<td>-</td>
<td>1.22</td>
<td>+</td>
<td>1.38</td>
</tr>
<tr>
<td>7</td>
<td>1.06</td>
<td>+</td>
<td>1.32</td>
<td>-</td>
<td>1.11</td>
</tr>
<tr>
<td>8</td>
<td>1.44</td>
<td>+</td>
<td>1.51</td>
<td>-</td>
<td>1.50</td>
</tr>
</tbody>
</table>

*Note.* + indicates increase across the interval; - indicates decrease across the interval
Total Circumplex ratio.

According to the Circumplex model, it may be possible for families to have different levels of functioning on different dimensions. For instance, in clinical work the FACES IV can be used to plot a grid location to show families’ strengths and deficits in cohesion and flexibility. The Total Circumplex ratio represents the intersection of the two main dimensions and can be interpreted as an overall indicator of family functioning. Total Circumplex ratio scores are summarized in Table 7.

Similarly to the flexibility and cohesion ratios, all but one of the parents’ scores indicated that they were already experiencing healthy balance in their families at pretest. Although there was more variability in the overall ratio scores than in the individual cohesion and flexibility dimension scores, only one case experienced a change exceeding 1.0 point in either direction. This respondent, the same that had shown the greatest increase in family flexibility (case 3), also showed the greatest overall improvement in family functioning at Time 2 (.94 to 2.89). The gain represents a move across the normed threshold from unbalanced to very balanced, in fact, at Time 3 this case had the highest score for overall family functioning. There was also an indication, as there was in the cohesion dimension, that parents with the lowest scores at pretest were more likely to improve. While three of the four cases with the highest scores declined at time 2, three of the four cases with the lowest initial scores improved. Overall, the hypothesis that total Circumplex ratio scores would improve following the intervention were not sustained, however scores from Time 2 to Time 3 were relatively stable.
Table 7

*Total Circumplex Ratios at Pretest, Time 2, and Time 3*

<table>
<thead>
<tr>
<th>Case</th>
<th>Pretest</th>
<th>+/-</th>
<th>Time 2</th>
<th>+/-</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.45</td>
<td>-</td>
<td>1.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1.63</td>
<td>-</td>
<td>1.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.94</td>
<td>+</td>
<td>2.89</td>
<td>-</td>
<td>2.64</td>
</tr>
<tr>
<td>4</td>
<td>1.98</td>
<td>+</td>
<td>2.04</td>
<td>+</td>
<td>2.13</td>
</tr>
<tr>
<td>5</td>
<td>3.00</td>
<td>-</td>
<td>2.51</td>
<td>-</td>
<td>2.39</td>
</tr>
<tr>
<td>6</td>
<td>1.54</td>
<td>+</td>
<td>1.71</td>
<td>-</td>
<td>1.52</td>
</tr>
<tr>
<td>7</td>
<td>1.65</td>
<td>+</td>
<td>1.70</td>
<td>-</td>
<td>1.52</td>
</tr>
<tr>
<td>8</td>
<td>1.79</td>
<td>-</td>
<td>1.76</td>
<td>-</td>
<td>1.56</td>
</tr>
</tbody>
</table>

*Note.* + indicates increase across the interval; - indicates decrease across the interval
**Communication.**

Communication is seen as a facilitating dimension in the Circumplex model and is likely to correspond to other family functioning dimensions. Scores on the supplementary communication scale were analyzed as percentages and corresponding levels as shown in Table 8. Cutoff values for each level were established in Olson, et al. (2007). Levels range from very low to very high, with higher levels indicating more healthy communication in the family. Grouping percentages into categories makes it easier to track changes across the data collection points and is an attempt to indicate practical significance.

The range of communication percentage scores at pretest was larger than the other dimensions (10 percent to 99 percent) due to three low-scoring cases. These cases had low communication scores despite having had relatively high ratio scores in the other dimensions. In an opposite example, the parent with the lowest Total Circumplex ratio (case 3) indicated that their family communication was high or very high over time. This observation was somewhat counter-intuitive to the theory of the Circumplex model where communication scores would be expected to be similar to the ratio scores (Olson, 2010).

Percentage scores indicate that four parents experienced declines in communication between pretest and one month after the retreat (Time 2), two experienced gains, and two remained the same. Many of these changes, however, represent small differences in the functional level of communication. Communication percentage scores were categorized into levels to help clarify the magnitude of changes across the data collection points. Comparing communication levels led to a somewhat different finding. In six of the seven cases that were in the High or Very High range at pretest (parents already indicating healthy levels of communication), percentages remained at least High at Time 2 even though some of the cases
Table 8

*Communication Percentage and Level at Pretest, Time 2, and Time 3*

<table>
<thead>
<tr>
<th>Case</th>
<th>Pretest Percent</th>
<th>Pretest Level</th>
<th>Time 2 Percent</th>
<th>Time 2 Level</th>
<th>Time 3 Percent</th>
<th>Time 3 Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>80.00</td>
<td>High</td>
<td>86.00</td>
<td>High</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>2</td>
<td>86.00</td>
<td>High</td>
<td>80.00</td>
<td>High</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>3</td>
<td>74.00</td>
<td>High</td>
<td>88.00</td>
<td>Very High</td>
<td>96.00</td>
<td>Very High</td>
</tr>
<tr>
<td>4</td>
<td>74.00</td>
<td>High</td>
<td>70.00</td>
<td>High</td>
<td>65.00</td>
<td>Moderate</td>
</tr>
<tr>
<td>5</td>
<td>94.00</td>
<td>Very High</td>
<td>94.00</td>
<td>Very High</td>
<td>83.00</td>
<td>High</td>
</tr>
<tr>
<td>6</td>
<td>99.00</td>
<td>Very High</td>
<td>65.00</td>
<td>Moderate</td>
<td>61.00</td>
<td>Moderate</td>
</tr>
<tr>
<td>7</td>
<td>10.00</td>
<td>Very Low</td>
<td>10.00</td>
<td>Very Low</td>
<td>13.00</td>
<td>Very Low</td>
</tr>
<tr>
<td>8</td>
<td>94.00</td>
<td>Very High</td>
<td>70.00</td>
<td>High</td>
<td>61.00</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

*Note.* Level determined by cutoff values established in Olson, et al., 2007.
had declined slightly. The case with very low communication levels at pretest remained low at Time 2. The hypothesis that communication levels would increase after the intervention cannot be supported.

**Satisfaction.**

While not measured as part of the Circumplex model, a satisfaction scale is included in the FACES IV instrument because family satisfaction has been shown to be positively correlated with family functioning (Olson, n.d.). For example, families are more likely to be satisfied with their families when they are balanced than when they are unbalanced. Satisfaction percentages and levels are presented in Table 9. At pretest, only half of the parents rated themselves in the High range, and none were in the Very High range of satisfaction. This finding seems to support the theory that parents with pre-adolescent children would be less likely to experience high satisfaction. Percentage scores show that satisfaction increased for four of the cases, three declined, and one stayed the same from pretest to Time 2. Similar to the analysis of the communication dimension, percentage scores were grouped into levels for additional interpretation. Of the four cases that were very low to moderate at pretest, three improved at least one level at Time 2, compared to no cases of level improvement among those who were already high at pretest. This may indicate that those with the lowest scores prior to the intervention, or the least satisfaction, had the most potential for improvement.
Table 9

*Satisfaction Percentage and Level at Pretest, Time 2, and Time 3*

<table>
<thead>
<tr>
<th>Case</th>
<th>Pretest</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent</td>
<td>Level</td>
<td>Percent</td>
</tr>
<tr>
<td>1</td>
<td>71.00</td>
<td>High</td>
<td>71.00</td>
</tr>
<tr>
<td>2</td>
<td>30.00</td>
<td>Low</td>
<td>21.00</td>
</tr>
<tr>
<td>3</td>
<td>58.00</td>
<td>Moderate</td>
<td>92.00</td>
</tr>
<tr>
<td>4</td>
<td>75.00</td>
<td>High</td>
<td>79.00</td>
</tr>
<tr>
<td>5</td>
<td>58.00</td>
<td>Moderate</td>
<td>79.00</td>
</tr>
<tr>
<td>6</td>
<td>84.00</td>
<td>High</td>
<td>45.00</td>
</tr>
<tr>
<td>7</td>
<td>10.00</td>
<td>Very Low</td>
<td>28.00</td>
</tr>
<tr>
<td>8</td>
<td>71.00</td>
<td>High</td>
<td>45.00</td>
</tr>
</tbody>
</table>

*Note.* Level determined by cutoff values established in Olson, et al., 2007.
Results of School Adjustment Indicators

Sample Demographics-Children

One of the major adaptations discussed in social work intervention research is making an intervention more culturally congruent (Fraser et al., 2009). Tracking race in an intervention research study is important because race has been shown to play a significant role in intervention outcomes, partly because cultural factors vary among groups (Kumar, 2006; Wampler et al., 2002). Not only do groups vary culturally, but being a member of a minority race has been shown to amplify risk for children transitioning to middle school due to increased social pressure (Bowman, 2006). The racial make-up of the Richmond school district is 85% Black, 8.2% White, 5.6% Hispanic (RPS ethnic statistics, 2009-2010), however in the current sample all but one of the rising 6th graders (13) were African American. The remaining child was White, with no Hispanic children represented.

Although the literature specific to middle school adjustment sparsely addresses issues related to sex difference, it is clearly documented in the risk and resilience literature that males and females have significantly different developmental trajectories (Fraser et al., 2009). These differences in development also create different meaning and outcomes for female versus male children (Carter et al., 2009). Of the rising 6th graders that attended retreats, 4 were male and 10 were female.

Adjustment Indicators

Grade point average (GPA), school attendance, and the number of behavioral incidents per semester were used to indicate the level of school adjustment in 6th grade (Gutman & Midgley, 2000; Malaspina & Rimm-Kaufman, 2008). To capture the extent that sample students experienced changes in these adjustment indicators, scores across two baseline points (Fall and
Spring semesters of 5\textsuperscript{th} grade) and a post-intervention point (Fall semester of 6\textsuperscript{th} grade; \(n=12\)) were compared. An additional analysis to address the proposed hypotheses compared changes in individual scores to changes in the school mean scores (school population means for each school where sample students attended) from the Spring semester of 5\textsuperscript{th} grade to the Fall semester of 6\textsuperscript{th} grade.

**GPA.**

GPA could range from 0.0 to 4.0. The sample mean GPA for the first semester of 5\textsuperscript{th} grade was 2.6 (range = 1.7) and increased during the second semester to 2.8 (range = 1.5). The mean GPA then dropped to 2.53 in 6\textsuperscript{th} grade (range = 2.27). Individual scores demonstrated the same pattern. GPAs for each case are presented in Table 10 with difference scores noted for each interval. Between semesters of 5\textsuperscript{th} grade, only one student’s GPA declined, and between 5\textsuperscript{th} and 6\textsuperscript{th} grade eight of the eleven students experienced a drop in GPA. A drop in GPA following the middle school transition was expected based on previous findings (Barber & Olsen, 2004; Gutman & Midgeley, 2000) and the intervention does not appear to have been enough to modify this trend.
Table 10

*Grade Point Average at Fall 5th grade, Spring 5th grade, and Fall 6th grade with difference scores*

<table>
<thead>
<tr>
<th>Case</th>
<th>Fall 5th</th>
<th>(Diff)</th>
<th>Spring 5th</th>
<th>(Diff)</th>
<th>Fall 6th</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.60</td>
<td>(.30)</td>
<td>1.90</td>
<td>(-.57)</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>2.70</td>
<td>(.40)</td>
<td>3.10</td>
<td>(-.10)</td>
<td>3.00</td>
</tr>
<tr>
<td>3</td>
<td>3.30</td>
<td>(.10)</td>
<td>3.40</td>
<td>(-1.40)</td>
<td>2.00</td>
</tr>
<tr>
<td>4</td>
<td>2.20</td>
<td>(.10)</td>
<td>2.30</td>
<td>(.00)</td>
<td>2.30</td>
</tr>
<tr>
<td>5</td>
<td>3.30</td>
<td>(.10)</td>
<td>3.40</td>
<td>(.20)</td>
<td>3.60</td>
</tr>
<tr>
<td>6</td>
<td>3.00</td>
<td>(.20)</td>
<td>3.20</td>
<td>(-.20)</td>
<td>3.00</td>
</tr>
<tr>
<td>7</td>
<td>2.60</td>
<td>(.50)</td>
<td>3.10</td>
<td>(-.27)</td>
<td>2.83</td>
</tr>
<tr>
<td>8</td>
<td>2.10</td>
<td>(.00)</td>
<td>2.10</td>
<td>(.50)</td>
<td>2.60</td>
</tr>
<tr>
<td>9</td>
<td>2.40</td>
<td>(.10)</td>
<td>2.50</td>
<td>(-.25)</td>
<td>2.25</td>
</tr>
<tr>
<td>10</td>
<td>3.20</td>
<td>(.10)</td>
<td>3.30</td>
<td>(-1.16)</td>
<td>2.14</td>
</tr>
<tr>
<td>11</td>
<td>2.40</td>
<td>(.30)</td>
<td>2.70</td>
<td>(-.70)</td>
<td>2.00</td>
</tr>
<tr>
<td>12</td>
<td>2.90</td>
<td>(-.30)</td>
<td>2.60</td>
<td>(.70)</td>
<td>3.30</td>
</tr>
</tbody>
</table>

*Note.* Grade point average based on a 4 point scale; (0.0 F, 1.0 D, 2.0 C, 3.0 B, 4.0 A).
Table 11

*Difference scores between individual and school mean GPAs; 5th and 6th grade.*

<table>
<thead>
<tr>
<th>Case</th>
<th>5th</th>
<th>6th</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-.50</td>
<td>-1.87</td>
</tr>
<tr>
<td>2</td>
<td>.70</td>
<td>.10</td>
</tr>
<tr>
<td>3</td>
<td>1.00</td>
<td>-1.20</td>
</tr>
<tr>
<td>4</td>
<td>-.50</td>
<td>-.56</td>
</tr>
<tr>
<td>5</td>
<td>1.20</td>
<td>.70</td>
</tr>
<tr>
<td>6</td>
<td>.80</td>
<td>.10</td>
</tr>
<tr>
<td>7</td>
<td>.70</td>
<td>.33</td>
</tr>
<tr>
<td>8</td>
<td>-.30</td>
<td>-.30</td>
</tr>
<tr>
<td>9</td>
<td>.40</td>
<td>-.95</td>
</tr>
<tr>
<td>10</td>
<td>.60</td>
<td>-.36</td>
</tr>
<tr>
<td>11</td>
<td>.00</td>
<td>-.50</td>
</tr>
<tr>
<td>12</td>
<td>.00</td>
<td>.40</td>
</tr>
</tbody>
</table>

*Note.* Difference scores calculated by subtracting conglomerate mean GPA from individual child GPA.
To test the hypothesis that students who attended retreats would experience less decline in GPA than their average classmates, students’ GPAs from 5th to 6th grade were compared to the mean GPAs for the schools they attended. As mentioned above, the sample mean GPA declined from 2.8 to 2.53 from 5th to 6th grade, while the school mean GPA (mean of all schools attended by sample students) increased from 2.46 to 2.87 across the same interval. Using another method to explore this finding, difference scores were calculated by subtracting the corresponding school mean GPA from each case’s GPA so that negative scores indicated below average grades and positive numbers indicated above average grades. Difference scores were calculated separately for 5th and 6th grade GPAs and are presented in Table 11. In the second semester of 5th grade three students had GPAs lower than their average classmates. In 6th grade, seven of the twelve students had below average GPAs. Counter to the hypothesis, students in the sample were more slightly more likely to experience drops in GPA in 6th grade than their average peers.

**Attendance.**

School attendance was reported as the percentage of instructional days attended during the semester. Average elementary attendance ranged from 92 to 99 percent in the five schools. Middle school attendance was equally high in three of the four schools (96, 97, 99), but was only 73 percent in the other. While this is a concern, the same school reported the highest average GPA. The mean attendance for the sample during the second semester of 5th grade was 98.7 percent, and declined slightly to 96.3 percent in the Fall semester of 6th grade. This drop was not representative of the majority of sample students however, with most of the decline resulting from two students’ absences. Attendance percentages for each case are presented in Table 12. One student’s attendance dropped from 97 to 80 percent, and the other from 98 to 89 percent.
Six students had 100 percent attendance in 6\textsuperscript{th} grade compared to only five students in 5\textsuperscript{th} grade and the remainder had percentages in the high 90s.

It was hypothesized that children who received the intervention would experience less decline in their attendance percentage from 5\textsuperscript{th} to 6\textsuperscript{th} grade than their average classmates. This was tested by comparing the samples’ mean attendance percentage to the mean of the schools attendance percentages. While the sample mean declined from 98.7 to 96.3 percent, the school mean dropped further from 97 to 92 percent. This finding supports the theory that students will have lower attendance in 6\textsuperscript{th} grade, but is also somewhat supportive of the intervention hypothesis.

**Behavioral incidents.**

Collecting data on the number of behavioral incidents was the most challenging of the academic adjustment indicators and yielded the least reliable information. Although all schools had a method for tracking the number of behavioral incidents, definitions varied widely depending on individual school policies. Even among elementary schools and middle schools in the same district there seemed to be significant variation. Children in the sample changed schools between the data collection points and also entered a different school level (elementary to middle). Comparisons of the number of behavioral incidents across the middle school transition lack validity. The number of behavioral incidents, shown in Table 13, was low for the sample students and did decline over time with incidents ranging from 0-4 in the Fall of 5\textsuperscript{th} grade, to 0-2 in the Spring of 5\textsuperscript{th} grade, to only one reported incident for one child in Fall of 6\textsuperscript{th} grade. The hypothesis that intervention participants would have no more problem behavioral incidents in 6\textsuperscript{th} grade than in 5\textsuperscript{th} grade was supported with the data; however the validity of the data was questioned.
Table 12

Attendance Percentage at Fall 5th grade, Spring 5th grade, Fall 6th grade

<table>
<thead>
<tr>
<th>Case</th>
<th>Fall 5th</th>
<th>+/-</th>
<th>Spring 5th</th>
<th>+/-</th>
<th>Fall 6th</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100.00</td>
<td>=</td>
<td>100.00</td>
<td>-</td>
<td>98.00</td>
</tr>
<tr>
<td>2</td>
<td>97.00</td>
<td>=</td>
<td>97.00</td>
<td>-</td>
<td>80.00</td>
</tr>
<tr>
<td>3</td>
<td>100.00</td>
<td>-</td>
<td>98.00</td>
<td>-</td>
<td>89.00</td>
</tr>
<tr>
<td>4</td>
<td>100.00</td>
<td>=</td>
<td>100.00</td>
<td>-</td>
<td>96.00</td>
</tr>
<tr>
<td>5</td>
<td>98.00</td>
<td>+</td>
<td>99.00</td>
<td>+</td>
<td>100.00</td>
</tr>
<tr>
<td>6</td>
<td>97.00</td>
<td>+</td>
<td>100.00</td>
<td>=</td>
<td>100.00</td>
</tr>
<tr>
<td>7</td>
<td>99.00</td>
<td>+</td>
<td>100.00</td>
<td>=</td>
<td>100.00</td>
</tr>
<tr>
<td>8</td>
<td>100.00</td>
<td>=</td>
<td>100.00</td>
<td>=</td>
<td>100.00</td>
</tr>
<tr>
<td>9</td>
<td>94.00</td>
<td>+</td>
<td>98.00</td>
<td>-</td>
<td>93.30</td>
</tr>
<tr>
<td>10</td>
<td>100.00</td>
<td>-</td>
<td>99.00</td>
<td>=</td>
<td>99.00</td>
</tr>
<tr>
<td>11</td>
<td>98.00</td>
<td>-</td>
<td>95.00</td>
<td>+</td>
<td>100.00</td>
</tr>
<tr>
<td>12</td>
<td>97.00</td>
<td>+</td>
<td>98.00</td>
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Note. “+” indicates increase across the interval; “-” indicates decrease across the interval.
Table 13

*Reported Behavioral Incidents at Fall 5th grade, Spring 5th grade, Fall 6th grade*

<table>
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<tr>
<th>Case</th>
<th>Fall 5th</th>
<th>+/-</th>
<th>Spring 5th</th>
<th>+/-</th>
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</tbody>
</table>

*Note.* “+” indicates increase across the interval; “-” indicates decrease across the interval.
Results of Fidelity Tracking

Informative event tracking sheets (Figure C1) were completed by outside observers (investigators) and by the retreat staff (staff) that facilitated each of the group activities. The two investigators planned to randomly select which groups would be observed since the schedule called for activities with up to three age groups at once (adult, adolescent, and child). In practice, since only one participant was younger than age 10 at each of the first two retreats, child and adolescent groups were combined for those weekends. This condensed format allowed the investigators to observe all group sessions in the first two retreats, and do partial observation (split time) of each session in the third retreat when a separate child group was conducted. The investigators took turns attending parent and adolescent groups when divided, and both observed sessions that brought all participants together.

Data from tracking sheets consisted of descriptions of informative events and suggested actions. Informative events were loosely defined during training as any deviations from the established activity protocol and observers were encouraged to record any suggestions they had for making the training or activity outlines more effective. After data from the first retreat were analyzed, a list of clarifying questions was developed to help guide staff and investigators in their observations (refer to Table A3).

Informative events were analyzed using a process of constant comparison, where all new data (comments made on tracking sheets) were compared to the existing structure (Creswell, 2007). Some of the informative events contributed to more general themes and others were used to make specific changes to the format or activities in group sessions. Themes and specific suggestions were developed based on all of the available data and were fed back to the staff at their weekly meeting. After the first weekend retreat, events and suggested actions collected on
tracking sheets were compared to other observers’ comments and to the existing activity and training protocols. During the meeting investigators used the themes to provide additional training general to all of the staff (see learning points in Table A3), and then walked through the suggestions that had been made for changes to the activity protocol. The revised set of activities was then published and used in the second retreat. After the second retreat this process was repeated so that new data was synthesized into the manual through the comparison process. Data gathered during the third retreat were similarly analyzed and used to make final modifications to the training protocol and the weekend retreat manual.

The informative event tracking data can be generally divided into four main categories. These included; events that clarified the family objective (objective not well formed, objective not explicit stated), events that clarified specific activities (material/activity not covered, activity changed, activity held attention, was age appropriate, feasible, and moved participants toward the objective), events that clarified procedures (timing, distractions, variety of activities, group size, room size), and events that reflected a need for ongoing training (leader preparation, clear explanations, redirecting skills, facilitation skills, co-leadership issues). Although observations centered on specific group sessions, some of the informative events and their corresponding suggestions were more generalized, especially those regarding ongoing training needs and modification of the group setting.

Results of the informative event data analysis are presented in two sections. Objective, activity, and procedural clarifications specific to the intervention components will be discussed. Training related themes corresponding with the numerical learning points from Table A3 will then be reviewed.
Clarification of Intervention Components

Orientation.

The objective of the orientation session was to engage families, establish boundaries, and help group members get to know each other and the staff. At the first retreat staff had planned to have families sign in at a registration table, then give a welcoming speech to include an overview of the weekend and the facilities, basic rules (confidentiality, no weapons, no drugs/alcohol, smoking in designated areas, safety precautions), and staff introductions. They prepared to engage participants by having families introduce themselves, and then facilitate a discussion helping participants create their own expectations for group and family interaction (rules) using a white board.

Feedback from the tracking sheets collected after the first retreat suggested several changes for improving the flow and effectiveness of the orientation. When families arrived to the lodge they were directed to sit at tables on the far left of the room opposite of those that had been set for dinner. Due to these arrangements, the retreat director had to give the welcome speech and direct the rule-making activity from the floor rather than the small stage centered on the back wall and had trouble maintaining the groups’ attention. The introduction activity also lacked clarity and families were unsure which member to speak for them, or what was to be shared.

For the second retreat plans were modified so that tables were centered in front of the stage and staff members gave clearer directions. Rather than families introducing themselves, they were asked to converse with a neighboring family about their interest areas for 3-5 minutes and then have one family introduce the other using the rising 6th grader as the spokesperson. Being more purposeful and directive with families as they arrived increased the formality and
smoothed the process. Encouraging families to interact earlier and begin to place responsibility with their early adolescents coordinated with the overall content of the retreat.

During the third retreat additional effort during orientation was placed on helping families develop unity within a sub-group of participants, designated as their “multiple-family groups.” These smaller groups were necessary to maintain ideal group sizes (8-12 participants) during sections of the curriculum where families were brought together. Families were pre-assigned to specific multiple family groups and were delineated by the color of the binder they received, name tags, and table decorations during orientation. Feedback from the final retreat suggested several significant changes to the orientation section. The director will share a more focused intervention philosophy to emphasize building knowledge and skills toward increasing family support for adjustment to middle school. As families introduced each other, they should share their family goals for the retreat as well as their interest areas. Notebooks will be handed out to each older child (middle school and higher) and parent rather than to the family and framed as a journal. This journal will be used during the processing of each activity as a place to record thoughts, feelings, goals, and resolutions.

**Component 1a: Trust building.**

*Objective clarification.*

The family objective of the trust building component was originally “to build a trusting relationship with family members. To aid family members in identifying strengths, discuss family functioning, identify family support systems, and establish goals for the retreats.” Activities across age groups aimed at building trust between group leaders and participants with the theory that any group activity would build confidence and trust. The variety of activities across age groups, however, did not allow families to have common experiences as a foundation
for subsequent groups. Activities within the age groups also led to somewhat disparate goals. In
the child group, activities focused on trust among group members, the role of children in the
family, and participation. Adolescent activities emphasized teamwork and intra-group trust, and
parents discussed family strength; trust in support systems outside the family, and building
rapport in the group.

After the initial retreats, activities and processing questions were centered on building
trust by identifying individual and family level strengths. A new family objective emphasized
family strengths and aligned part “a” of the trust building component with part “b”; “to develop
trusting relationships with other participants and group leaders through sharing family strengths.”
Processing questions were also shifted to focus on solutions, rather than on identifying problems
during the middle school transition. For example, parents were now asked: “What changes do
you anticipate during this transition and how can your support system help you manage those
changes?”

**Procedural clarification.**

Staff instructions were modified to address timing issues created by unanticipated group
needs. For example, staff added a “name-game” activity that cut time short for the main activity
in the adolescent group. The ice-breaker was necessary to help the participants feel comfortable
at the beginning of the retreat, so procedures for the main activity were modified to allow time
for both. In the parent group staff addressed timing issues created by additional orientation
needs through building in extra time to discuss group process. The initial orientation covered
overall policies and procedures, and this discussion included confidentiality, mutual respect,
turning off cell phones, and the need for participation. The process of doing an activity, then
discussing it, was introduced so participants would anticipate the expectation for processing.
Additional safety procedures were implemented for the adolescent mine-field activity including the use of spotters and more flexible obstacles as some of the children were off-balance when blindfolded.

*Activity clarification.*

Variations were added to the activity descriptions that allowed staff to tailor activities specific to their group’s needs. Adolescent and adult activity modifications included changes to the level of physical or cognitive challenge, such as adding a timed component or giving additional “rules” to restrict verbal communication or sight. Variations to children’s activities addressed the range of developmental levels that were encountered. The first younger children’s group (ages 3-10) was conducted during the 3rd retreat and included only two children, ages three and six. Attempting to design activities developmentally appropriate activities for such a large age range was challenging. Flexible protocols that included multiple activities and variations (all of which focus on the common family objective) were needed to encourage staff responsiveness to participants. In practice, both participants were able to engage at different levels in the craft-based creating hands activity and share their projects with each other.

**Component 1b: Trust building.**

*Objective clarification.*

Parents and children were brought together for a multiple family group activity for the second part of the trust building component to enact or practice what they had learned. The emphasis shifted from identifying family strengths to sharing them with the group. Families walked as a group to an amphitheater surrounding a campfire. During the formal part of the session families stood and shared their strengths with the group and added a token “contribution” to the fire (a small bag of fire-coloring powder turns the flames different colors creating a visual
effect). Some comments were declarations of love and appreciation, such as; “my parents are supportive,” “I love my parents,” “I am proud of my kids at school and sports,” and “spending time with my family is very important.” Most families also declared the importance of unity, or sticking together. Even families admitting to struggles expressed how necessary unity is to family functioning. Examples of the theme included; “when one of us is having a problem, all of us help out,” “we stick together no matter what,” “we do almost everything together,” and “we share everything.”

**Activity clarification.**

Several activities including songs and skits around the fire and making S’more treats were added to the manual to enhance this component. Many families had never been camping and viewed these activities as a highlight of the retreat. One parent stated “I’ve never been camping before now, it’s fun to let loose,” another said “I am going to have to do this again, can families just come out here and do this?” A child participant shared “my favorite time was when we had S’mores, (went to the) pool, (and) camping with my mom.” These creative activities also encouraged high levels of child participation and leadership within families. A parent remarked after one participative song; “I didn’t know my child had so much energy! It was fun to see them take charge like that.”

**Procedural clarification.**

Changes to the logistical plan increased the organization and overall impact of the experience. At the first campfire, staff struggled to engage families in songs or skits, the S’more preparation became chaotic (parents were challenged in controlling their children in the preparation line, at the fire, and with cooked marshmallows), and families were less engaged due to distractions. Adaptations included distributing songbooks to families, soliciting entertainment
contributions ahead of time, increasing the lighting and table space for S’mores and increasing staff monitoring to assist parents. Parents were also reminded to smoke ahead of time and bring all belongings from the lodge to avoid distraction. Campfire programs at the remaining retreats were more smooth and effective, and families were more engaged.

Warm up.

Objective clarification.

Families gathered after breakfast on the second day into their multiple family groups (a single group the first and second weekends) to participate in a team-building activity. Staff reinforced behavioral and participation expectations and made additional announcements. The activity objective was to warm up, both mentally and physically, to increase engagement at the start of the day. Some families had not slept well or otherwise talked about not “feeling awake” yet. A physically active problem-solving activity reinforced the “doing the activity, then discussing it” processing format and encouraged participants to identify principles that help groups solve problems.

Activity clarification.

After the first retreat, staff added a “front loading” processing aspect to the activity by writing out the problem-solving steps on a white board (Boyle et al., 2009). They referred to these steps when discussing what was learned and when helping families apply the principles to other problems in their lives. Several observations suggested that families responded positively to the physical challenge and to the opportunity for parents to work with children in a “fun” activity.
Component 2a: Communication.

Objective clarification.

Activities in the communication component were increasingly focused on building knowledge and skills to increase positive family communication. Different activities were used to meet the objective in the different age groups. Young children played games where they learned to speak directly to others and practiced communicating verbally and non-verbally. Adolescents played several games with varied activity levels to reinforce principles of communication, including a cooperative activity used as a metaphor for family communication and a fast-talking game to emphasize the importance of conversation. Parents began with an active partnership game that required parents to communicate in atypical ways, followed by discussion about principles of good communication. These included listening skills of attention and empathy, and speaking skills of self-disclosure (I-statements), clarity, tracking, and respect and regard. Parents were asked to practice listening and speaking skills with partners, where one person shared a simple story with the other about a favorite activity or hobby.

Activity clarification.

Following the first retreat, staff modified the puzzle pieces used in an adolescent activity by adding inspirational words meant to spur discussion and reinforce communication objectives. Words included talking, listening, messages, non-verbal, etc. In the adolescent human tic-tac-toe game, staff used colored bandanas to distinguish participants used as “X”s or “O”s from different teams. Staff also added activity variations in response to the needs of the slightly older group in the second retreat.

Investigators observed that staff deleted a partner practice activity at the end of the session in both the first and second retreats. In the first retreat, participants refused to participate.
in the activity as it was proposed leading to staff retraining about engaging parents. In the second retreat staff ran out of time, but also admitted that they were still unsure about leading the activity because the directions seemed vague. For the third retreat the activity was changed to a role play where parent and child roles were assigned and parents were told what communication problem to play out. This additional clarity helped staff to explain the activity and allowed parents to practice communication principles. Processing in the third retreat was also re-focused entirely on communication with the transitioning middle school child.

**Component 2b: Communication.**

*Objective clarification.*

Participants practiced the communications skills they had learned through a group problem solving challenge that involved a human sized puzzle. Participants solved the puzzle by deducing and following a pattern that allowed them to move to the correct positions following a set of rules. Success required the group to endure some level of trial and error, communicate effectively, and exercise patience with the process.

*Procedural clarification.*

This activity proved to be meaningful due to the challenge involved for families; however, it tested the staff members’ skills in managing group dynamics. One staff member stated “there was a lot of side talk going on, after four or five tries it was hard to keep them (participants) engaged because they were just done with it.” Parents in the first and second retreats tended to dominate the active efforts of the group, while the ideas of the children (which were often more accurate) were minimized. Group leaders had planned to process the activity with the group after it was solved, as they had done in previous sessions; however they missed opportunities to stop the group and discuss the examples of effective or less effective
communication as they were occurring. Retraining focused on maintaining control of the group through techniques like calling time-out, or using a “talking stick” to reinforce listening and turn-taking, and engaging in “here and now” processing (Boyle et al., 2009).

In the third retreat two smaller groups were formed due to the increased number of participants. These groups had very different activity outcomes. One group solved the puzzle quickly after staff challenged the parents not to verbally participate. This allowed the children, specifically rising 6th graders, to organize and lead the group which increased the participant’s level of focus on the task. Staff also engaged in processing during the group, and focused the final discussion on parents’ styles of communicating with their middle school children. The other group struggled to solve the problem and ran out of time to finish the puzzle. Staff did not process the group as they were struggling nor did they discuss the application of the activity to communication. It was critical that staff began with clear directions, knew the activity well enough to give hints, processed during the activity, and applied the activity to the objective.

Component 3a: Stress and coping.

Objective clarification.

Skills for recognizing and coping with stress and other emotions were taught and reinforced with activities specific to age groups. Adolescents participated in a variety of activities including a group juggling activity about managing multiple stressors, a time-limited competitive activity designed to create a feeling of stress, and relaxation through deep breathing. Parents identified stressors, discussed ways to handle stress, and engaged in deep breathing and guided imagery.
**Procedural clarification.**

Both groups included a type of relaxation exercise, which requires a quiet and comfortable space protected from distraction. Even with the variety of meeting places available at the camp, protecting groups from distraction was challenging and required pre-planning. Staff reported that parents were distracted in the first retreat by “setting up lunch,” and in the second retreat by “noisy volunteers.” At the third retreat, group leaders moved all of the parent groups to a small classroom on the basement level to minimize distraction and provided a more intimate setting. Staff reflected that having a set meeting space was important to consistency and helped parents build on previous discussions. Adolescents were distracted during their relaxation exercise by time constraints because staff had attempted too many activities and because of the time of day. Staff noted “the kids just couldn’t get serious and stop giggling long enough to do it.”

Staff in the parent group used the ball juggling activity successfully to create dialogue about managing multiple life stressors. In the adolescent group, discussion was more muted and processing was more challenging. In the third retreat staff engaged participants more fully by front loading the group’s processing with psychoeducation about the effects of stress on the body and then moved the group to a more comfortable setting for additional processing after the activity.

**Activity clarification.**

The stress-inducing activity was not used in any of the retreats due to time limitations, although it remains in the manual as an alternate. Pairing a mildly stress-inducing activity with discussion and practice of stress reduction techniques can be effective (Priest & Gass, 1997).
Although yoga may be effective for reducing stress with young people, it was removed from the manual due to the lack of staff expertise and time limitations on this component session.

**Component 3b: Stress and coping.**

*Objective clarification.*

A large portion of the afternoon (almost 3 hours) was set aside for families to spend time together doing fun recreational activities around the camp property. Originally, this “family fun time” was not included as a component group. After the first retreat the activities were formally described as ways to practice managing stress through wholesome recreation.

*Procedural clarification.*

At the first retreat children went directly to the swimming pool and spent time playing with staff instead of their families. This prompted the addition of a formal introduction to the group and a follow-up processing session. Families were encouraged to spend the time together and then record what they had learned. The pool was also closed halfway through the time so families were pushed to try canoeing, fishing, and lawn games. Families viewed these open-choice activities as highlights of the retreat. Family members shared “My favorite thing was riding in canoes, playing croquet, and just being with my friends and family,” “I liked when we rode the canoes,” and my favorite activities were “canoeing with family and new friends, playing sharks and minnows in the pool, and fishing with my mom and step-father.”

After the open activities, it was challenging for staff to get families dressed and back to the lodge for the remainder of the groups. Closing the pool earlier helped because families moved more quickly with the incentive of more free-time activities. Verbally building up the remainder of the days’ activities, especially the scrapbooking, also encouraged families. Even with these interventions, however, the component 4 groups were shortened in all three retreats.
Component 4a/b: Family organization.

Objective clarification.

In the first retreat, component 4a was not followed by opportunities for families to practice their new organizational skills. The family scrapbooking activity had been labeled as 4b, but the content was not directly related to organization. For the second and third retreats, the objective of “improving balance in the family by encouraging structure and flexibility” was accomplished by splitting the time. Groups divided by age for 15 minutes, then adolescents and parents were brought together for the remaining 30 minutes. Younger children remained separate in the third retreat. This limited the range of topics that could be covered (did not discuss calendaring/scheduling), but increased the focus of the group and provided an opportunity for parents to collaborate with older children.

Activity clarification.

Parents learned guidelines for making and enforcing rules, setting appropriate consequences, and defining responsibilities with early adolescent children. Psychoeducation about children’s developmental needs were also discussed including opportunities for autonomy and independence. Several parents shared success stories about allowing their children more independence without allowing them to “run wild.” Adolescents discussed the importance of family rules, and how setting personal rules for behavior could protect against peer pressure in middle school.

Families were seated at individual tables for the practice aspect and assigned two tasks. A weekly calendar showing the schedule of responsibilities for children was collaboratively created. Some families included only housework chores, while others focused on school tasks and after school activity participation. Parents then shared one rule that they would like to
implement in the family and worked with their children to establish a reasonable set of consequences related to following or not following the rule. Staff circulated among the families to provide support and encourage discussion. All families in the second and third retreats demonstrated their ability to identify a family rule and set appropriate consequences. Families were encouraged to include their products in their scrapbooks.

**Component 5a: Family unity.**

Families were given a variety of artistic materials, photographs of themselves during the retreat (through family fun time), and binders to create scrapbooks about their experiences. The objective was to reflect on their bonding experiences at the retreat and commit to future support. Similarly to the family fun time, a formal introduction about the purpose of the activity was added to the protocol after the first retreat. Based on feedback from the third retreat, the final activity description encourages families to make a list of goals to “keep their families close” and include it in the scrapbook. This processing component is designed to help families carry forward any gains they have made during the retreat.

**Component 5b: Family unity.**

As the closing ceremony, the objective of this component group was to reinforce positive feelings from the retreat with testimonials about the importance of family unity. Families were called forward and applauded in a large circle of participants, staff, and volunteers as they received a certificate of completion. Participants then passed around a jar of glass beads and were asked to share a positive statement about their family as they took one bead for a memento. Many family members thanked staff or expressed to their families how much they appreciated the time they had spent. The mood was solemn and reflective and many participants shed tears. One parent, who had been the most vocal complainer about the facilities and process of the
retreat, became emotional as she likened overcoming the challenges of the weekend to her overall commitment to her daughter. She stated “I made it through this weekend to show my daughter how much I care about her and that I would do anything for her.” After each person spoke, the retreat director encouraged families to display their certificates and scrapbooks (and journals in the final manual) prominently in their homes to remind them of the experience.

Training Protocol

Many of the informative events and suggestions that were recorded during the retreats by investigators (outside observers) focused on the way planned activities were delivered. While staff had received social work practice instruction in their university coursework and through training for the weekend retreats, they still lacked experience managing and facilitating groups. Staff demonstrated strengths and deficits in different areas as they worked with families, so additional training began with individual instruction during or directly following sessions. Additional group instruction was given during weekly staff meetings and focused on training topics drawn from individual training needs.

Although the ongoing learning points in Table A3 are listed in the order they were encountered, they contribute to the clarity of the overall training protocol. In future tests, all of the learning points should be incorporated into the pre-retreat training. Learning points developed during the retreats can roughly be divided into three categories, including attitude and approach to groups, structuring and managing the group experience, and processing activities, as discussed below. The learning points are referred to by number corresponding to their place in Table A3.
**Attitude and approach.**

The staff member/group facilitator role at the weekend retreats turned out to be very intense, physically, mentally, and emotionally. Staff members had to stay sharp during each of their formal groups, but were also “on” during preparation, transitions, meal times, and wrap-up activities. Encouragement and debriefing from the investigators and retreat director were critical to staff maintenance. Retreats were run on three consecutive weekends, which also increased the level of fatigue expressed by some of the staff members. Hosting the retreats back to back may have had some advantages, such as ease in scheduling, and the ability of staff members to find a pace and build on their efforts from the previous weeks, however, it may have been more effective to have additional time for recovery and re-training.

**Energy.**

Encouragement and “pep-talks” given to the staff members during retreats were complemented by the suggestion that mustering up bursts of energy at strategic points could increase their effectiveness as group leaders. One of these critical points was during the introduction of activities, whether there were problem-solving challenges or discussions (point 26). Staff who gave activity instructions with energy, excitement, and assertiveness garnered a more energetic response from the participants, who were also experiencing fatigue. Another key energy point was when the group became stuck or expressed frustration with problem-solving challenges (point 35). This was most noted during the large multiple family group activities. Staff demonstrated their energy by standing to become more physically present and increased their expressions of encouragement. These actions enhanced the group’s willingness to continue the activity. After groups completed role play exercises, problem-solving challenges, crafts, or games, they often relied on staff to provide energy in order to engage in discussion and
processing about what was accomplished (point 37). Staff seemed to miss several opportunities to reinforce the knowledge and skills from the activity through processing, especially in groups after lunch on the second day possibly due to their fatigue.

**Confidence.**

Leader confidence was another theme related to increased effectiveness in group sessions. Confidence was related to how prepared staff were for their groups, such as having supplies ready, remembering to include important points during activity introductions, and remembering to discuss activities. Specific suggestions for group preparation included creating supply bags that contained all materials needed for the next block of groups (between breakfast and lunch), creating small note cards with key points of each activity (rather than using the cumbersome activity manual), and clearly dividing responsibilities with co-facilitators ahead of time (points 25, 27).

Staff also increased their level of confidence as they gained experience with activities, with participants, and with co-facilitators. Experience was inhibited somewhat however, by the overall staffing structure of the intervention. Staff often ran consecutive sessions with different participants and different co-facilitators. Group leader assignments were originally made to give all staff the opportunity to work with both child and parent groups rather than focusing on consistency. Assigning staff members to specific age groups for the entire intervention would increase their potential to build co-facilitator relationships and build rapport with participants.

**Self-awareness.**

Several learning points were created to address concerns about staff not maintaining appropriate professional boundaries, including too much self-disclosure or failing to recognize and moderate personal biases. Principles of non-judgment, empathy, and active listening were
taught to encourage group leaders to be more validating of participants’ life experiences (points 29, 35). Staff were also encouraged to help participants take ownership in their process by not participating in activities, and not jumping in to solve problems for the group (points 31, 32). When staff viewed participants as capable, strong, and powerful, they were more likely to act as facilitators or guides in the process rather than becoming overly directive.

**Structuring and managing the group.**

*Setting.*

While staff members were instructed to be somewhat less intrusive in the group problem solving process, they needed to take action in managing the structure and environment of the group. Multiple settings were available for groups at the host camp, including large indoor halls, small classrooms, outdoor lawn areas (shaded or not), patios, and picnic tables. Group spaces were assigned prior to the retreats according the type of activities planned. Staff were given some latitude however, to use other spaces if needed. Attention to temperature, lighting, distractions, layout of chairs or tables, and physical space were encouraged to tailor the setting as much as possible to the groups’ needs (point 34). In a positive case the parent group venue was changed to accommodate a participant with physical disabilities (upstairs vs. down), and in a case for improvement staff attempted to sit and process with adolescents in the heat of the sun when shade was available.

*Pacing.*

Managing the pacing and timing of group activities became an important aspect of training. In a few cases, staff started new activities just a few minutes prior to the end of sessions in order to follow their plans. Retraining focused on identifying the most critical content to cover in each component group in case activities ran longer than expected, and on
attending to the timing of each smaller activity (points 33, 38). Staff were told to leave time to process the activities that were done rather than move to new activities just to get them in. This was especially important since the activity protocol was purposefully designed to include variations to accommodate faster moving groups. Slower moving groups need not do all of the supplemental activities beyond the identified core content. Specific time-management suggestions included giving well-thought-out hints, encouraging focus on the process not the product, and the use of modeling to increase the pace of skill acquisition.

_Tailoring to need._

Many of the variations listed in the manual for group problem-solving activities increased or decreased the level of challenge. According to Cziszentmihalyi (1990), a mental state called “flow” is achieved when the levels of challenge and skill are optimized. Briefly, when the challenge level is high and the skill level is low, participants feel anxious and when the challenge level is low and the skill level is high, there is boredom or lack of engagement. When the challenge level matches the participants’ (or groups’) skill level, flow can be achieved. The experience of flow has been described as being fully immersed or involved, with a high level of focus or concentration. Often flow is accompanied by a distorted sense of time or lack of awareness of surroundings due to the intensity of the attention given to the activity. Based on this theoretical underpinning, staff members were encouraged to modify the level of challenge in activities to match the groups’ skill level as much as possible (point 28). Specific tools for increasing the challenge, or intensity, of activities included adding time-constraints, using creative consequences for not following procedures (mock disabilities for strongest leaders--blind, mute, loss of limb), or adding restrictions like not being able to talk.
**Redirection.**

One of the most challenging tasks for staff was re-directing groups that had gotten off topic or were no longer moving toward the objective. Example incidents included participants speaking over each other, refusing to participate, or distracting to topics unrelated to the content, and when individuals dominated groups. Specific re-directing skills included calling time-out, using a talking stick to enforce turn-taking and respect of others voices, referring back to the pre-established group expectations, and discussing the “golden-rule” to increase empathy for those speaking (point 35). Staff were encouraged to manage children’s behavior with consistency, fairness, assertiveness, and empathy, and to creatively respond to children’s developmental needs.

**Group processing.**

Group processing is an essential element of cooperative learning and consists of group members discussing the process of their work. By reviewing the process of a group activity, members can continually improve on their learning and better understand what actions were helpful in reaching their goals (Johnson & Johnson, 2009). Models for processing challenge group activities and initiative games in adventure programs often involve discussions throughout the activity (Priest & Gass, 1997). Group leaders begin by conducting a preview discussion for focus (frontloading), then frame the activity as a metaphor for some other aspect of the participants lives (such as the challenges related to middle school transition). As participants work toward solving the presented problem, group leaders continue to emphasize the process by pausing for brief discussions about what is going well (or not), how members are feeling, and how these might contribute to the metaphor. At the end of the activity the group engages in a
more formal discussion of what was learned and what might be carried forward into the next activity or in other areas of the participant’s lives (Boyle et al., 2009; Priest & Gass).

While some activities in the component groups were psychoeducational or consisted mostly of discussion (especially in parent groups), many of the activities were metaphorical and relied on effective processing in order to tie them to the content of the group. Some processing skills were covered prior to the retreats as part of the review of group theory (point 8), including the concepts of frontloading and gathering the group for discussion at the end of each activity (referred to earlier as doing and activity, then discussing it). Group leaders demonstrated some understanding of this model by including instructions for introducing activity and sets of processing questions in the original activity protocols.

Areas for improvement included processing throughout the activity and asking additional questions during the follow-up discussion. Staff were instructed to find opportunities to engage the group in discussions while they were working toward solutions (point 35). Suggested points of entry were when the group expressed frustration or felt overwhelmed, during natural pauses, and when actions or statements could contribute to the metaphor (e.g. “this is so easy when we all work together”). Staff often engaged the participants after activities by asking the scripted questions, however they rarely asked additional questions or referred to specific parts of the groups’ process. A four-step procedure encouraged staff to ask the scripted open-ended prompts, listen actively to responses, encourage discussion with additional questions, and steer the discussion toward application and generalization (point 37).

Chapter 4 Summary

Outcomes for each of the family functioning variables were tested by comparing pretest scores to scores at one-month and one-semester follow up points. Median differences were
evaluated with nonparametric statistical tests and differences in scores were examined with case level analyses. No statistically significant differences were found from pretest to follow-up. The case analysis showed that pretest scores were generally high, lower scores at pretest were more likely to improve at follow up, and scores varied more between pretest and Time 2 than between Time 2 and Time 3. Students’ GPAs and attendance percentages from 5th to 6th grade were compared to school means. The sample mean GPA dropped slightly while the school mean increased and attendance percentages remained high for both groups. Objective clarifications, procedural clarifications, and activity clarifications were made to the activity protocol based on fidelity tracking data. Modifications were also made to the training protocol.
Chapter 5: Discussion

Synopsis of the Dissertation

Children experience changes in multiple levels of their social ecologies when they transition into middle school (Eccles, 1999; Jozefowicz-Simbeni, 2008). These biological, psychological, social, and environmental changes create increased risk for dropout and other factors related to academic adjustment (Cataldi et al., 2009). For low-income minority children these risks can be magnified by environmental and social factors (Ge et al., 2002). Healthy family functioning, including balanced levels of cohesion and flexibility, has been shown to buffer these risks (Burchinal et al., 2008; Olson, 2010; Wampler et al., 2002) and was targeted by the intervention.

The Multiple Family Group Weekend Retreat intervention, adapted from a previous version to specifically address the family support needs of children transitioning to middle school, was tested in a pilot study as a method for increasing family functioning. Fourteen families of rising 6th grade students from public schools on the South side of Richmond, VA participated in one of three MFG retreats. The intervention consisted of a series of group components focused on building knowledge and skills in areas of trust, communication, stress and coping, family organization, and family unity. Assessing feasibility was the overarching goal of the early pilot study and involved monitoring issues of training, recruitment, and retention prior to the retreats; provider competence, group setting, activity effectiveness, and possible adverse affects during the retreats; and procedures for determining preliminary efficacy
after the retreats. Key evaluation objectives included 1) measuring changes in children’s family functioning and academic adjustment according to a set of hypotheses and 2) collecting fidelity data to help assess feasibility and further clarify the activity and training protocols of the intervention.

**Synthesis of Findings**

**Family Functioning Outcomes**

The FACES IV instrument was designed as a clinical assessment tool for families, and has been used in research to assess changes in functioning (Olson, 2010). In this study it was used to collect data from parents on family functioning variables including cohesion, flexibility, total family functioning, communication, and satisfaction. Outcomes for each of these family variables were tested by comparing pretest scores to scores at one-month and one-semester follow up points. Median differences were evaluated with nonparametric statistical tests and differences in scores were examined with case level analyses. Findings from the family functioning dimensions of cohesion, flexibility, and total Circumplex ratio will be reviewed, followed by a discussion of findings from the communication and satisfaction scales.

**Cohesion and flexibility.**

It was hypothesized that cohesion, flexibility, and total Circumplex scores would increase after the intervention and maintain gains after one semester, although this was not supported in the findings from this study. The number of scores that declined after the intervention was nearly equal to the number that improved resulting in a null statistical finding for these family functioning outcomes. Two explanations for this finding are offered below. First, the clinical change outcomes measured by the ratio scores may not capture the gains in knowledge and skill that are targeted by the preventive intervention. Second, high pretest scores may have limited
the range for demonstrating improvement. Other patterns in the data indicate that cases with the lowest pretest scores showed the greatest improvement at follow up, and changes in scores were smaller from Time 2 to Time 3 than from Pretest to Time 1. These results are also reviewed below.

**Impact of the intervention.**

Olson (2000) delineates two types of family interventions. In family therapy, therapists focus on reducing current problems or symptoms. When guided by the Circumplex model specifically, therapists assess families with the FACES IV instrument and then help them increase balance in one or more areas of functioning. Improvements in balance are anticipated in this type of clinical family therapy. In preventive work, intervention moves beyond dealing with the current symptoms to provide families with skills necessary to negotiate system changes over time. Increased coping skills enable families to adapt more effectively to life stressors and developmental changes. A critical question is whether gains from a short term preventive intervention focused on knowledge and skill building, such as the MFG weekend retreat, can be accurately measured with an instrument designed to capture clinical changes. Rather than focusing evaluation efforts on measuring short term changes in family functioning, a more informative plan might include assessing the initial validity of the program components (did the participants actually acquire new knowledge and skills?) and then tracking longer term outcomes.

Skill acquirement may need to be measured directly following sessions in addition to looking for longer-term outcomes in specific sub-categories of cohesion and flexibility. For example, families may respond to middle school children’s increased desires for time away from home (one aspect of cohesion) in extreme ways by not planning family time or by insisting on
unrealistic amounts of family time. Anticipating that time management may become a problem due to developmental and situational changes, preventive intervention focuses on helping families learn to establish healthy schedules (one of the options in component 4a/b). Acquisition of the skill can be measured by having parents demonstrate their ability to work collaboratively with their children on the schedule and then completing a knowledge assessment instrument. Knowledge assessment instruments will be described in more detail later.

**Balanced pretest scores.**

**Practical significance.**

Ratio scores on the cohesion, flexibility, and total Circumplex dimensions were almost all in the balanced range, above 1, at pretest (with the exception of one case in flexibility and total Circumplex) and scores at both follow up points remained above 1. This seemed to indicate that most families who attended retreats were already functioning at healthy levels prior to the intervention and any variation in scores was contained within this upper range. It is possible that a social desirability bias, or the likelihood of research subjects to represent themselves somewhat more favorably on self-report instruments than what is accurate, might have affected the scores. This may have been exacerbated by racial distrust between the African American participants and the white researchers (Sanderson & Richards, 2010). If this were true, families may have been functioning less well than they indicated. Observations from the informative event tracking sheets suggested that some families lacked the balance in cohesion and flexibility that the FACES-IV data showed, although most seemed to function reasonably well. Examples of unbalanced functioning included one father who was controlling with his children and did not allow them to participate (low flexibility), a mother who did not intervene when her pre-adolescent daughter hit her younger sister (high flexibility), a mother who responded to her
daughter’s physical pain from a minor injury with coldness (low cohesion), and an adolescent daughter that would not leave her mother’s side and mirrored her mother’s rapid changes in emotional state (high cohesion). Measuring family functioning with additional instruments, or from different perspectives such as children’s report or comparing parent’s scores, could have controlled for this social desirability bias, and using researchers that were either the same race or had built trust with the participants could minimize bias stemming from racial issues.

Despite the counter examples, assuming that families were actually functioning in the balanced range as the FACES scores showed, what is the practical significance of variation above the balanced cutoff point of 1? A review of the formula for ratio scores helps to clarify this question. Ratio scores were calculated by dividing the balanced score (items with middle level responses), by the unbalanced score (items with extremely high or low responses). Families were seen as functional as long as they showed balance in at least as many areas as they showed imbalance (Olson, 2010). Improvement in scores was measurable up to a point where parents had a balanced response on each item. Changes over time in scores above 1 (up to 3.88 in the sample) do reflect improvement or decline in functioning, however variation within this healthy range may be less important to family systems than changes across the threshold of 1. Targeting lower functioning families for intervention may yield more meaningful results.

*Level of need.*

Rather than purposefully selecting candidates for participation based on increased risk, such as those receiving individualized services through CISR, children and their families were recruited from the general school population. The identified CISR schools are considered to be high risk due to their percentages of low income students, however, this does not mean that all students are struggling or that all families are unhealthy. When advertised to the whole school,
the intervention may have attracted families with higher resources or those with higher functioning. High functioning families can benefit from spending additional time building skills but intervention is most needed by families functioning at lower levels.

**Barriers to participation.**

Providing services to the neediest families is often challenging due to a variety of barriers to participation. Some of the practical barriers were addressed in the study such as transportation, cost of participation (retreats were free), and child care, while other more emotional barriers such as not knowing what to expect and feeling overwhelmed were not addressed until after parents had registered (Owens et al, 2007; Sanderson & Richards, 2010). Phone calls and at-home visits were designed to address these barriers but did not help with initial recruitment. Ideally, all families with children transitioning to middle school would have the opportunity to participate in an MFG retreat, but future tests of the intervention should target families of youth with greater indicators at risk (Gutman & Midgeley, 2000).

**Improvement among low scorers.**

Ratio scores in the cohesion, flexibility, and total Circumplex dimensions were more likely to improve after the intervention in cases where pretest scores were lowest. This was demonstrated by the large improvement in one case that was initially below the balanced range in flexibility and total Circumplex, and was shown across most cases by comparing changes from pretest to Time 2 between the lowest and highest pretest scores. While interpreted with much caution, this pattern may lend support to the previously discussed assertion that future studies should focus on higher risk families to have the greatest effect. Perhaps parents that demonstrated more need were more likely to benefit from the intervention. The pattern may however, simply be due to error related to regression toward the mean (Kazdin, 2002). If there is
some statistically centralized score located within the balanced range, scores would tend to migrate toward that point in repeated measurements. This may be caused by avoidance of extreme scores on the 5-point response format. Without a comparison group, this threat to validity must be considered.

**Difference scores between intervals.**

Another pattern observed in the flexibility and total Circumplex ratios was that scores changed more drastically between the pretest and Time 1 (1 month) than between Time 2 and Time 3 (4-5 months). Difference scores were calculated for both intervals to examine the range of changes (Time 2 minus pretest; Time 3 minus Time 2). Between pretest and Time 2 the ranges of differences for flexibility and total Circumplex were 1.62 and 2.57, respectively. Between Time 2 (1-month) and Time 3 (5-6 months), the ranges of differences for the same dimensions were .41 and .34. As above, this pattern could be explained by regression toward the mean due to multiple completions of the same instrument. However, there may be some possibility of support for two related theoretical explanations. The level of balance in key areas of functioning may fluctuate in families as children transition to middle school and then stabilize by the middle of the school year. Similarly, families in general that are adjusting to the school schedule after summer break may demonstrate changes in balance that then even out as routines are established.

**Communication.**

The hypothesis that communication percentages would improve after the intervention and then maintain over time was not supported. Most parents had scores in the high range or above at pretest (7 of 8 cases), which may have left less room for improvement. The case analysis showed that one parents’ communication scores were in the low range while their cohesion and
flexibility ratio scores were balanced. This observation was counter to the theoretical assumption that communication, as the facilitating dimension of the Circumplex model, would tend to correlate with cohesion and flexibility (Olson, 2000). This parent may have had an exaggerated or understated perception of their communication effectiveness. Another explanation may be that levels of balance in cohesion and flexibility in a family system are more stable due to being shaped by context and experiences over time, whereas communication may be more influenced by situational stress and developmental changes (Olson et al., 1979). It may be possible to have healthy levels of functioning while experiencing temporary problems in communication.

**Satisfaction.**

Overall, satisfaction percentages did not significantly improve after the intervention even though half of the pretest percentages were not as high as initial scores on the various dimensions of the Circumplex model. Low family satisfaction scores may be explained by overall trends in satisfaction through the life cycle. Family satisfaction in parents, including happiness and fulfillment, has been shown in previous studies to decline through the childrearing years and into children’s adolescence before returning to higher levels as children gain independence (Olson, n.d.). In this sample, even parents who indicated balanced functioning (all but one case on Total Circumplex Ratio) did not seem to recognize a benefit in terms of very high satisfaction with their families. Satisfaction with family functioning does change, but may be more dependent on life stage than on small changes in levels of balance making it a more challenging target for intervention.

**School Adjustment Indicators**
Positive school adjustment was conceptualized in the theoretical model of the dissertation (Chapter 2) as a short term outcome of positive changes in family functioning resulting from the intervention. School adjustment was assessed with indicators of GPA, attendance, and behavioral referrals. It is not clear however, how appropriate measuring school outcomes was for the pilot study since these indicators were relatively stable and may have distracted from the intervention’s focus on modifying family functioning. For example, attempts to adapt the intervention to emphasize the middle school transition may have de-emphasized overall family functioning. A key question is whether the intervention activities emphasize family functioning (as they generally do), or whether the components should be modified to focus directly on improving academic performance (such as tips for establishing homework and tutoring time). Currently, the intervention does not target grade improvement, attendance, or school behavior directly, but hopes to affect these outcomes by improving family functioning. Longitudinal assessment of school indicators may help to demonstrate the effect of the intervention, but may not produce intermediate results.

The null results for improvement in school adjustment indicators were not surprising since changes in family functioning were not found. Instead, patterns of change in the sample GPA and attendance scores generally followed the same trends as the mean school populations. GPA scores did drop slightly for the sample in 6th grade compared to a slight increase in the school mean, however overall scores remained in the mid 2-point range for both 5th and 6th grade (2.4 to 2.8) and were most likely due to factors other than the intervention.

As an indicator of achievement, GPA is comparable between different schools (unlike some other indicators) but may lack utility as an outcome measure for this intervention. GPA is relatively consistent over time and may not be immediately affected by changes in family
functioning. GPA represents the accumulated effect of a host of variables relating to intelligence, social and emotional functioning, and school factors in addition to school adjustment (Gutman & Midgeley, 2000). Although it is hoped that school adjustment will be improved with increased family functioning, family indicators are more likely to be affected and should be the focus of assessment.

Attendance may help to indicate adjustment, but the low variability in scores made changes difficult to interpret (most changes occurred within the top few percent on a scale of 1-100). Most children in the sample and most schools had very high attendance rates and the exceptions are not likely to be the result of typical student adjustment. One school's average attendance was only 73 percent. This low score is more likely the result of systemic concerns within the school or neighborhoods rather than of individual student problems. Follow up data revealed that the student showing the largest attendance decline in 6th grade was experiencing a major life crisis in addition to transitioning to middle school.

School behavior also may be a good indicator of adjustment, although it is difficult to measure using data from school records due to inconsistencies in the data collection process (Spaulding, Irvin, Horner, May, Emeldi, Tobin & Sugai, 2010). While data from this study showed a decline in behavioral problems, middle schools may have defined school problems differently than elementary schools and there may have been variability in these procedures across middle schools. What constituted a behavioral referral in elementary school may not have triggered documentable disciplinary action at the middle school level (Morrison, Peterson, O’Farrell & Redding, 2004). Tracking office discipline referrals (ODRs) in the sample with a standardized instrument, such as the School-Wide Information System (SWIS) would produce more useful results (Spaulding).
Fidelity Tracking

Qualitative data were collected to track fidelity between the published activity protocol and what was observed in practice. Deviations from the protocol were interpreted as informative events and were used for further adaptation and clarification. For example, if staff modified an activity for a particular group by increasing the challenge level, those modifications were included in the manual as alternatives. When staff did not process an activity in the specified way because they ran out of time, additional training was offered about group management and the sessions’ activities were re-assessed for feasibility. Four main categories of informative events resulted from the data analysis, including clarifications of the family objectives for each component group, clarifications of procedures, clarifications of activities, and clarifications related to training. The modifications made to the activity and training protocols as a result of these informative events were presented in detail in Chapter 4.

Adapting the Manual

Modifications were made to nearly all components of the intervention during the pilot test, representing a successful effort to collect, analyze, and apply fidelity data. Decisions about how to adapt the manual were guided by an MFG theoretical framework that included components of both family and group therapies. As stated in Chapter 2, changes in family functioning are facilitated in MFGs through the group process (Dennison, 2005). It is critical that groups function well, or cohesively, so that members can take advantage of key therapeutic factors (Yalom, 1995). Many changes that were suggested focused on creating a more appropriate setting, providing adequate structure, orienting members to the group process, and other factors important to the early stages of group development (Corey, 2008). Suggestions for staff also focused on the functions of leaders in early group developmental stages, including
preparing physically and psychologically, modeling appropriate group behavior, assessing needs, teaching interpersonal skills, and being open.

**Methodological Limitations**

**Power**

The power of a statistical test is its ability to detect an effect, or the probability of a Type II error (false negative). Power depends on three key factors, including the statistical significance criterion used in the test ($p=.05$, etc.), the desired effect size, and the sample size. Smaller sample sizes increase the sampling error and can make it more difficult to detect an effect (Faul, Erdfelder, Buchner, & Lang, 2009). The small sample sizes in the current study, especially after attrition, limited how results could be interpreted, which statistical tests could be used, and likely limited the ability to detect an effect if there had been one. Four to five families at each of three retreats was a reasonable sample size for testing the feasibility of the intervention (producing enough data to inform adaptation). This sample size was not large enough however to demonstrate the intervention's efficacy. If all 28 families that were scheduled for retreats had attended, there should have been sufficient power to detect a moderate effect in a Wilcoxon signed-rank test (when effect size = .5, alpha level = .05, and power = .8; Faul, Erdfelder, Buckner & Lange, 2009).

**Design Limitations**

Pre-experimental designs were used in the pilot study to measure preliminary effectiveness because of their low cost and feasibility, but they are subject to a variety of threats to validity (Rubin & Babbie, 2008). Without a comparison group, the design cannot control for confounding variables. As examples, the threats of regression toward the mean and repeated testing effects were discussed previously as alternative explanations for the observed patterns in
the family functioning data. In many of the family functioning dimensions, cases that scored lower at pretest tended to have greater improvement but these positive outcomes may be explained by these competing hypotheses.

In repeated measures designs, whether pretest/post-test, or longitudinal, the factor of time between data collection points can create additional threats to validity (Kazdin, 2002). History and maturation are both pertinent to this study because of the numerous changes that take place in children’s lives near the time they are transitioning to middle school. Developmental changes may greatly influence children’s cognitive and emotional abilities, as well as their physical makeup. Measuring GPA and behavior across time without controlling for these factors will decrease the validity of outcomes. Similarly, changes in the school ecology and among peer groups during the transition can strongly influence study results. Some beneficial design strategies were used in this study, including collecting data at follow up points in the family functioning assessment and attempting to compare children’s grades to their peers, however there is much room for improvement.

Certainly randomly assigning experimental and control groups would be important, however recruitment was challenging. A possible solution would be using a multiple baseline design where families are recruited at the same time and assigned to participate in one of three retreats that are conducted at least one month apart. Baseline data could be collected on all three groups at a registration meeting and then the first experimental group could be compared to the other two for a month prior to the second group receiving the intervention (Kazdin, 2002). This design was proposed for the pilot test, but was not feasible due to time restrictions.
Recruitment/Sampling

In an experimental design, random sampling allows sample findings to be more confidently generalized to the population (Kazdin, 2002). A purposive sampling method was proposed in this study instead, because the intervention was aimed at a specific subset of children within the schools. The goal was to advertise the intervention among students receiving individualized services through CISR, thereby targeting youth with higher risk factors. This intention was not well communicated to those actually marketing the study, which created variability in the way families became aware of the opportunity. Some children and parents were directly recruited, while others saw a flier or heard about the intervention from friends. In this shared research process with the community partner, researchers needed to play a more active role in following up or participating directly in the recruitment process (Secret et al., 2011).

Retention

One of the strongest reasons for condensing an MFG intervention into a weekend retreat is to prevent treatment dropout. Maintaining families between initial recruitment and intervention however remained a problem despite efforts in the current study to provide outreach to families. In terms of a design limitation, there was no way to assess demographic, attitudinal, or other differences between those that attended retreats and those that did not because pre-test assessments were not completed until the day of the retreat. It is possible that those who did not attend had something in common that limited their likelihood of attendance. If the lowest functioning families for instance were the ones that did not attend, any successful outcomes would have limited external validity. Future studies are likely to face similarly high levels of dropout prior to the intervention. It would be important to have all families who consent to the study complete a pre-test assessment so that patterns in dropout can be determined.
Attrition following the intervention was also a limitation of this study. Families who attended retreats received the full intervention, but many were unavailable for follow up data collection. A large amount of resources were expended even in the small sample to gather follow up data at two points after the intervention. The process of making appointments by phone and driving to homes to collect surveys was supplemented with mailing for those who could not be reached. Surprisingly, four of the ten mailed surveys were actually returned. A suggestion for future studies would be to plan a reunion event for families that would allow them to re-connect and complete follow-up surveys. This would limit the amount of individual contacts to be made and could serve as an opportunity for a brief booster session. Timing the retreats at the end of the summer was seen as ideal because the intervention would be fresh when children entered 6th grade. This created a gap, however, between when children were recruited at the end of school in June to the retreats in August. This delay may have been a factor in dropout. A possible scenario would time retreats early in the summer to narrow this gap and follow up with reunion events late summer just prior to the start of school.

Measurement

FACES IV.

FACES instruments have been shown to be reliable tools for measuring changes in areas of family functioning in a host of previous studies (Olson, 2010), although the newest FACES IV version has not been as well tested. It was normed mostly in a white mid-western sample of college students’ families and may have some untested limitations related to cultural or socioeconomic differences. As mentioned earlier, there may also be questions about the utility of the instrument for measuring changes in functioning when families are not in the clinical range.
In the current study, the intervention was either not powerful enough to produce changes in core levels of functioning, or the FACES IV instrument was not focused enough to detect changes in functioning targeted by the intervention. Measuring the acquisition of knowledge and skills directly following each component group (with knowledge instruments or observational checklists) would have provided data to bridge this gap in information. It remains unclear whether families did not acquire the intended knowledge and skills during the groups, or whether these skills were not adopted into the family enough to demonstrate changes in functioning. There is a strong enough theory background to believe that it is possible to affect change in some level of family functioning with an MFG intervention. Although, a question remains as to whether the intervention needs to be modified to better help families acquire skills or whether more follow up work needs to be done to help families integrate new skills. Brief knowledge assessment instruments could be developed for each of the component groups as well as check-boxes for demonstrated skills. These would help measure acquisition of knowledge and skills and promote the development of efficacy in areas of family interaction.

Data about family functioning was limited to parents’ perceptions from a self-report instrument. Additional sources of information would have added greater perspective. Comparing adolescent children’s perceptions to their parents, and relating couples information would give more accurate pictures of families’ dynamics and how they changed over time. Gathering data through other standardized measures or through observation could also help to provide a clearer picture of family system changes.

**Fidelity tracking.**

Informative event tracking sheets were used to collect a range of data about activities, procedures, and staff training needs in a narrative format. There was a convenience benefit to
having a single form for the many types of information, but the events and suggestions were often not well organized and required a high level of subjective interpretation during the data analysis. A more objective form with increased delineation through check-boxes and specific blocks for the various types of information would make the analysis more straightforward and accurate. As discussed in Chapter 4, a list of questions was produced specifying the types of information that were appropriate for inclusion on the form. These questions could be translated into a guide for the creation of a more organized data collection tool. In future studies a more objective tool will become even more important as the focus of collecting treatment fidelity data will shift from informing changes to measuring reliability.

**Provider Competence**

The competence of providers to deliver a specified intervention is an important aspect of treatment fidelity because variability across providers can introduce error. Staff competence was monitored closely in this pilot test through observation and informative event tracking. Tracking data were used in a manner similar to the other types of information that were collected, in that feedback about provider competence was used to inform changes in the training protocol rather than to determine the level of deviance from the model. This approach was helpful in clarifying the aspects of training and the level of competence needed to provide the intervention, but the result was high variability in intervention delivery. Inconsistent delivery was an important limitation of the pilot study.

Provider competence and variability in that competence can be a limitation of any study but may have been especially salient in this case due to the use of foundation year Bachelor’s students (Juniors) as providers. BSW Juniors were chosen for this implementation due to the convenience of their summer availability, however several of the staff had no experience leading
groups prior to the retreats and were relying on brief training and life experience to facilitate the experience. Staff members had completed the pre-requisites for acceptance in the social work program and were hand selected through interviews based on their life experiences and desire to work with families, however they were not equally competent and the base level of competence prior to training was low. Helpful staff characteristics included good organizational skills, experience with group dynamics, prior knowledge of the population (early adolescents and/or families living in inner cities), and self-awareness.

A question arises about the effect experienced BSW graduates or master’s level group leaders, perhaps even those with previous experience in MFG weekend retreats like the investigators and retreat directors, would have had on the outcome of the study. It is anticipated that the components of the intervention would have been delivered with more consistency and had better outcomes if staff were initially more competent. Many of the learning points on the training protocol would have also been less critical because they represent basic group facilitation skills. The BSW junior staff did demonstrate some competence prior to the retreats based on the non-standardized assessment of the study staff, however they required intensive training and supervision by the investigators above that which would have been required in preparing higher level staff to deliver the intervention. A more standard method of assessing group facilitation competence would need to be used in order to claim that the BSW students were competent facilitators.

In future studies and implementations of the intervention, the level of staff education and competence should be carefully considered. There is value in identifying the lowest level of competency for a given intervention; however it is important to consistently select and train candidates. Using higher level students that have completed at least foundation practice courses
is recommended for future studies. If BSW Juniors are used, a strong training program including all of the learning points outlined in the results section should be implemented, along with a practical group facilitation experience. As discussed in the results, staff improved greatly after having “practiced” the intervention activities in the first few retreats.

**Manual Structure**

Creating an intervention manual with enough structure to be reliable and enough flexibility to be responsive to a variety of differences is challenging. In the early stages of adapting the MFG weekend retreat manual, activities in each of the components were listed as options, or alternatives, in an attempt to give providers more choice to match personal style or group needs. A variety of activities were acceptable as long as they helped move participants toward the family objectives. This flexibility created problems however when the age groups met separately (adults, adolescents) and then were brought together to practice skills. Several decisions were made that improved the consistency of the manual based on feedback from the pilot test. A firm set of activities were established for each component group including instructions and processing questions that focused activities on the family objectives. Rather than allow flexibility in the choice of activities, modifications for each activity were included. These modifications did not alter the core function of the activity, but allowed staff to adjust the level of physical or cognitive challenge. If several activities were included in a particular component, a main activity was specified so that if staff had limited time they would know where to focus to have the best chance of reaching the objective.

**Future Research**

The current pilot test established the procedural elements of the MFG weekend retreat intervention to make it more feasible, clarified the training and activity protocols for the manual,
and provided information about measurement that can be used in future studies. The study focused on the first four phases of the design and development model (Rothman & Thomas, 1994), culminating with early development and pilot testing. The intervention is not yet ready for movement into the final phases of evaluation and advanced development and dissemination, however. The next realistic step in developing the MFG weekend retreat model for middle school transition would be to conduct additional pilot testing that focuses on refining the curriculum and measuring preliminary outcomes. Until some level of efficacy can be established, a large scale study would not be justified (Thomas, 1994).

Thomas (1994) delineates three important considerations when preparing for further evaluation and development, which may serve to guide additional studies of the MFG intervention. He begins by suggesting a “fair” test of outcomes (p.272) including a rigorous experimental or quasi experimental design, and a sample size with enough power to detect an effect. The example given by Thomas uses a multiple baseline design similar to the one proposed earlier for this intervention to allow comparisons between the initial treatment group and pre-treatment group (those that will get the intervention eventually but have not been exposed to it yet) before and after the intervention. Another element of fairness is that the variables and measurement processes should be closely tied to the key components of the intervention so that desired changes are accurately assessed. This study theoretically connected the intervention components of trust building, communication, stress management, family organization, and family unity to the constructs of cohesion and flexibility that were measured, but did not assess the extent to which stress management or family unity improved, for example. Measuring cohesion and flexibility are important to the theoretical model, but assessing the effectiveness of each intervention component is a critical intermediate step. Using additional
measurement instruments and collecting data from multiple perspectives will also contribute to a more comprehensive picture of the impact of the intervention. Tracking children’s school data and family data longitudinally, at least through the entire transition year, will be important. Establishing booster sessions, framed as reunions from the retreat as previously discussed, at regular intervals would facilitate longitudinal data collection and could add to the overall effectiveness of the intervention.

Controlling for students’ individual risk and resilience factors in the research design will help to clarify the efficacy of the intervention for influencing change in family functioning and academic adjustment. As described in the theoretical model in Chapter 2, the pace at which children develop and the developmental resources children can enlist in coping with life challenges can vary largely (San Antonio, 2004). Differences in individual resources can affect school performance through a number of pathways, and can influence the overall functioning of the family (Fraser, 2004). Collecting baseline data in the areas of cognitive, social, emotional, and physical development will allow future studies to separate effects due to individual factors from effects resulting from the intervention. Examples of cognitive abilities tests, some of which may already be collected regularly in schools, include the Weschler Intelligence Scales (Kaufman, 1994), Cognitive Abilities Test (Lohman & Hagen, 2001), and the Woodcock Johnson (Woodcock, McGrew & Mather, 2001). Emotional and social functioning can be assessed with the Bar-On Emotional Quotient Inventory (Bar-On, 2006) or with the Behavioral and Emotional Rating Scale (Epstein, Harniss, Pearson & Ryser, 1999). Assessment of physical and sexual development is more challenging due to the sensitive nature of the questions. Accurate self-assessment formats are available for determining the sexual developmental stage (Duke, Litt & Gross, 1980); however the level of detail and intrusiveness seems out of balance.
when only used for a control variable. Questions related to the pathways by which physical development may affect academic functioning could be used instead. One example is to assess the attitudes and social behaviors of girls relating to their associations with older peers. Early maturation has been shown to increase risk for antisocial behavior and poor achievement through negative peer influences resulting from association with older males (Carter et al., 2009).

To complement the quantitative methods used to assess the effectiveness of the intervention, a focused qualitative inquiry should be used. Participants’ perspectives on the overall usefulness of the intervention and the usefulness of individual components to their family could add to the demonstration of effectiveness and highlight ways in which the intervention stimulated growth or change in areas not formally assessed. Qualitative data could also provide insight about how positive changes occurred. Did the families experience positive growth just from spending time together, or do they believe the rustic setting was important to that change? Were the multiple family groups effective for providing practice of the knowledge and skills gained in the psychoeducational components? Semi-structured interview or focus groups could be conducted at the end of the retreat experience, however due to fatigue participants may be more insightful after a brief follow-up period. Families will also need time to assess whether the experience itself or the new knowledge and skills actually impacted functioning. Phone calls could be made to selected individuals from each of the retreats after a few weeks, and focus groups could be conducted during the reunion events mentioned previously. A caveat is that many of the participants did not respond to telephone calls one month after the current intervention even after a gift card incentive, so creative incentives may be necessary to encourage follow-up participation.
Another consideration when preparing for additional evaluation, according to Thomas (1994), is to ensure that the intervention provides the human service for which it was intended. The MFG weekend retreat for middle school transition is designed to help families build knowledge and skills that will help them provide greater support for their rising 6th graders. Attempting to provide mental health intervention, or target abusive families, for instance, would distract from the psychoeducational and support goals of the group. The MFG retreat may have utility for other populations or problems, as discussed below, but continuing design work specifically with families of at-risk rising middle school children is needed prior to advanced development and testing (Thomas).

Thomas (1994) also advocates for further development and adaptation of the intervention during ongoing evaluation studies. Additional trial use of the intervention with more cases, with different providers and different settings, provides an opportunity for further advancement and chances to hone key processes. A balance must be found between training staff to follow the established intervention protocols, or maintaining treatment fidelity, and taking advantage of opportunities to learn from practice experiences. Thomas suggests building upon process evaluation procedures already established in early pilot testing, including the use of observation and tracking of informative events in this case. Additional objectivity could be added by using check boxes to document knowledge and skill attainment in each intervention component.

Continued development of the MFG weekend retreat for middle school transition is an important pathway for further research, however a variety of other opportunities for adaptation also exist. The core components and procedures of the MFG weekend retreat intervention have remained consistent through its use with several populations despite the modification for specific needs. This shows the utility of the core intervention for families with a host of problems. The
knowledge produced in this study furthers the adaptation for middle school transition and also contributes to the growing knowledge base for the intervention generally. Currently the intervention is being adapted for use with families of traumatic brain injury patients at VCU and may be used to help military families.

**Practice Implications**

In chapter 1, two practice themes were used to shape the dissertation study. The first related to the central importance of families to child development because families represent the most proximal layer of the social ecology. Families that function in healthy ways help children negotiate their multi-systemic challenges. The second theme focused on the need for early intervention to ameliorate problem behaviors in older adolescents. Findings related to these themes are discussed as practice implications.

**Family Systems Approach**

Families were defined in the study as groups of supportive persons living together in a household. Outside resources are important to children’s development, but people living in the same household may have the most direct influence on younger children (Fraser, 2004). Focusing intervention efforts on family systems garnered support for children who were anticipating a breadth of changes associated with transitioning to middle school. This support was observed in a number of ways throughout the retreats.

Families demonstrated support for their transitioning middle school children through their attendance. With the exception of two fathers, all parents of the 14 rising 6th graders attended retreats and only a few of the oldest siblings were missing. The willingness of families to dedicate a full weekend to an activity advertised as support for rising 6th graders showed a high level of commitment. Support was also demonstrated through the willingness of families to
participate fully in intervention activities. Even when parents experienced discomfort due to the

camp setting they generally engaged in the group process and maintained positive outlooks.

Older adolescent siblings were observed acting as guides for their younger brothers or sisters in
group activities including offering counsel or positive statements about their own middle school
experiences.

Families were asked to share testimonials of strength and support during activities at the
end of both days of the retreats. The first opportunity was sharing family strengths during the
campfire program. An analysis of notes taken by staff indicated that the most consistent theme
among parents and children was family unity. Families expressed that working through
challenges as a family was their greatest strength. During the closing ceremony of the retreat
individuals were asked to share something positive about their experience. Many participants
expressed how much they appreciated the time they had been able to focus on their family and
how much they had learned about each other. Others reflected back to specific activities that
were challenging or unique and noted how much those opportunities to struggle led to growth.
In one case, a father who had fallen into the lake while canoeing with his daughter reflected back
on the experience as a symbol of his commitment to her.

Observations throughout the intervention demonstrated the benefit of increased support
when families worked and played together. Had the intervention brought just groups of rising 6th
graders together, as many camp settings do, the benefits of the experience would not have been
shared throughout the family system. Although empirical support was not found for the efficacy
of the intervention, family members did use the opportunity to increase and express support for
each other. Involving families in prevention and intervention efforts with children can have
lasting supportive benefits that can protect against a variety of risks.
Preventive Intervention

The MFG weekend retreat intervention helps families build knowledge and skills in areas important to healthy functioning. Children entering middle school were targeted by the intervention because this transition point corresponds with critical developmental changes. Rather than waiting until the transition to high school where poor academic adjustment is more likely to lead to dropout and other psychosocial problems, the preventive effort focused on preparing families to support their children in times of change.

Retreats were held just prior to the start of school, so many of the changes that might have challenged children had not occurred yet. Parents were introduced to new knowledge and skills that allowed them to be more prepared to help their children in anticipation of these changes. Several examples from the retreats demonstrate the benefits of providing a preventive intervention. One step-mother who attended with her daughter (without the father) shared that they did not communicate well because of her daughter’s shy and avoidant nature. The mother later told an investigator that she had used the empathetic listening skills she learned to engage her daughter in a healthy conversation. In another example, a father who was harsh and controlling with his son responded to staff prompts during a multiple family group activity to ask his son for help in solving the puzzle. His son then played a key role in finding a solution and both father and son were lauded for their co-participation. In both of these examples, parents practiced skills they had learned during the intervention and experienced positive outcomes. Helping parents learn new skills in a preventive format will prepare them to provide support to their children as they negotiate future life challenges.
Evidence-Based Practice

Social workers have an ethical obligation to contribute to the relevant knowledge base of the profession, and to practice in ways that leverage the most updated information available (NASW, 2010). However, reflecting on the effort and resources expended for the current feasibility pilot study, and the continued investment necessary for the MFG retreat to be considered effective with this population a question could be asked about why such output is necessary. Why not provide previously established programs as they are or carry out interventions that have been used without evidence and leave evaluation and the development of empirical evidence to the side? The answer lies in the responsibility social workers and other human service providers feel to engage their clients with the best practices possible. The NASW (2009) defines evidence-based practice as a “process in which the practitioner combines well-researched interventions with clinical experience, ethics, client preferences, and culture to guide and inform the delivery of treatments and services” (¶ 3). MFG interventions have been reasonably well established (see review in Dennison, 2005), however significant developmental work is necessary to be flexible to client needs, preference, and cultures. The search for improvements in the way interventions are implemented with new client groups was referred to by Thomas (1994) as “developmental practice,” defined as “a mode of practice in which the practitioner is also a developer of interventions” (p. 288). The message for social work practitioners is that adaptation of interventions is an ongoing process that can, and should, be engaged in at all levels of practice.

Curriculum Design

Several practice implications related to designing the curriculum were drawn from the study. Perhaps the most important was the need for establishing clear objectives that were
consistent between age groups. Aligning the objectives allowed staff to design different sets of activities for the various ages that all led to similar discussion points. When parents and children came together for multiple family groups activities, they were able to apply, or practice, what they had learned in previous sessions. In-session practice, such as that encouraged by the “a” and “b” component sections can reinforce participants’ newly acquired knowledge and skills (Walsh, 2010). Reflection experiences also play a key role reinforcing families’ experiences. At the end of each day (Saturday night and Sunday night) a ceremony was conducted to facilitate a time to look back on what had been accomplished and experience positive feelings. While not included previously as core components, these additional activities have a strong potential to impact families. Designing curricula to include reinforcement activities, such as practice and reflection are likely to heighten the effectiveness of interventions.

The importance of establishing a firm, yet flexible activity protocol was also clear. Groups varied considerably across retreats and the intervention manual had to be supple enough to accommodate different developmental levels, group sizes, participant attitudes and physical abilities while still maintaining enough structure to guide staff toward the objectives. Suggesting ways to modify the procedural elements of core activities in the protocol allowed staff to increase or decrease the level of challenge or accommodate specific needs without deleting or replacing the activities.

Including process and procedural elements in the manual along with the activities was necessary because of the 24-hour format of the intervention. All procedural aspects were important to clarify because of the potential to detract from or enhance families’ overall experiences. Although some of these procedures may vary depending upon the context of the trial (different retreat settings, families recruited differently, more families participating, etc.),
many experiences are likely to generalize. The retreat directors had both played key roles in other MFG weekend retreat interventions and provided valuable resources. Because having such experience on hand will not always be feasible, outlining the flow of events in the manual was necessary. Examples of process elements include orientation procedures, comments about volunteer responsibilities, approximate times for transition between groups, and ideas for accommodating larger numbers of participants.

**Conclusion**

Improving family functioning is a worthy goal of preventive interventions targeting children that are at increased risk due to developmental changes and changes in their schools and peer groups as they transition to middle school. The MFG weekend retreat was shown to be a feasible intervention that enhanced family support for high risk children in this challenging transitional stage. Further testing of the adapted intervention should focus on establishing early effectiveness ahead of a larger efficacy trial.

Early adolescent children who are supported by healthy families will be better able to negotiate life’s challenges, however many families are overwhelmed and unable to provide this critical support. Social workers are ethically obligated to focus their efforts on these vulnerable and oppressed families by delivering culturally sensitive and strengths-based services (NASW, 2010). Designing and testing interventions that break down barriers to access and enhance human relationships are important aspects of this overall mission.
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Appendix A

General Schedule

**Family Fun Weekend Retreat**

**Master Schedule**

**Day One**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00 pm</td>
<td>Arrival of camp staff (students, volunteers, director, etc.), set up, &amp; prep time</td>
</tr>
<tr>
<td></td>
<td>(assemble tables in main hall, set up tables in front of stage, designate family cabins and post signs; clean cabins review of schedule and assignments)</td>
</tr>
<tr>
<td>3:30 – 3:45 pm</td>
<td>Buses leave for schools- 2-3 staff will ride the bus to greet families.</td>
</tr>
<tr>
<td>4:00 – 5:00 pm</td>
<td>Buses arrive at designated schools for pick up of families. (Students will register families on the bus-complete check in list and distribute name tags and retreat packets)</td>
</tr>
<tr>
<td>5:15 pm</td>
<td>Buses arrive back at camp. Families will gather in the main hall.</td>
</tr>
<tr>
<td>5:15 pm</td>
<td>Welcome, Introduction of Staff, Rules &amp; Overview of Weekend. MFG “Getting to Know You” activity</td>
</tr>
<tr>
<td>5:45 pm</td>
<td>Parents: Break OR Rsrch Information Meeting/Consent &amp; Assessment</td>
</tr>
<tr>
<td></td>
<td>Children: Outside Group Activity</td>
</tr>
<tr>
<td></td>
<td>Volunteers prepare dinner</td>
</tr>
<tr>
<td>6:30 -7:00 pm</td>
<td>Families settle into cabins; research assent meetings for rising 6th graders;</td>
</tr>
<tr>
<td></td>
<td>Volunteers prepare campfire</td>
</tr>
<tr>
<td>7:00 – 7:30 pm</td>
<td>Dinner Served (Main Hall: buffet style/ family tables)</td>
</tr>
<tr>
<td>7:30 – 8:15 pm</td>
<td><strong>Session # 1a: Trust Building</strong></td>
</tr>
<tr>
<td></td>
<td>Child Group: downstairs main hall</td>
</tr>
</tbody>
</table>
Adolescent Group: deck and grass field
Adult Group: main dining hall
Volunteers clean up meal

8:15 – 8:20 pm Group Walk to Campfire (meet in grass field directly behind main hall)
Staff/volunteers bring s’mores supplies & flashlights

8:20 – 9:00 pm  **Session # 1b: Positive Statement Ceremony/Campfire**
*Backup Rain Plan: Activities in the Main Hall*

10:00 pm  Bed time (All families must be in the cabins - family games)

10:15 – 10:30 pm  Staff Meeting @Main Hall (brief review of the evening, questions &/or concerns)

**Day Two**

6:00 am  Staff Wake Up Time/Review activities and gather materials
Volunteers prepare breakfast

7:00 am  Family Wake Up Time (staff assist families w/preparing for the day)

8:15 – 9:00 am  Breakfast Served

9:00 – 9:30 am  **MFG Warm Up Activity** in Main Hall

9:30 – 10:15 am  **Session # 2a: Communication**
Child Group: outside deck
Adolescent Group: -downstairs main hall
Adult Group: main dining hall
Volunteers clean up breakfast

10:15 – 10:30 am  Break (Bathroom/Water)

10:30 – 11:00 am  **Session # 2b: MFG Communication/Problem Solving Activity** Main Hall

11:00 – 11:45 am  **Session # 3a: Stress and Coping**
Child Group: main hall
Adolescent Group: downstairs main hall
Adult Group: outside (deck and/or grass field)
Volunteers prepare lunch
11:45 – 12:00 pm  Transition back to Main Hall

12:00 – 12:30 pm  Lunch (Main Hall)

12:30 – 12:45 pm  **Session # 3a: Stress and Coping/Family Fun Time:**
  Separation into A/B Groups for activities
  Volunteers clean up lunch

12:45 – 1:45 pm  Group A: Pool/Games & Group B: Canoeing/Fishing
1:45 – 2:45 pm  Group A: Canoeing/Fishing & Group B: Pool/Games

2:45 – 3:15 pm  Family Pack Up/Clothing Change/Transition back to Main Hall (Families should bring all items at this time to Main Hall. Items will stored in the designated family areas until departure)
  Volunteers organize and print pictures of families for Scrapbooks

3:15 – 3:45 pm  **Session #4a: Family Organization**
  Child Group: downstairs hall
  Adolescent: main dining hall
  Adults: outside deck

3:45 – 4:15 pm  **Session #4b: Family Organization/Practice**
  Child Group: outside
  Adolescent & Adults together: main dining hall
  Volunteers prepare scrapbooking supplies

4:15 – 5:15pm  **Session #5a: Family Unity/Scrapbooks**-utilizing printed pictures
  Volunteers prepare for dinner

5:15 – 6:15 pm  Dinner (Catered) & Evaluations (Main Dining Hall)

6:15 – 6:45 pm  **Session #5b: Family Unity/Closing Ceremony**
  (All Families, Staff, Volunteers) front lawn

6:45 – 7:00 pm  Bus Pick Up of Families

7:00 – 7:30 pm  Staff Clean Up/Debriefing
Appendix B

MFG Weekend Retreat Training Protocol

**Introductory Training**

<table>
<thead>
<tr>
<th>Learning Point</th>
<th>Topic</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Philosophy of Change</td>
<td>Introduction to theory; family systems, group, MFG, outdoor family recreation</td>
</tr>
<tr>
<td>2</td>
<td>Structure of Manual</td>
<td>Theoretical and Practical justification for the 5 core components of the manual</td>
</tr>
<tr>
<td>3</td>
<td>Background of Retreat</td>
<td>History of the development of the MFG weekend retreat and sharing of previous experiences</td>
</tr>
<tr>
<td>4</td>
<td>General Schedule</td>
<td>Overview of the general schedule of the weekend; expectations for availability, behavior, professionalism</td>
</tr>
<tr>
<td>5</td>
<td>Components and Activities</td>
<td>Hour by hour review of intervention components and suggested activities</td>
</tr>
<tr>
<td>6</td>
<td>Task Group Stages</td>
<td>Review stages of task groups; frame retreat staff as a task group</td>
</tr>
<tr>
<td>Learning Point</td>
<td>Topic</td>
<td>Content</td>
</tr>
<tr>
<td>---------------</td>
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<tr>
<td>7</td>
<td>Differentiating Trainee Roles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● <strong>Student Role:</strong> Learning agreement, conference agenda, process recording, accountability tracking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● <strong>Task Group Member:</strong> Confidentiality, participation, respect, flexibility, commitment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● <strong>Social Work Practitioner:</strong> Social work values/ethics, professional boundaries, social work practice approach—assessment, intervention, evaluation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● <strong>Group Facilitator:</strong> Knowledge of intervention, development of group and family practice skills, applying the intervention with fidelity</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Building Relationships</td>
<td>Keys to building trusting interpersonal relationships; empathy, authenticity, active listening, following through on commitments</td>
</tr>
<tr>
<td>9</td>
<td>Research Design/Intent</td>
<td>Synopsis of research design (feasibility study—early model development); adaptation of the manual for middle school transition, fidelity tracking, outcome measurement</td>
</tr>
<tr>
<td>10</td>
<td>Theoretical Model</td>
<td>Overview of theoretical model; risk and resilience at middle school transition, buffering effect of positive family functioning, anticipated outcomes. Read and discuss literature.</td>
</tr>
<tr>
<td>11</td>
<td>Facility Tour</td>
<td>Orientation to facilities; discussion of logistics; safety concerns; necessary preparations; building excitement prior to family contacts</td>
</tr>
<tr>
<td>12</td>
<td>Agency Partnership</td>
<td>University-Community partnerships. Fit of the project with agency partners’ missions and strategic plans; explore Communities in Schools (National and Richmond) and Richmond Public Schools websites.</td>
</tr>
<tr>
<td>13</td>
<td>Confidentiality</td>
<td>Maintaining confidentiality in the group setting; responsibilities, limitations, age-appropriate language. Storing confidential records.</td>
</tr>
<tr>
<td>14</td>
<td>Theory—Beg &amp; Middle</td>
<td>Beginning; clarifying purpose, facilitating involvement and communication, contracting, processing Middle; building cohesion, differentiation, goal accomplishment</td>
</tr>
<tr>
<td>15</td>
<td>Congruence of Activities and Objectives</td>
<td>Purposeful planning of activities to meet family objectives; maintain clear ties to objectives</td>
</tr>
<tr>
<td>Learning Point</td>
<td>Topic</td>
<td>Content</td>
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<td>---------------</td>
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<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>16</td>
<td>The Problem Solving Process</td>
<td>definition, analysis, solutions for problems, analyzing the solutions, selecting the best solution, planning the next steps</td>
</tr>
<tr>
<td>17</td>
<td>Client Phone Contact</td>
<td>Flexible scripts; introduction, purpose, responding to questions and overcoming barriers, sharing testimonials, getting a commitment.</td>
</tr>
<tr>
<td>19</td>
<td>Group Theory—Evaluation and Termination</td>
<td>Separation; carrying gains forward, facing feelings of separation, engaging support systems - Evaluating effectiveness; skill demonstrations, questionnaires</td>
</tr>
<tr>
<td>20</td>
<td>Gaining Experience</td>
<td>Building confidence. Live test of sample group activities with volunteers; processing and feedback, adjustment of activities</td>
</tr>
<tr>
<td>21</td>
<td>MFG Theory—Tenets</td>
<td>Integration of group, family, and MFG theory; prioritizing MFG activities during retreats</td>
</tr>
<tr>
<td>22</td>
<td>Approaching Clients at Home</td>
<td>Listening, boundaries and professionalism, non-judgmental approach, personal safety considerations, team work; incident reporting</td>
</tr>
<tr>
<td>23</td>
<td>Case Mgmt.</td>
<td>Maintaining focus of contact, being prepared to refer, follow-up</td>
</tr>
<tr>
<td>24</td>
<td>MFG Theory—Assessment</td>
<td>Ongoing assessment of individual cognitive and behavior patterns, group dynamics, and family dynamics</td>
</tr>
<tr>
<td></td>
<td>Facility Tour—Follow-up</td>
<td>Feasibility and logistics of planned activities and master schedule.</td>
</tr>
<tr>
<td>25</td>
<td>Follow-up</td>
<td>Attention to distances, accessibility, and environment</td>
</tr>
<tr>
<td>26</td>
<td>Therapeutic Recreation</td>
<td>Making recreational activities therapeutic (oriented to change). Frontloading discussions, “here and now” processing, generalization</td>
</tr>
<tr>
<td>27</td>
<td>Activity Audit</td>
<td>Review of activity outlines: age appropriate; detailed and flexible; congruent with family objectives; feasible; adapted for MS transition?</td>
</tr>
<tr>
<td>28</td>
<td>Group Leader Organization</td>
<td>Preparation of supplies and notes; competence with proposed activities</td>
</tr>
<tr>
<td>29</td>
<td>Behavioral Rehearsal</td>
<td>Role play of activity introductions, practice facilitating activities with group members</td>
</tr>
<tr>
<td>30</td>
<td>Fidelity Tracking</td>
<td>Completing Informative Event Tracking records; research purpose, evaluation purpose. Complete after each activity.</td>
</tr>
</tbody>
</table>
# Follow-up Training

<table>
<thead>
<tr>
<th>Learning Point</th>
<th>Topic</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Group Leader</td>
<td>Creation of supply bags—ready for entire day; Notecards specifying key introduction points and discussion questions</td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Active Intros</td>
<td>Energy &amp; assertiveness during activity descriptions increases energy from participants</td>
</tr>
<tr>
<td>33</td>
<td>Co-Facilitation</td>
<td>Specifying roles &amp; responsibilities ahead of time; presenting a united front; err on the side of listening vs. speaking</td>
</tr>
<tr>
<td>34</td>
<td>Increasing Intensity-FLOW</td>
<td>Using time constraints and creative consequences for mistakes to heighten intensity in problem-solving activities</td>
</tr>
<tr>
<td>35</td>
<td>Validating Clients</td>
<td>Empathetic/Active listening skills; non-judgment</td>
</tr>
<tr>
<td>36</td>
<td>Modeling</td>
<td>Demonstration of skills; normalizes positive behavior, decreases reliance on verbal instructions</td>
</tr>
<tr>
<td>37</td>
<td>Allowing Struggle</td>
<td>Allowing struggle with challenging problems and questions facilitates change.</td>
</tr>
<tr>
<td>38</td>
<td>Group Leader Roles</td>
<td>Observer, facilitator, guide; not participant. Maintaining boundaries regarding self-disclosure and personal values</td>
</tr>
<tr>
<td>39</td>
<td>Timekeeping</td>
<td>Awareness of activity timing; beginning and ending on time</td>
</tr>
<tr>
<td>40</td>
<td>Managing Environment</td>
<td>Adequate space, lighting, temperature, distractions</td>
</tr>
<tr>
<td>41</td>
<td>Re-directing the Group</td>
<td>Pause and examine the “here and now”; structure turn-taking with talking stick or whip technique; model empathy &amp; active listening; refer to pre-established rules; viewing behavior from a developmental perspective</td>
</tr>
<tr>
<td>42</td>
<td>Evaluating Objectives</td>
<td>Assess the acquisition of knowledge or skills with follow-up questions and demonstrations</td>
</tr>
<tr>
<td>43</td>
<td>Processing Skills</td>
<td>open-ended question, listen actively to responses, encourage more discussion with follow-up questions—work toward application</td>
</tr>
<tr>
<td>44</td>
<td>Maintaining Engagement</td>
<td>Pacing, activity variety, group ownership, facilitator energy</td>
</tr>
</tbody>
</table>
Family Fun Weekend Retreats
for rising 6th Grade Students and their Families

Come and Join the Fun during this Educational and Exciting Weekend with Your Children!

- Improve Communication
- Family Bonding
- Prepare for Middle School

Located in a Camp Setting with Cabins, Ponds, Pool, and a Campfire!

- Transportation Provided
- Home-Cooked Meals
- Canoeing
Registration Form

Family Fun Weekend Retreat
Information Form
XXX Elementary School

Aug. 21st to 22nd (Saturday-Sunday)

☐ Yes, I would like to participate in the Family Fun Weekend Retreat!

Name of Elementary School ___________________________________________________________

Custodial Parents/Guardians who will participate:
Name ________________________________ Phone ________________________________
Address _________________________________________________________________

Name ________________________________ Phone ________________________________
Address _________________________________________________________________

Children who will participate (3 to 18 years old, living in the same home):

Name ________________________________ Sex (circle) M or F Age __________
Name ________________________________ Sex (circle) M or F Age __________
Name ________________________________ Sex (circle) M or F Age __________
Name ________________________________ Sex (circle) M or F Age __________
Name ________________________________ Sex (circle) M or F Age __________
Name ________________________________ Sex (circle) M or F Age __________

* There are a limited number of openings in each Retreat. Completing this form does not guarantee that you will be selected to participate.

* There is NO COST to families for this retreat. It is provided FREE of Charge.

Please return this form to the CIS Site Coordinator at your child’s school no later than June 15th to be considered for participation.
Appendix D

Data Collection Forms

Informative Event Tracking Sheet

**Instructions:** Use this form for tracking events which demonstrate a deviation from the manualized intervention protocol. DO NOT use participant names or other identifying information on this form.

**Example:** During a parenting group for Communication, the planned activity took considerably more time than expected because more remedial work needed to be done with some parents on understanding the terms used in the communication model.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Type*</th>
<th>Component**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of the event</td>
<td>Suggested Actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Group type: Fam Together (FAM), Multiple Fam (MFG), Child, Adolescent, Parent
** Component: 1-Trust Building, 2-Communication, 3-Stress & Coping, 4-Family Organization, 5-Unity
Prompts for Completing Informative Event Tracking Sheets

- Was the activity developmentally appropriate?
- Were the participants engaged/bored?
- Were there any behavior issues with children?
- Did the participants ask any questions that were difficult to answer?
- How did you re-direct from distractions?
- Were there any outside distractions?
- Were you over/under time?
- Did you need to modify or add in a new activity?
- Was there any significant material that wasn’t covered?
Satisfaction Survey

Family Fun Weekend Evaluation Form

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Our family really enjoyed the Family Weekend Retreat.
   1  2  3  4  5

What did you enjoy most? _____________________________________________

What did you enjoy least? _____________________________________________

2. The Weekend Retreat helped us to feel better about our family.
   1  2  3  4  5

Specifically, how did it help you feel better about your family? ______________________________

3. The information presented during the retreat was helpful for our family.
   1  2  3  4  5

What information was most helpful? _____________________________________________

What information was least helpful? _____________________________________________

4. Please check all Groups and activities you and your family participated in:
   ___ Family Strengths
   ___ Family Fun Activities (Canoeing, Swimming, Fishing)
   ___ Family Communication
   ___ Family Scrapbook
   ___ Family Organization
   ___ Family Unity

What group did you like the best? _____________________________________________

What group did you like the least? _____________________________________________

5. The weekend retreat has helped me to better communicate with my family.
   1  2  3  4  5

Specifically, how did it help you communicate your family better? ______________________________

6. The weekend retreat helped me to come up with ways to organize my family better.
   1  2  3  4  5

What was most helpful? _____________________________________________

What was least helpful? _____________________________________________

7. The group leaders listened to my families concerns and feelings.
   1  2  3  4  5

Specifically, how did you know they were (or were not) listening? ______________________________

8. Would you recommend this workshop to other families? Yes___ No___

Comments: _____________________________________________