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Predictors of youth after-school involvement: The role of congruence between perceived early community and family supportive control

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The role of congruence between perceived early community and family supportive control

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ABSTRACT

The objective of the present study was twofold: 1) to understand how perceived community and family supportive control during early adolescence were associated with late adolescent after-school involvement while controlling for self-selection factors for a sample of low-income, urban, minority adolescents; and 2) to examine how congruency between the perceived community and family contexts influenced after-school involvement overtime. Three waves of data from the *Welfare, Children, and Families: A Three-City Study* were used (N = 528; Ages 16-20 at Wave 3). First, a series of lagged Ordinary Least Squares (OLS) hierarchical multiple regressions were conducted to determine if exposure to early community and family supportive control was linked with late adolescent after-school involvement. Results show that early after-school involvement and being male were linked to increases in after-school involvement over time. A trend-level main effect for perceived community supportive control was found, whereby adolescents living in areas with high community supportive control decreased their involvement over time. Secondly, to determine if there were differential effects of environmental congruency for youth in after-school involvement, dummy categories for the environmental congruence groups were included in an additional hierarchical regression. Adolescents living in incongruent environments, specifically living in areas perceived as being low in community supportive control and high in family supportive control significantly increased after-school involvement compared to those living in environments with average supportive control overtime. Results are presented separately by adolescents' gender and ethnicity as well. Implications for early intervention are explored.

CHAPTER 1. INTRODUCTION

Adolescence has consistently been characterized as a period full of transition and changes. It is important for the contexts where adolescents live, such as the community and family, to support adolescents through these transitions. Important characteristics at both the community and family level include the presence of an organized environment, cohesive and trusting relationships, and monitoring; these constructs are referred to collectively from here within as "supportive control" (Eccles, 2004; Steinberg, Lamborn, Dornbusch & Darling, 1992). Furthermore, the promotion of a positive youth development paradigm in the literature has prompted a shift toward examining the development of competencies and resiliencies in multiple contexts, such as the community and family simultaneously (Catalano et al., 2004; Damon, 2004). This study focuses on the positive youth outcome of engagement in prosocial activities, specifically late adolescent after-school involvement.

Extant research on positive youth development has found that participation in structured activities, such as after-school clubs or community places, benefits adolescents by acting as an independent context for healthy exploration and interactions (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Eccles, Barber, Stone, & Hunt, 2003). There is ample research demonstrating the unique personal benefits of after-school involvement such as decreased delinquent and problem behaviors (Barber et al., 2001; Bartko & Eccles, 2003; Pancer, Pratt, Hunsberger, & Alisat, 2007) and increased self-esteem and academic achievement (Anderson et al., 2007; Eccles et al., 2003; Holland & Andre, 1987; Pierce & Shields, 1998; Pettit et al., 1999; Posner & Vandell, 1994).

However, research has not necessarily examined what and how outside contexts influence adolescent after-school involvement initially and over time. The contextual factors of particular interest here are early perceived supportive control of the community and family. These dimensions have been linked to the increased likelihood of positive developmental trajectories in youth (Eccles, 2004), though little has been done to examine the link specifically to after-school involvement. Supportive control reflects an organized environment, cohesive and trusting relationships and monitoring. Communities perceived to have supportive control tend to have lower amounts of neighborhood problems and higher levels of collective social support, trust and cohesion (Connell & Halpern-Felsher, 1997; Furstenberg & Hughes, 1997; Moore & Chase-Landale, 2001; Levanthal & Brooks-Gunn, 2000; Sampson, 1991; Sampson, Morenoff, & Gannon-Rowley, 2002). Families with supportive control commonly pair trusting and communicative parent-child relationships and adequate monitoring (Eccles, Early, Frasie, Belansky, & McCarthy, 1997; Larson, Richards, Morieta, Holmbeck, & Duckett, 1996; Patterson & Stouthamer-Loeber, 1984).

Moreover, research that examines contextual influences in conjunction with pre-existing adolescent characteristics is scarce. Pre-existing characteristics of the adolescent are also known as self-selection factors and commonly include: age, gender, race, academic achievement, internalizing and externalizing behaviors, delinquency and problem behaviors and employment (Staff, Mortimer, & Uggen, 2004). Indeed, these selection factors have been linked to adolescent after-school involvement (Coley, Morris, & Hernandez, 2004; Fauth, Roth, & Brooks-Gunn, 2007; Feldman & Matjasko, 2005; Pancer et al., 2007; Perkins et al., 2007). Particularly in disadvantaged environments, being an African-American, being male, having poor academic performance, clinical or border-line clinical symptoms of internalizing

and externalizing behaviors, engaging in delinquent or high-risk behaviors or working long hours at a job have been consistently linked to poorer academic achievement, lower self-esteem and higher problem behaviors (Eccles et al., 2003; Eccles, 2004; Staff et al., 2004). Moreover, these behaviors and activities encourage or discourage after-school involvement two-fold: (1) activities such as delinquency or employment may fill the adolescents' nonschool hours; and (2) these adolescents may lack access to after-school activities or youth centers (Fredricks et al., 2002; Roth & Brooks-Gunn, 2003). Therefore, this study accounts for adolescent self-selection factors when examining the nature of the relationship between early perceived community and family supportive control and changes in after-school involvement during adolescence.

Beyond extending the literature by assessing self-selection factors while simultaneously accounting for two contexts, the community and family, this study also examines the influence of perceived environmental congruency. Indeed, the degree of congruence experienced across developmental contexts or environments can amplify the occurrence of positive or negative outcomes (Brand & Felner, 1996; Eccles et al., 1993; Lohman, Kaura, Newman, 2007; Roberts & Robins, 2004). This study assesses how similarities in community and family contexts, defined as a matched mesosystem, increase late adolescent after-school involvement. In addition, dissynchrony or incongruence are assessed across community and family contexts to see if it deters late adolescent after-school involvement.

Much of the current literature addressing extracurricular activities or after-school involvement utilizes cross-sectional methods (Barber et al., 2001; Eccles et al., 2003; Coley & Hoffman, 1996; Feldman & Matjasko, 2005; Holland & Andre, 1987; Larson, 2000). Thus, the use of longitudinal data from *Welfare, Children, and Families: A Three-City Study*

(commonly referred to as the *Three-City Study*) expands the current research on after-school involvement by highlighting possibilities for low-income, urban, minority adolescents' positive youth development. Community and family contexts and after-school involvement have been shown to be particularly instrumental in the development of low-income minority youth (Anderson et al., 2007; Holland & Andre, 1987; Posner & Vandell, 1994). The *Three-City Study* is a sample of predominately lower income, minority adolescents and their caregivers who were studied longitudinally from 1999 to 2006 in Boston, Chicago, and San Antonio. Utilizing the longitudinal nature of the *Three-City Study* also allows for a more thorough understanding of the complex relationships that exist among early community, family, and adolescent characteristics and late adolescent after-school involvement.

Theoretical Framework

In order to effectively understand the complex relationships between individual, community, and family characteristics on youth after-school involvement, it is imperative to form a discussion around a sound theoretical foundation. This study implements Bronfenbrenner's bioecological theory in conjunction with a positive youth development paradigm. These two approaches are used to frame the current investigation that aims to identify how the relationship of congruence between perceived community and family supportive control is associated with predicting late adolescent after-school involvement while early adolescents' attributes are also considered. The bioecological model is discussed first, followed by a discussion of positive youth development.

Bronfenbrenner's bioecological model captures multicontextual effects and is comprised of 4 main components: proximal processes, person characteristics, context and time (Bronfenbrenner & Morris, 1998). Each of these components is defined generally, followed

by a more specific application to the present study. First, proximal processes are those interactions that happen between the developing person and their surroundings. According to Bronfenbrenner and Morris (1998), these interactions drive development. This study looks specifically at the process of perceived supportive control whereby the developing person experiences organized environments, cohesive and trusting relationships and monitoring (Steinberg et al., 1992; Youngblade et al., 2007).

Second, person characteristics determine whether proximal processes occur. In the present study, person characteristics were addressed via factors termed self-selection factors. Self-selection factors influence whether or not the developing person engages in after-school activities and includes age, gender, race, academic achievement, showing internalizing and externalizing symptoms, engaging in delinquent acts and adolescent employment. Third, contexts encompass the various settings where proximal processes take place. There are 5 contexts identified by Bronfenbrenner (1989): the microsystem, mesosystem, exosystem, macrosystem and chronosystem.

Of particular interest in the present study are the meso-, and chrono-systems. Mesosystems reflect the relationships among the contexts that an individual, in this case the adolescent, exists; thus, capturing the nested, or cross-contextual, nature of development. In the present study, the mesosystem addresses the matching relationship amongst the community and family. A match, or congruency, across contexts is also an important dimension to consider as youth traverse multiple contexts and require several opportunities to learn and adapt. Congruency within a mesosystem is related to the degree of consistency or agreement in the contexts; in other words, environmental congruency examines whether multiple contexts complement each other to influence an adolescent's development (Eccles,

2004; Gutman & Eccles, 2007; Roberts & Robins, 2004). Indeed, greater consensus between environments has been shown to yield better outcomes (Brand & Felner, 1996; Lohman, Kaura, & Newman, 2007).

Next, the chronosystem is closely related to the fourth element, time, which examines the influence of changes and continuities over the individual's life course. Much of the current literature on after-school involvement relies primarily on cross-sectional methodology and is not able to test changes in contexts over time (Barber et al., 2001; Eccles et al., 2003; Coley & Hoffman, 1996; Feldman & Matjasko, 2005; Holland & Andre, 1987; Larson, 2000). Thus, in the present study, the chronosystem was addressed by the use of longitudinal data to allow for the assessment of early community and family supportive control and changes in after-school involvement.

Finally, the emphasis on the procurement of positive outcomes is a product of the positive youth development (PYD) paradigm that developed during the 1990s (Catalano et al., 2004; Damon, 2004; Lerner, Almerigi, Theokas, & Lerner, 2005). In addition to reiterating the presence of plasticity in development, under PYD, adolescents are seen as resources and have the potential to succeed (Catalano et al., 2004; Lerner et al., 2005). A way in which adolescents can engage in PYD is to become involved in prosocial activities such as after-school involvement. Therefore, a PYD model (Lerner et al., 2005) is also a part of the theoretical framework guiding the rationale behind the present study. Figure 1, provides an illustrative example of the bioecological model as it relates to adolescent, community and family factors and after-school involvement.

As shown in figure 1, characteristics within the adolescent, community, and family contexts are hypothesized to uniquely influence after-school involvement. Furthermore, as

proposed in this study and postulated by the theoretical framework, early adolescent, community, and family characteristics must be considered simultaneously to better understand what influences adolescent participation in after-school activities (Barber et al., 2001; Eccles et al., 2003; Coley & Hoffman, 1996; Feldman & Matjasko, 2005; Holland & Andre, 1987; Larson, 2000). Specifically, several adolescent self-selection factors, as well as evidence of supportive control in the community and family have consistently been found to influence adolescent outcomes such as delinquency (Eccles et al., 2003; Fauth et al., 2007; Pancer et al., 2007), internalizing and externalizing problems (Anderson, Sabatelli, & Kosutic, 2007; Feldman & Matjasko, 2005), and academic achievement (Fredricks et al., 2002; Holland & Andre, 1987; Pancer et al., 2007). This study extends and applies these findings to after-school involvement, which, as an outcome, has been scarcely researched.

The early adolescent factors that have been found to correlate with adolescent after-school involvement are: early involvement (Barber et al., 2001; Raymore et al., 2001), being male or female (Bartko & Eccles, 2003; Feldman & Matjasko, 2005; Holland & Andre, 1987), having internalizing or externalizing behaviors (Holland & Andre, 1987), engaging in delinquent behaviors (Coley, Morris, & Hernandez, 2004; Fauth, Roth, & Brooks-Gunn, 2007; Feldman & Matjasko, 2005; Pancer et al., 2007; Perkins et al., 2007) and being employed (Staff, Mortimer, & Uggen, 2004).The existing research on after-school involvement recognizes the need to include adolescent self-selection factors in analyses to account for potential confounders (Barber et al., 2001; Eccles et al., 2003; Feldman & Matjasko, 2005; Holland & Andre, 1987; Larson, 2000). This is especially important when considering effects of early attributes on late adolescent after-school involvement.

With regards to the community, research has linked both structural neighborhood problems (Connell & Halpern-Felsher, 1997; Furstenberg & Hughes, 1997; Sampson, 1991; Sampson, Morenoff, & Gannon-Rowley, 2002), as well as perceived problems such as low neighborhood cohesion and trust (Caughy, Hayslett-McCall, & O'Campo, 2007; Sampson, Morenoff, & Earls, 1999; Sampson et al., 2002), and low collective monitoring (Sampson et al., 2002; Simons et al., 2005) to adolescent outcomes such as problem behaviors (D'Imperio, Dubow, & Ippolito, 2000; Spencer et al., 1997), poor educational achievement and effort (Ceballo, 2004), and cognitive development (Caughy, Hayslett-McCall, & O'Campo, 2007). This study focuses on examining the extent to which perceptions of the community environment influences on the adolescent outcome of after-school involvement.

Similarly, the literature on the influence of the family context on adolescent outcomes has focused on the role of parenting style (Baumrind, 1991; Darling & Steinberg, 1993; Lamborn, Mounts, Steinberg, & Dornbusch, 1991), the parent-child relationship and involvement (Crouter, Head, McHale, & Tucker, 2004; Larson et al., 1996; Loeber et al, 2000; Patterson & Stouthamer-Loeber, 1984) and monitoring (Hill et al., 2004; Jacobson & Crockett, 2000; Patterson & Stouthamer-Loeber, 1984) on adolescent outcomes such as delinquency (Jacobson & Crockets, 2000; Patterson & Stouthamer-Loeber, 1984), internalizing and externalizing problems (Kerr & Stattin, 2000), and educational achievement and effort (Baumrind, 1996; Gonzalez et al., 2000; Hill et al., 2004; Steinberg, Lamborn, Dornbush, & Darling, 1992). Moreover, these family characteristics are often tied to family demographic factors such as family income, family structure and maternal education (Kowaleski-Jones & Dunifron, 2006; Posner & Vandell, 1994; Wickrama, Merten, & Elder, 2005). Since adolescents grow in families and families operate in communities, those

communities and families that provide an organized environment, trusting and cohesive relationships and monitoring - in other words, provide supportive control - are consistently found to yield more positive adolescent outcomes (Coley & Hoffman, 2006).

While a good deal of research has linked the elements of supportive control of the community and family contexts to several behavioral and educational adolescent outcomes, not as much has investigated how these contexts relate to after-school involvement as an outcome. Therefore, based on the current literature on community and family influences on adolescent well-being, this study hypothesized that early perceived community and supportive control would also have a positive influence on adolescent after-school involvement. Although the relationships between the community and family and after-school involvement are extrapolated from the existing research, past research and the theoretical framework for this proposal support the hypothesized relationship.

Literature Review

The literature review begins with a discussion of after-school involvement and its associated outcomes. Second, an overview of the literature on communities and specifically, the influence of perceived community supportive control on adolescent well-being are detailed. Third, family supportive control is operationalized and its effects are reviewed. Fourth, adolescent self-selection factors are described. Next, the relationship between early supportive control of the community and family are discussed with respect to adolescent after-school involvement and academic and behavioral outcomes. Finally, the literature review concludes with a discussion of specific research questions.

Adolescent After-School Involvement

The hours between 2 and 6 pm have been found to be peak times for conduct disorders or engagement in risky behaviors (Anderson-Butcher et al., 2003; Fredricks et al, 2002; Nicholson et al., 2004). With that, there has been increased interest in how adolescents spend their time during non-school hours. Furthermore, adolescents in low-income, urban settings are more likely to engage in self-care, which may not necessarily be developmentally conducive, and may be compounded with a lack of access to structured youth programs (Coley, Morris, & Hernandez, 2004; Perkins et al., 2007; Posner & Vandell, 1994). Therefore, researchers have come to consider the non-school hours as structural contexts that can promote positive peer group interactions, socialization and the development of several competencies (Barber, Eccles, & Stone, 2001; Coley et al., 2004; Dworkin, Larson, & Hansen, 2003; Fredricks et al., 2002; Holland & Andre, 1987; Larson, Gillman, & Richards, 1997; Raymore, Barber, & Eccles, 2001). Moreover, this has led developmental scientists and youth policy advocates to recommend the implementation of positive leisure time (Eccles, Barber, Stone, & Hunt, 2003).

A Developmental Context

After-school involvement is a specific forum for the development of youth assets, and a large percentage of youth are already participating in at least one after-school activity (Feldman & Matjasko, 2005). Moreover, adolescents who are involved in structured after-school activities have shown several positive outcomes such as decreased problem behaviors (Barber et al., 2001; Bartko & Eccles, 2003; Pancer et al., 2007) and increased academic performance and self-esteem (Anderson et al., 2007; Eccles et al., 2003; Holland & Andre, 1987; Pierce & Shields, 1998; Pettit et al., 1999; Posner & Vandell, 1994). Raymore and colleagues (2001) have also found that a majority of youths' leisure patterns are stable over

time, despite life transitions such as continuing on to college and moving away from home. Furthermore, participation in after-school activities is related to better preparation for adulthood (Eccles et al., 2003).

Extant research has also found that after-school involvement, and similar structured youth programs, provide youth with a context for self-generated development (Larson, Pearce, Sullivan, & Jarrett, 2006; Pettit, Bates, Dodge, & Meece, 1999). However, the activities must be prosocial, constructive, and most importantly, structured (Bartko & Eccles, 2003; Feldman & Matjasko, 2005). After-school activities that are more structured give youth an opportunity to spend time in supervised settings, enrichment lessons, and with adults who can act as positive role models or mentors (Posner & Vandell, 1994). These opportunities may bear particular significance for low-income urban youth given their limited access to such activities (Coley et al., 2004).

Benefits of Involvement

Researchers have acknowledged the beneficial influence of after-school involvement on several youth outcomes. A review of the current literature on adolescent after-school involvement demonstrates that specifically with structured activities, there are both decreases in problem behaviors and increases in developmental assets that may contribute to adolescents' later transition into adulthood. Furthermore, structured after-school activities create a unique context that incorporates the effects of community, family and individual factors on positive youth involvement and outcomes (Connell & Halpern-Felsher, 1997; Anderson, Sabatelli, & Hosutic, 2007).

A convergence amongst the aforementioned contexts provide adolescents with several sources of social support that, combined, act as significant protective factors for negative

outcomes. As Anderson et al. (2007) and Fredricks et al. (2002) discuss, youth who are highly connected within their family, peers, extrafamilial adults and other social contexts show higher levels of positive adjustment. And again, low-income urban youth may benefit the most from after-school involvement given their greater likelihood of being exposed to neighborhood violence and lack of collective support (Fauth, Roth, & Brooks-Gunn, 2007; Pettit et al., 1999).

Despite the ample research demonstrating the unique benefits of after-school involvement, research has not necessarily delved into what specific contextual features and youth self-selection factors together predict youth after-school involvement over time. More longitudinal research is also needed to assess these influences simultaneously. This study examined the unique and combined influences of community and family supportive control and self-selection factors on late adolescent after-school involvement particularly in low-income minority youth.

Community Context

Community influences on adolescent well-being are important factors to consider. As aforementioned, during adolescence, youth become more directly exposed to their community environment where they must then determine their roles and identity within a larger social context that may include the presence of violence and risky behaviors (Furstenberg & Hughes, 1997; Kowaleski-Jones & Dunifon, 2006; Sampson, Morenoff, & Earls, 1999). The community is important in after-school research as the opportunity for involvement sometimes depends on the community's resources and institutions (Furstenberg & Hughes, 1997; Leventhal & Brooks-Gunn, 2000; Sampson et al., 1999; Sampson et al., 2002). In reviewing the influence of community factors, the social disorganization model is

briefly discussed with an emphasis on the role of perceived community environment, followed by a definition of community supportive control and how it is postulated to influence after-school involvement.

Mechanism

Five main models are often used to describe the ways in which communities impact the well-being of people (Brody et al., 2001; Caughy, Hayslett-McCall, & O-Campo, 2007; Ceballo, McLloyd, & Toyokawa, 2004; Furstenberg & Hughes, 1997; Levanthal & Brooks-Gunn, 2000; Sampson, Morenoff, & Gannon-Rowley, 2002). These models include the epidemic, collective socialization, neighborhood institutional report, distal neighborhood influence, and social disorganization models. In the present study, the social disorganization model was used as a guide to conceptualize the effects of community supportive control on youth after-school involvement.

According to the social disorganization model, the community influences development and socialization through the proliferation and dissemination of pro-social or anti-social values by the people and institutions of the neighborhood (Ceballo et al., 2004; Connell & Halpern-Feishe, 1997; Sampson, 1991). Inherent in this model, then, are the exchanges between community residents and perceptions of these community characteristics amongst the residents. Indeed, as Sampson, Morenoff and Earls (1999) found, social mechanisms such as perceptions of collective efficacy and shared child control had a greater influence on child and adolescent outcomes than the structural characteristics of the community. Brand and Felner (1996) also found that an individual's subjective perceptions of their neighborhood environment could act as a protective factor for adolescent outcomes.

Social Support

Community connectedness is one important element to consider when describing the mechanism that links social disorganization, community characteristics and positive youth outcomes (Ceballo et al., 2004; Connell & Halpern-Feishe, 1997). Community connectedness can be regarded as element of community support (Sampson, 1991; Sampson et al., 1999, Sampson et al., 2002). According to social disorganization theory, it is the lack of formal, informal and intimate ties in a community that creates deficits in structural and social systems that lead to negative outcomes (Sampson, 1991). As Sampson et al. (1999) found, young minority youth do not feel as connected to their community, which hinders their ability to develop meaningful civic roles and to engage in prosocial activities, such as after-school programs. Adults are also less tied to their communities; subsequently, there is a lack of perceived consensus on social norms regarding extrafamilial adult-child relationships (Scales et al., 2001). These relationships are particularly important as the research on after-school involvement has shown that positive adult ties and role models help nurture the positive benefits associated with after-school involvement.

Collective Monitoring

A lack of perceived consensus and cohesion also prevents community residents from effectively monitoring the neighborhood children. Collective monitoring represents community control, another important element that ties social disorganization, community characteristics and youth outcomes (Simons et al, 2005). Furthermore, Spencer, Cole, Jones and Swanson (1997) discuss how poor, urban neighborhoods increase opportunities for youth to engage in risky experimentation rather than constructive activities. A lack of monitoring on the part of parents and other community members will most likely increase the opportunities for youth to make risky decision (Spencer et al., 1997). In other words,

collective monitoring can help steer adolescents toward more healthy and prosocial activities such as after-school involvement. In sum, youth in disadvantaged neighborhoods are at an increased risk for negative outcomes such as delinquency, problem behaviors, substance use and poor academic achievement due to a lack of community supportive control (Scales et al., 2001).

Unfortunately, the current literature on the effects of community disadvantage tends to define disadvantage as a function of socioeconomic status and race – more structural features rather than social or perceived mechanisms. These two dimensions only present a partial picture of the community landscape, and often times, the community composition is compounded by self-selection factors of the residents who live in those areas such that it is difficult to untangle community effects from family and individual characteristics (Brody et al., 2001; Connell & Halpern-Felshe, 1997; Furstenberg & Hughes, 1997; Hoffman, 2006; Leventhal & Brooks-Gunn, 2000; Wickrama & Bryant, 2003). Therefore, definitions of disadvantage must also include the presence or absence of social processes such as perceived supportive control.

Family Context

Family characteristics are also important to consider when examining after-school involvement. Although the literature specifically investigating the relationship between the family context and after-school involvement is scarce, there is research that has consistently linked certain family processes – parenting style, involvement and monitoring - to positive youth outcomes. Each of these processes will be briefly discussed as a component of family supportive control, or the extent to which the family provides a cohesive and trusting home

environment and healthy parent-child interactions (Baumrind, 1991; Bradley et al., 2001; Eccles, 2004).

Research has found that parenting and family interactions greatly influence whether or not youth experience positive socio-emotional and behavioral outcomes (Crouter, Head, McHale, & Tucker, 2004; Eccles, Frasie, Belansky, & McCarthy, 1997; Loeber et al., 2000; Patterson & Stouthamer-Loeber, 1984), and have a particularly strong predictive effect for females (Baumrind, 1991; Ceballo et al., 2004; Gutman & Eccles, 2007; Jacobsen & Crockett, 2000; Larson et al., 1996) and white adolescents (Gutman & Eccles, 2007; Klebanov et al., 1997; Kowaleski-Jones & Dunifon, 2006). Again, the research specifically linking family supportive control and adolescent after-school involvement is limited, thus the proposed relationship is extrapolated from the current literature on the influence of family on adolescent well-being.

Parenting Style

Parenting style represents a constellation of characteristics that influence youth socialization and outcomes (Darling & Steinberg, 1993). Baumrind (1991) was first to define several common styles: authoritative, authoritarian, and permissive. The most effective style of parenting is consistently defined as authoritative parenting. Authoritative parenting is characterized by a balance between demandingness and responsiveness and is consistently linked to positive psychosocial adjustment in youth (Baumrind, 1991; Darling & Steinberg, 1993; Lamborn et al., 1991). Conversely, authoritarian or permissive parenting has been linked to more negative outcomes such as increased academic and behavioral problems (Baumrind, 1991; Darline & Steinberg, 1993; Eccles et al., 1997; Steinberg et al., 1992). Therefore, this study proposes that an authoritative parenting style would also have a positive

influence on adolescent after-school involvement based on these established associations between parenting style and psychosocial, behavioral and academic outcomes.

Parent Involvement

Parent involvement differs from parenting style in that involvement includes more specific behaviors. Steinberg et al. (1992) defined authoritative parenting as providing warmth and supervision while parental involvement provides encouragement and direct parental participation. Involvement allows parents to play more active roles in their children's lives and can better and more directly instill values (Gonzalex-Pienda et al., 2002; Hill et al., 2004). In essence, parental involvement is more the act of family supportive control. Furthermore, based on Steinberg et al.'s (1992) finding on the moderating influence of parental involvement on authoritative parenting, parental involvement is presumed to exert a similar influence on after-school involvement by amplifying the advantages of authoritative parenting on adolescent well-being.

Parental Monitoring

Parental monitoring is a form of socialization and control and has consistently been found to relate to decreases in antisocial and risky behaviors, such as delinquency and sexual behavior, and increases school functioning (Jacobsen & Crockett, 2000; Kerr & Stattin, 2000; Klein et al., 2000; Rankin & Quane, 2002). Therefore, parental monitoring is inferred to have a similar relationship with adolescent after-school involvement. However, as with parental involvement, in order for monitoring to be effective it must be a deliberate act.

As Kerr and Stattin (2000) found, parental monitoring in collaboration with child disclosure yielded more positive outcomes compared to parental tracking and surveillance alone. Conversely, Coley and Hoffman (1996) found that in situations with low supervision,

distal monitoring and authoritative parenting styles served as protective factors for youth; being unsupervised but monitored actually increased positive behavioral ratings in risky neighborhoods compared to those youth who were constantly supervised. Therefore, parents and youth must engage in a mutual trust and exchange of information– characteristics of effective monitoring, authoritative parenting and adolescence. The latter are also key elements in family supportive control, and together should positively influence adolescent after-school involvement by providing encouragement and reinforcement for prosocial activities.

Early Adolescent Self-Selection Factors

Characteristics that encourage or discourage participation are defined as self-selection factors. Self-selection factors are labeled as such because they influence whether an individual selects into an outcome and, thus, must also be considered when studying the precursors to after-school involvement. Indeed, self-selection factors such as age, gender, race, academic achievement, internalizing and externalizing behaviors, delinquency and problem behaviors, and employment have been linked to after-school involvement (Coley, Morris, & Hernandez, 2004; Fauth, Roth, & Brooks-Gunn, 2007; Feldman & Matjasko, 2005; Pancer et al., 2007; Perkins et al., 2007; Staff, Mortimer, & Uggen, 2004). Particularly in socially disorganized environments, being an African-American, being male, having poor academic performance, clinical or border-line clinical symptoms of internalizing and externalizing behaviors, engaging in delinquent or high-risk behaviors or working long hours at a job have been consistently linked to poorer academic achievement, lower self-esteem and higher problem behaviors (Eccles et al., 2003; Eccles, 2004; Staff et al., 2004).

Gender and Race Differences

Taken together, the current literature on after-school involvement, on the community, and on the family has used gender-balanced and ethnically diverse samples. Despite the overall equal representation of gender and race in the literature, some gender and race related outcomes associated with after-school involvement and community and family effects have been found.

In Feldman and Matjasko's (2005) review of research on youth after-school involvement, for example, some studies found positive outcomes for male athletes, while other studies found no effect or even more negative effects for male athletes compared to female athletes. On the other hand, Holland and Andre (1987) found that only males experienced an increase in self-esteem and decrease in delinquency due to after-school involvement. However, one consistent finding is that males consistently participate more in sports than females, and other activities have also been gender-typed (Bartko & Eccles, 2003; Eccles et al., 2003). Similarly, some studies found positive outcomes, such as improved academic achievement and self-esteem for White, Hispanic and African-American adolescents, while other studies failed to find any significance for the latter (Feldman & Matjasko, 2005).

There are also some gender and racial biases with respect to community and family influences. Community effects have been found to be moderated by individual factors (Spencer et al., 1997) and characteristics of the neighborhood, especially community socioeconomic status, which itself is often times tied to certain factors such as race and family structure (Leventhal & Brooks-Gunn, 2000). Research has also found that males are more susceptible to deleterious outcomes compared to females within socially disorganized contexts (Beyers et al., 2003; Caughy et al., 2007; Ceballo et al., 2004; Connell & Halpern-Felsher, 1997; Leventhal & Brooks-Gunn, 2000). On the other hand, research has found that

parenting and family interactions have a particularly strong predictive effect for females (Baumrind, 1991; Ceballo et al., 2004; Gutman & Eccles, 2007; Jacobsen & Crockett, 2000; Larson et al., 1996) and white adolescents (Gutman & Eccles, 2007; Klebanov et al., 1997; Kowaleski-Jones & Dunifon, 2006). Given the inconsistent findings with regards to gender and race outcomes with after-school involvement, and community and family microsystems, this study offers the first exploration in these differences.

Environmental Congruence: The Community and Family Mesosystem

Extending the bioecological model, the influence of early perceived supportive control of the community and family on adolescent after-school involvement should be the most optimal when adolescents are surrounded by contexts matched in values, particularly support, trust and cohesion (Brand & Felner, 1996; Bronfenbrenner, 1989; Eccles, 1993; Lohman, Kaura & Newman, 2007; Roberts & Robins, 2004). As Anderson et al. (2007) found, having a greater number of external supports and opportunities was associated with an increase in prosocial outcomes and a decrease in the probability of risk behaviors. Specifically, research on families living in disadvantaged communities often looks at familial and extrafamilial transactions that influence child rearing and socialization and has found that perceptions of high collective efficacy and positive community role models offers benefits to adolescent well-being (Bradley, Corwyn, Burchinal, McAdoo, & Coll, 2001; Cook, Herman, Phillips, & Setterson, 2002; Jessor, 1993; Rankin & Quane, 2002).

Furthermore, it is important to assess whether characteristics of one context transfer onto other contexts of development (Cook et al., 2002; Damon, 2004; Fagan, Van Horn, Hawkins, & Arthur, 2007; Gutman & Eccles, 2007). Eccles et al. (1997), for instance, found that adolescents who experienced positive interactions in one context often had positive

interactions in others. The matching contexts better facilitated an increase in school function, and decreased depressive symptoms and problem behaviors. Conversely, Caughy and colleagues' (1997) investigation of neighborhoods and spatial dynamics, found that the occurrence of concentrated poverty in the immediate as well as distal neighborhoods yielded a greater decrease in problem solving skills in children. Therefore, it is important to consider how matching or mismatching environments influence the development and distribution of social capital and networks (Sampson et al., 1999; Wickrama & Bryant, 2003).

Moreover, little is known about how environmental congruence influences after-school involvement as an outcome that reflects adolescent well-being. As aforementioned, after-school activities offer a context that integrates the community, family and individual since the availability and operation of after-school programs and centers depends on community resources, family encouragement and adolescent participation. Thus a congruent or matching mesosystem was defined as those environments that share high supportive control.

Additionally, the prevalence of positive and negative community and family issues has been documented in many low-income urban settings (e.g. Anderson et al., 2007; Beyers, Bates, Pettit, & Dodge., 2003, Brody et al., 2001; Coley & Hoffman, 1996; Fagan et al., 2007; Gutman et al., 2005), which makes it more important to understand how the relationship of congruence in supportive control of the community and family may provide positive youth outcomes, especially the opportunity for low-income urban adolescents to participate in after-school activities. Again, research has shown that the benefits of after-school involvement are particularly great for low-income youth (Anderson et al., 2007; Fauth, Roth, & Brooks-Gunn, 2007; Holland & Andre, 1987; Pettit et al., 1999; Posner & Vandell, 1994), but not much research has specifically investigated the contribution of

perceived congruence in community and family supportive control to adolescent after-school involvement.

Central Aim and Research Questions

In sum, the central aim of this study was to examine the relationship and influence of congruence between early perceived community and family supportive control on adolescent involvement in after-school activities over time while considering early adolescent characteristics for a sample of low-income, urban, minority youth. Previous research has yet to address the longitudinal implications presented by contextual and individual factors in impacting after-school involvement. Based on the literature review provided, two specific research questions were posed:

1. After controlling for early adolescent self-selection factors, are perceived early community and family supportive control still related to late adolescent after-school involvement over time?
    a. Are there differential effects of community and family supportive control on late after-school involvement over time depending on gender?
    b. Are there differential effects of community and family supportive control on late after-school involvement over time depending on race?
2. How does early environmental congruence influence late adolescent after-school involvement over time?
    a. How does early environmental congruence influence late adolescent after-school involvement over time by gender?
    b. How does early environmental congruence influence late adolescent after-school involvement over time by race?

CHAPTER 2. METHODS AND PROCEDURE

Sample and Procedure

Data were drawn from waves 1, 2, and 3 of the survey component of *Welfare, Children, and Families: A Three-City Study*. The *Three-City Study* is a household-based, stratified random-sample of over 2,000 low-income children and their caregivers in low-incomes neighborhoods in Boston, Chicago, and San Antonio. In 1999, over 40,000 households were screened by professional, trained interviewers to identify eligible families with a child between the ages of 0 to 4 or 10 to 14 years of age, with a woman as the primary caregiver. Eighty-two percent of the eligible families agreed to participate in the study, with an overall response rate of 74 percent. The second wave of data was collected approximately 16 months following wave 1, when the focal children were between 1 and 6 or 11 and 16 years of age. Eighty-eight percent of the families completed a second interview. The third wave of data collection took place four years later in 2005, with 80 percent of families from wave 1 participating in wave 3. The children were between the ages of 5 and 10 and 15 and 20. The sample is representative of low-income families with children living in low-income neighborhoods in Boston, Chicago, and San Antonio.

At wave 1, the primary caregiver and one focal child were selected from the eligible households to complete cognitive assessments and in-person interviews. Primary caregivers completed two-hour interviews regarding themselves, their families, households, and children. Primary caregivers were usually mothers (90% were biological mothers at wave 1), therefore, caregiver information will be referred to as mother or maternal information. Demographic information, as well as information on mental health, parenting behaviors and

the neighborhood environment was collected from the mothers via the survey. Adolescent children also participated in 30-minute in-person interviews separate from the mother. The adolescents were asked about their social, emotion, and behavioral functioning, schooling, and interactions with the peers and parents. Both mothers and adolescents completed surveys using a Computer Assisted Personal Interview (CAPI), which allows trained field interviewers to enter responses into a laptop during the interview process. Furthermore, adolescents and mothers used an Automated Computer Assisted Survey Interview (ACASI) when answering potentially sensitive questions like those related to drug and alcohol use. ACASI allows the respondents to enter answers directly into the laptop computer, while listening to questions on headphones, and has been shown to increase the response rate and validity of reporting on sensitive topics (Turner et al., 1998).

For this study, households that had a focal child age 10-15 years at wave 1, and who completed surveys and interviews in all 3 waves were utilized. Of those youth who were early adolescents at wave 1 (M = 11.96, SD = 1.45; N = 1158), 883 were interviewed 6 years later in 2005 during wave 3 and had valid responses for all study variables. Thus, the early adolescents were now late adolescents and ranged in age from 15 to 21 years (M = 17.77, SD = 1.50). Only youth who were still in school or had recently graduated completed the questions regarding after-school involvement during the wave 3 interview (N = 528). Thus, 46% of the original adolescents were assessed. Attrition analyses (Table 1) were conducted to see if adolescents assessed in the study varied on key self-selection factors and family covariates compared to those adolescents who were not retained in the survey. Adolescents who were not included in the analyses were more likely at wave 1 to be older, ($t(881) = 27.28$, $p < .001$); white, (χ^2 (1, N = 883) = 4.28, $p < .05$); African-American, (χ^2 (1, N = 883)

= 8.48, $p < .05$); male, (χ^2 (1, N = 883) = 4.17, $p < .05$); have poor academic achievement, ($t(881) = -5.59$, $p < .01$); exhibit externalizing symptoms, (χ^2 (1, N = 883) = 10.08, $p < .01$); be more delinquent, ($t(881) = 5.58$, $p < .001$); and have poorer future orientations, ($t(881) = 2.79$, $p < .01$). This suggests that some of the most disadvantaged youth were lost from the sample. No differences were found amongst any other key study variables.

Measures

Dependent Variable

Adolescent After-School Involvement

Adolescents responded to 6 items in waves 1, 2 and 3 regarding their after-school involvement. Specifically, the items assessed if during the past 12 months he/she has: (1) been elected an officer of a school class or of a school club; (2) received an award or letter for sports music or art; (3) played on any sports teams through school or through a community group; (4) taken art or music lessons outside of school; (5) participated in after-school or summertime clubs or programs either at school or in your community; or (6) attended a YMCA or Boys/Girls Club or other community place for kids. Adolescents responded using yes (1) and no (0) responses. In each wave, the adolescent's responses are summed to create a composite with higher scores reflecting more after-school involvement (6 items, $\alpha_{T1} = .60$ $\alpha_{T3} = .64$). Wave 3 after-school involvement was used as the outcome measure, with wave 1 youth after-school involvement included as an additional predictor variable. Specifically, the wave 1 after-school composite was entered into the lagged OLS regressions as a covariate to predict youth after-school involvement at wave 3. Kessler and Greenberg (1981) showed that by controlling for the wave 1 behavior, coefficients on the

independent variables in the models are interpreted as the effects of each independent variable on changes in rates or involvement overtime.

Independent Variables

Community and Family Supportive Control

Perceived early supportive control for both the community and family contexts were created by taking the mean of standardized items reflecting social characteristics of supportive control. Supportive control measures were created for wave 1.

Community supportive control. To reflect community supportive control, 24 items from the mother's report were drawn from 2 scales reflecting social support (Winston et al., 1999), neighborhood problems, and collective efficacy (Sampson et al., 1997). Sample questions include: (1) How much of a problem is high unemployment in your neighborhood?; (2) When you need someone to take care of your child(ren) when you are not around, are there people you can count on?; and (3) People around here are willing to help neighbors. A confirmatory factor analysis was then conducted to verify the item choices, which were based on past theoretical and empirical results. Prior to the factor analysis, response categories were recoded so that higher scores reflected more supportive control and then items were standardized. A principal components analysis with promax rotation was conducted and extracted 20 items that provided the most theoretically and statistically sound construct reflecting community supportive control ($\text{eigenvalue}_{T1} = 7.645$). Four items that reflected mother's personal social support were not utilized in the composite. A composite that reflects community supportive control was created by taking the mean of the 20 extracted items and reliability analyses run afterwards ($\alpha_{T1} = .91$).

Additionally, community supportive control measures were calculated separately for each city (Boston, Chicago and San Antonio) following the procedures outlined above to compare the variance in community supportive control across the three cities. Comparisons showed that the variance was not statistically different across all three cities (Table 3).

Family supportive control. To reflect family supportive control, 28 items from 4 scales reflecting parenting style (Shumow, Vandell, & Posner, 1998), mother-child activities (Winston et al., 1999), mother-child relationship (Armsden & Greenberg, 1986, 1987), and parental monitoring (Steinberg, Mounts, Lamborn, & Dornbusch, 1991), were used. Items were drawn from both mother and adolescent reports. Sample questions include: (1) I try to explain the reasons for the rules I make; (2) During the past school year, how often has your [relative] helped you with your homework or with studying; (3) I trust my [relative]; and (4) How much does your [relative] know about who your friends are? A confirmatory factor analysis was then conducted to verify the item choices which were based on past theoretical and empirical results. Prior to the factor analysis, response categories were recoded so that higher scores reflected more supportive control and then items were standardized. A principal components analysis with promax rotation was conducted and extracted 13 items that provided the most theoretically and statistically sound construct reflecting family supportive control ($\text{eigenvalue}_{T1} = 4.301$). Thirteen items that reflected parenting style and two items that reflected monitoring were not utilized in the composite. A composite was created by taking the mean of the 13 items, and reliability analyses were conducted afterwards (13 items, $\alpha_{T1} = .79$). This scale reflects family supportive control.

Additionally, family supportive control measures were calculated separately for each city (Boston, Chicago and San Antonio) following the same procedure to compare the variance in

family supportive control across the three cities. Comparisons showed that the variance was not statistically difference across all three cities (Table 3).

Early environmental congruence. Congruence categories were created with the wave 1 composites to reflect early matching or mismatching environments. Based on tertiary splits, the community and family supportive control scores were grouped as high ($\geq 67^{th}$ percentile), average ($> 33^{rd}$ and $< 67^{th}$ percentile), and low ($\leq 33^{rd}$ percentile; Brown, 2003; Camacho, Higgins, & Luger, 2003; Wheeler, Petty, & Bizer, 2005). Next, 6 categories were created to represent the congruency or match-mismatch groupings between community and family supportive control: Adolescents with high community supportive control and high family supportive control were coded as high matched (HH; $N = 58$); adolescents with low community supportive control and low family supportive control were labeled as low matched (LL; $N = 57$); adolescents with average measures of both community and supportive control were also considered matched (Avg; $N = 55$). Adolescents with high community supportive control and low family supportive control (HL; $N = 60$) or low community supportive control and high family supportive control (LH; $N = 56$) were defined as mismatched. Adolescents with mismatching average scores for community and family supportive control were grouped into one average category ($N = 242$). Preliminary analyses found no significant differences amongst the average categories (matching and mismatching) on the outcome variable ($F(4, 292) = 1.41$, $p = .23$). Figure 2 provides a table of the breakdown for the congruence categories; the shaded areas represent the cells that were collapsed to create the mismatched average group. Each category was then dummy coded

with membership in a group represented with a 1, and non-membership represented with a 0. The matching average group was omitted in the multivariate analyses as the referent group.[1]

Adolescent Self-Selection Factors

Age, gender, and race/ethnicity. Adolescent age was assessed at each wave of data collection, with age reflected in years. The current analyses used adolescent age reported in wave 1 to represent an early self-selection factor. Gender information was obtained from a single question asking adolescents to identify themselves as male (1) or female (0). Adolescent's race was represented in three categories: Non-Hispanic White, African-American, and Hispanic. Each category was dummy coded with membership in a group represented with a 1, and non-membership represented with a 0. The African-American group was omitted as the referent group.

Academic achievement. To measure high academic achievement, adolescents' self-reported grades from wave 1 were used for the analyses. Adolescents responded to the question "The last time you got a report card, what were your grades?" on a scale of 0 (mostly failing) to 4 (mostly A's). For adolescents who reported that their school did not give out grades, a follow-up question was asked about the adolescent's subjective achievement. Specifically, adolescents were asked, "Overall, how would you say you are doing in school? Would you say?" For these youth, the adolescent's grade were obtained with their response

[1] In preliminary analyses, alternative specifications of the mismatched and matched average congruence groups were tested. Specifications included: 1) a nondescript average group, which combined both matched and mismatched average categories; 2) a mismatched average group that partitioned out the matched average cases; and 3) a mismatched average group specific to community and family, where the identified environment (community or family) was average and the other environment was not. No significant differences were found amongst the average groupings, which led to the decision to collapse the mismatch average group (option 2) into one category and use the matched average group as the referent.

on how well they were doing in school on a similar 4.0 scale of 0 (not well at all) to 4 (very well).

Internalizing and externalizing behaviors. Adolescent behaviors such as exhibiting internalizing and externalizing behaviors (α = .90) were measured using the Child Behavior Checklist (Achenbach, 1991). Youth whose t-scores were at or above the 84th percentile were dummy coded, as prescribed by the authors, to be in the clinical and borderline-clinical range (1 = symptoms in need of service; 0 = none to limited symptoms). Wave 1 CBCL classifications were used in the current study.

Adolescent delinquency. At each wave, adolescent delinquent behavior was measured by adolescents' responses to 13 items adapted from the National Longitudinal Study of Youth (Borus, Carpenter, Crowley, & Daymont, 1982) and Youth Deviance Scale (Gold, 1970). Each question was scored by adolescents responding to a 4-point Likert scale with 1 (never) representing lack of involvement and 4 (often) representing frequent involvement. The total delinquency scale was used and reflects overall involvement in delinquent acts based on 13 of the 17 items. The omitted items address school delinquency. The scale was standardized, averaged, and logged for all items (13 items; α = .88).

Lack of future orientation. Mothers responded to 6 items in wave 1 concerning whether their child will likely engage in particular behaviors. Specifically, items assessed whether the mother thinks it is likely that her child will: (1) get involved in drugs; (2) need to go on welfare; (3) will be a victim of a serious crime; (4) get involved in gang activity; (5) spend some time in jail; and (6) will become a teenage parent. Mothers responded on a scale of 1 (very unlikely) to 6 (already happened). The items were summed to create a composite of the

mother's perception of negative outcomes for the adolescent. The current analyses utilized the mother's report from wave 1 (6 items, $\alpha = .77$).

Youth employment status. Adolescents responded to one question regarding employment, "Do you have a regular job or work that you get paid for? This could include a formal job, such as at a restaurant, or informal work like babysitting, doing hair, or yard work." Adolescents responded using yes (1) or no (0). Wave 1 responses were included in the current analyses.

Covariates

Family income-to-needs ratio. First, information on family income was collected by asking the mother for her previous month's income before taxes and deduction and the source of the income. Income sources included: unemployment insurance, food stamps, SSI, cash welfare income, child support payments, social security disability, worker's compensation/other disability, social security retirement or survivor payments, other pension or retirement income, income from relatives, income from friends, and any other source of income. A composite score of the sum of the total sources was created at each wave. Then to calculate the income-to-needs ratio, federal poverty standards for the year of the interview were used. For each case, the total household income was divided by the poverty line cut-off for the relevant family size. The current analyses used the family's income-to-needs ratio at wave 1.

Family structure. In wave 1, the mother's response to marital status was presented in 4 categories: single, cohabitating, separated or married. The categories were collapsed into a single category and other category. The other category includes those mothers who reported

being married, separated or in a cohabitating relationship. Single mothers were assigned a value of 1, with the ‘other’ category assigned a value of 0.

Maternal education. A dichotomous variable was created to assess maternal education at wave 1 with 1 representing more than a high school education and a 0 representing less than a high school education.

CHAPTER 3. RESULTS

The current study assessed the extent to which perceived early community and family supportive control increases or decreases adolescent after-school involvement for a sample of predominantly minority, low-income adolescent boys and girls in Boston, Chicago, and San Antonio. In addition, congruency or in-congruency in perceived early community and family supportive control was explored. First, a descriptive overview of after-school involvement and self-selection factors is provided. Next, results from t-tests and analysis of variance (ANOVA) are presented to understand between group differences for after-school involvement based on categorical individual and family characteristics of gender, race, adolescent internalizing and externalizing symptoms, youth employment, maternal marital status, maternal education, and congruence categories. Then, correlations among the study variables are provided. Presented last are results from a series of lagged Ordinary Least Squares (OLS) hierarchical multiple regressions that address each research question.

To assess the two research questions on the relationship between perceived early community and family supportive control, self-selection factors and late adolescent after-school involvement a series of Ordinary Least Squares regressions were employed. To address Research Question 1, community and family supportive control were separately stepped into the models, followed by early adolescent self-selection factors and then maternal covariates. For Research Question 2, which examined the influence of congruency on late adolescent after-school involvement, dummy categories representing pairings of community and family supportive control were stepped into the final model. Another aim of the study was to uncover potential variations by gender and race in the associations between

community and family supportive control on late adolescent after-school involvement. Therefore, the final models were tested for all adolescents simultaneously as well as being run separately by gender and race (only Hispanic and African-American). A small sample size precluded gender by race analyses or analysis on white adolescents.

All analyses were conducted in STATA 10.0. For parsimony, only final models are presented. In addition, prior to analyses, the multiple imputation procedure was utilized to address missingness in independent variables (Royston, 2004; Royston, 2005). The percentage of missing cases ranged from 0.2 - 1.7% with a mode of 0.2%. The multiple imputation procedure increased the sample size by 3.33% and 0.975% of information was gained. The regression coefficients presented here represent the average coefficients across 5 multiply imputed datasets; parameter estimates were combined by applying Rubin's rules (Royston, 2004). Additionally, unweighted models are presented. Population weights were not employed since the use of multiple imputation already corrects for nonresponse bias and the use of population weights may overly bias or inflate the coefficients (Horowitz & Manski, 1998).

Descriptive Statistics

As shown in Table 2, approximately half of the sample is male, with 46.2% African-American, 47.9% Hispanic and the remaining 5.9% representing white adolescents. More than half of the adolescents lived in single parent homes at wave 1, while approximately half of the mothers did not have a high school education. On average, adolescents were involved in at least one after-school activity at wave 1 and in at least two by wave 3. The means, standard deviations, and ranges for all other continuous variables are displayed in Table 3.

Bivariate Analyses

To assess between group differences in late adolescent after-school involvement based on self-selection factors and congruence, a series of t-tests and ANOVA were conducted. As shown in Table 4, there were significant differences in late after-school involvement by race ($F(3, 525) = 3.35$, $p < .05$). Using Bonferoni's correction, post hoc analyses showed that African-American adolescents were more involved in after-school activities than Hispanic adolescents. Male adolescents were also found to be significantly more involved than female adolescents ($t(526) = 3.79$, $p < .001$). Figures 3 and 4 present a comparison of mean late after-school involvement by gender and race partitioned by congruence categories; in low matched contexts, boys and African-American adolescents were significantly more involved in after-school activities than girls and Hispanic adolescents, respectively. Finally, those who had high after-school involvement were also more likely to have mothers that had more than a high school education ($t(526) = 8.60$, $p < .05$).

Table 5 displays the correlations amongst late after-school involvement, community and family supportive control, and the self-selection factors. The correlation table shows that late adolescent after-school involvement was positively related to early after-school involvement, academic achievement, and family supportive control, while it was negatively related to age, externalizing symptoms, and community supportive control. Community supportive control was found to be positively related to early after-school involvement, and income-to-needs ratio, and negatively related to most of the adolescent self-selection characteristics. Moreover, family supportive control was positively related to early and late after-school involvement, academic achievement, income-to-needs ratio, and community supportive control. It was negatively related to all other factors.

Multivariate Analyses

The relationship between perceived early community and family supportive control, and environmental congruence and after-school involvement were addressed through a series of OLS hierarchical regression techniques. To answer Research Question 1, early community and family supportive control measures were entered in step 1 followed by adolescent self-selection factors in step 2 and maternal covariates in step 3 ($R^2 = .13$, $F(511) = 4.77$, $p < .001$). In an additional set of OLS hierarchical regressions, congruency category dummies were utilized to answer Research Question 2 ($R^2 = .13$, $F(507) = 4.17$, $p < .001$). For parsimony, only the final series in the hierarchical regressions for each research question, step 3, are shown in Tables 6 and 7, along with the comparisons by gender and race.

Regarding Research Question 1, for the total sample, wave 1 after-school involvement was found to have a significant relationship with later adolescent after-school involvement. Specifically, a one standard deviation increase in early after-school involvement was linked to a .23 standard deviation increase in adolescent after-school involvement over time ($\beta = .23$, $p < .001$). There was also a significant gender effect; being male was linked to an increase in after-school involvement over time ($\beta = .16$, $p < .001$). In addition, the influence of community supportive control on late adolescent after-school involvement was found to be significant at the trend level (Table 6, column 1), whereby a one standard deviation increase in community supportive control was associated with a .08 standard deviation decrease in after-school involvement over time ($\beta = -.08$, $p < .10$).

Next, to explore if there were differential effects of community and family supportive control on late adolescent after-school involvement, the final model was run separately for gender and race. Results for the regression analyzed by adolescents' gender are presented in

columns 2 and 3 of Table 6. Again, early after-school involvement, which is measured at wave 1, was found to have a significant relationship with late adolescent after-school involvement for both males ($\beta = .24$, $p < .001$) and females ($\beta = .23$, $p < .001$). Some differences in self-selection factors were found for males and females; specifically, for females, being older ($\beta = -.12$, $p < .10$), Hispanic ($\beta = -.12$, $p < .10$), and living in a single-parent household ($\beta = -.11$, $p < .10$), were found to decrease after-school involvement over time at a trend level. No other self-selection factors were found to significantly relate to changes in after-school involvement over time. For males, however, high community supportive control was found to have a trend level significant effect on decreasing after-school involvement over time ($\beta = -.12$, $p < .10$).

Finally to explore if there were differences in the relationships for Research Question 1 based on race, hierarchical regressions were run separately for African-Americans and Hispanics, as shown in columns 4 and 5 of Table 6. Early after-school involvement was still found to have a significant relationship to late adolescent after-school involvement for both African-American ($\beta = .30$, $p < .001$) and Hispanic ($\beta = .18$, $p < .01$) adolescents. A few notable differences by race were observed: For African-American adolescents, a lack of future orientation was significantly related to changes in after-school participation ($\beta = .16$, $p < .05$), albeit in a counterintuitive direction; a one standard deviation increase in a lack of future orientation was related to a .16 standard deviation increase in after-school involvement over time. For Hispanic adolescents, there was a significant gender effect. Hispanic males, compared to females, showed an increased involvement over time ($\beta = .22$, $p < .01$). With respect to the community and family influences, community and family supportive control

was only found to predict after-school involvement at a trend level only in African-American adolescents (β = -.12, $p < .10$).

Following these findings, to address Research Question 2, the congruency dummy categories were introduced into separate models; see Table 7, column 1. Again, the relationship between early after-school involvement and late after-school involvement remained significant for the total sample of adolescents (β = .24, $p < .001$). Turning to the role of environmental congruency, it was found that living in an environment low in community supportive control and high in family supportive control was found to increase after-school involvement over time (β = .13 $p < .05$). In addition, post-hoc adjusted wald tests were completed to test for statistically significant differences among the groups. Post-hoc wald tests found a significant difference between living in environments with low community and high family supportive control and mismatching average community and family supportive control ($F(508) = 4.91$, $p < .05$).

In exploring gender differences, early after-school involvement was found to be a significant predictor for both males (β = .26, $p < .001$) and females (β = .22, $p < .001$). Specifically for males, column 2 of Table 7, living in environments with low community supportive control and high family supportive control, increased after-school involvement over time compared to those adolescents living in average conditions at a trend level (β = .15, $p = .07$). Specifically, living in a low community-high family mismatched environment was related to a .15 standard deviation increase in after-school involvement. Post-hoc analyses did not reveal any significant differences between the congruency groups. Environmental congruency was not found to influence female adolescents' after-school involvement patterns over time. However, post-hoc analyses found that there was a trend level significant

difference between living in an environment with low community supportive control and high family supportive control and low-matched environment ($F(249) = 3.47$, $p = .06$) or mismatching average environment ($F(249) = 2.90$, $p = .09$).

As shown in columns 4 and 5 of Table 7, when the congruency categories were included in the model and run by race, early after-school involvement remained a significant predictor of later after-school involvement for both African-American ($\beta = .31$, $p < .001$) and Hispanic ($\beta = .17$, $p < .01$) adolescents. In addition, some notable differences in predictor variables were found between races: for Hispanic adolescents, living in an environment with low community supportive control and high family supportive control was related to an increase in after-school involvement over time ($\beta = .19$, $p < .05$). Post-hoc analyses showed a significant difference between the low community supportive control – high family supportive control and mismatched average environment groups ($F(235) = 4.84$, $p < .05$). The relationship between low community supportive control – high family supportive control was only found to be significant at the trend level for African-American adolescents ($\beta = .15$, $p = .07$). Post-hoc analyses revealed a trend level significant difference between low community supportive control – high family supportive control and high community – low family supportive control ($F(226) = 3.04$, $p = .08$) and mismatched average environment ($F(226) = 2.92$, $p = .09$) for African-American adolescents. The significant self-selection factors from model 1 held in model 2 as well.

In sum, the most consistent finding was the role of early after-school involvement on later after-school involvement over time. Specifically, for the total sample and even when the sample was partitioned by gender and race, early involvement was significantly related to increases in after-school involvement 6 years later. Some notable differences in predictor

variables were found when examining the sample by gender and race. Female late after-school involvement was linked to age and mother's marital status, whereas male late after-school involvement was more linked to the community environment, particularly a community low in support control. With respect to race, African-American adolescent later after-school involvement was linked to their future orientation, with a more negative future orientation associated to increased involvement; for Hispanic adolescents, being male increased involvement over time. For both African-American and Hispanic adolescents, environmental incongruence was related to an increase in after-school involvement over time.

CHAPTER 4. SUMMARY AND DISCUSSION

The current study contributes to the body of literature on adolescent after-school involvement by: 1) simultaneously examining the influence of early community and family characteristics and self-selection factors on late adolescent after-school involvement; 2) testing how early congruence in the perceived community and family mesosystem contributes to changes in involvement over time; and 3) exploring effects by gender and race. Furthermore, the study results provide support for Bronfenbrenner's bioecological model whereby an adolescent's outcome is influenced by individual attributes as well as characteristics of his/her environment. A comparison of these results with prior research, limitations of the current study, future directions and policy implications are discussed.

Comparison of Present Study Findings to Prior Research

Adolescent After-School Involvement Patterns

Extant research on adolescent after-school involvement has found that adolescents' leisure patterns are consistent over time. For instance, Raymore and colleagues (2001) found that a majority of youths' leisure patterns are stable over time, despite life transitions such as continuing on to college and moving away from home. Moreover, sustained participation has been identified as a key link between involvement and the positive benefits due to involvement (Anderson-Butcher et al., 2003). Looking more closely at program participation, Anderson-Butcher and colleagues (2003) found that monthly attendance was positively associated with self-reported grades, and enjoyment and effort in school, while negatively associated with truancy, and favorable attitudes toward cheating and smoking. There was also a significant interaction with age, where increased participation had more of a protective

role with older children. However, the benefits of participation were contingent on there being a sufficient frequency and duration of involvement and motivation to attend.

Thus, the results of the present study substantiate these previous findings and provide support for the importance of early involvement on adolescent involvement over time. Specifically, adolescents' after-school involvement at wave 1 significantly predicted increases in after-school involvement 6 years later for the overall sample, and even when the sample was partitioned by gender and race. Although this stability coefficient would be only considered moderate, this most consistent finding has important policy implications which will be discussed further in the chapter.

Community and Family Contexts

The analyses indicated that a direct effect of perceived early community supportive control was negatively related to late adolescent after-school involvement at a trend level for the total sample, and specifically for male and African-American adolescents. Family supportive control, the second context assessed, was not directly and independently associated with late adolescent after-school involvement. However, this does not mean that the family plays no role in promoting after-school involvement. The contribution of family will be further discussed in the next section.

Considering the trend-level significant main effect of perceived early community supportive control on the total sample, first, and then by gender and race, the results lend support to the social disorganization model, particularly the research that has found that subjective perceptions of community disadvantage increase a person's vulnerability to being affected by their environment (Brand & Felner, 1996; Caughy et al, 2007; Sampson, 1991; Sampson et al, 1999; Spencer, 1997). Specifically, the influence of perceived community

supportive control was found to influence after-school involvement, albeit contrary to expectations. Rather than higher perceived early community supportive control increasing after-school involvement over time, having higher perceived early community supportive led to decreases in after-school involvement 6 years later. High perceived early community supportive control scores imply that mothers considered their neighborhoods to be relatively safe and perhaps felt comfortable enough to have the kids spend their non-school hours around the neighborhood rather in after-school programs. Moreover, having high supportive control reflects mothers' feelings of collective efficacy or the extent to which mothers perceive that neighbors would help monitor the area and intervene for the common good (Ceballo et al., 2004; Connell & Halpern-Feishe, 1997; Sampson, 1991; Sampson et al, 1999; Scales et al., 2001). Thus, having a sense of a collective efficacy or a "neighborhood watch" mentality may influence mothers' and adolescents' decision to trust the neighborhood area precluding the need to use after-school programming. In other words, adolescents may choose to stay at home rather than participating in after-school activities since the neighborhood is perceived to be high in collective efficacy.

As aforementioned, the influence of community supportive control was particularly salient for adolescent boys and African-Americans. This supports prior research that has found that male and African-American adolescent outcomes are more susceptible to community influences (Beyers et al., 2003; Connell & Halpern-Feishe, 1997; Leventhal & Brooks-Gunn, 2000). While past research has often linked social disorganization to negative and risky outcomes (Caughy et al., 2007; Ceballo et al., 2004; Leventhal & Brooks-Gunn, 2000; Sampson et al., 1999), the results of the present study suggest that there may also exist an inverse relationship between community and outcomes whereby a supportive community

context discouraged these adolescents from participating in after-school involvement over time. One explanation is that the adolescents in the sample are living in low-income, urban, and minority neighborhoods. These neighborhoods generally fall under the ‘at-risk’ or ‘vulnerable’ category (Scales et al, 2001); research has shown that these neighborhoods generally lack access or proximity to community-based after-school programs and centers and there is a sense of alienation or isolation from distal environments (Caughy et al., 1997; Sampson et al., 1999).

As aforementioned, no significant direct relationship between family supportive control and late adolescent after-school involvement was found. Recall that family supportive control involves parenting style, involvement and monitoring. These factors have been consistently linked to a decrease in problem behaviors (Crouter, Head, McHale, & Tucker, 2004; Eccles et al., 1997; Loeber et al., 2000; Patterson & Stouthamer-Loeber, 1984). Consequently, family supportive control can be characterized as a protective factor. This definition becomes particularly salient when assessing the role of family processes in at-risk neighborhoods. Indeed, research using an ecological framework has found that positive family processes, such as family supportive control, are particularly important when families and adolescents are surrounded by areas low in collective social support, trust and cohesion (Bradley et al, 2001; Cook et al, 2002; Jessor, 1993; Rankin & Quane, 2002). Specifically, they are found to buffer the effects of poor community processes. This relationship was further explored in the current study by assessing environmental congruency.

Environmental Congruence

When congruence categories were introduced into the regression models, adolescents living in environments perceived to be low in community supportive control but high in

family supportive control were found to increase their after-school involvement over time more than those adolescents living in environments not marked by these characteristics. This provides evidence that the family plays an important role for adolescents living in low-income, urban environments. As stated previously, the literature has consistently found that positive family processes such as having an authoritative parenting style, parental involvement and monitoring - components of family supportive control - act as protective factors that can help the child or adolescent deal with stress or avoid falling into risky behaviors (Eccles, Early, Frasie, Belansky, & McCarthy, 1997; Larson, Richards, Morieta, Holmbeck, & Duckett, 1996; Patterson & Stouthamer-Loeber, 1984).

The results of the current study substantiate these findings: adolescents living in environments characterized by low community supportive control, but high in family supportive control saw increases in after-school involvement over time compared to adolescents living in environments not characterized by this specific environmental incongruence. Furthermore, the use of tertiary splits especially helps to illustrate the buffering effect of family supportive control in at-risk communities. By using tertiary splits, when we discuss the incongruence between low community and high family supportive control, we are comparing adolescents living in environments in the lower third percentile for community supportive control, but in the upper third percentile for family supportive control; thus, we are essentially looking at highly incongruent environments. In other words, these adolescents are living in particularly poor communities, but they have a home environment that is particularly high in supportive control that guides them toward more positive behaviors, such as becoming involved in after-school activities rather than being out on the streets getting in trouble.

Indeed, in typical "at-risk" communities, the high prevalence of single parents, lack of resources, unemployment, mobility and crime, amongst other features, can diminish the beneficial influences of positive family practices leading to higher risks of negative outcomes. Nevertheless, other extant research has consistently documented the moderating role of supportive and positive family practices in promoting resiliency in youth from disadvantaged and impoverished communities (Beyers et al, 2006; Bradley et al., 2001; Brody et al., 2001; Klebanov, Brooks-Gunn, Chase-Lansdale, & Gordon, 1997; Gutman, McLoyd, Toyokawa, 2007; Klein et al., 2000, Simons et al, 2005; Taylor, 1996; Youngblade et al., 2007). Given that the sample was taken from predominantly low-income, poor neighborhoods, the finding that high family supportive control buffers the effects of low community supportive control supports research that claims positive family social resources are beneficial in extremely adverse communities.

Nevertheless, the findings are contrary to expectations set by the bioecological congruence framework. According to this framework, increases in late adolescent after-school involvement should have been highest among adolescents living in high matching environments (Damon, 2004; Eccles et al., 1993; Roberts & Robins, 2004). The results did not support this hypothesis. Again, this may be due to the fact the sample was taken from areas typically seen as at-risk, thus inherently low in community supportive control.

Early Adoelscent Self-Selection Factors and Attrition

Key findings from the present study suggest that there are differential effects of self-selection factors on late adolescent after-school involvement. Results show that there are significant differences in late adolescent after-school involvement with males being more involved than females over time. This supports prior research findings that males tend to be

more involved, particularly in sports (Barber et al, 2001). When the model was run separately by race, it was found that for African-American adolescents, having poor future orientations as described by the mothers, was associated with an increase in after-school involvement over time. Initially, this finding appears to be counterintuitive. However, upon closer inspection, a possible reason for the increase in involvement amongst these youth could be that the after-school programs are seen as a way to intervene in the early lack of future orientation. This provides support for the argument for after-school involvement as a method for early intervention of problem behaviors (Fauth, Roth, & Brooks-Gunn, 2007; Pettit et al., 1999).

Furthermore, attrition analysis found some important differences in the adolescents who were included in the sample and those that were not. Specifically, adolescents not in the sample were more likely to be older, white, and African-American; have lower early academic achievement, future orientations, and delinquency; and have higher externalizing symptoms. This suggests that some of the most disadvantaged youth were lost from the sample. Again, this finding supports the argument on the need for early intervention and associated benefits of after-school involvement (Fauth, Roth, & Brooks-Gunn, 2007; Pettit et al., 1999). This issue is discussed further in the section on policy implications.

Limitations and Future Directions

First, the study sample is a bit homogeneous in that it focuses on low-income minority families living in urban environments. Therefore, the relationship between contextual and individual factors and after-school involvement cannot be compared across different socioeconomic backgrounds. Second, the measure of community supportive control excludes the use of any census tract demographic information that can account for variance between

the contextual measures based on structural features. Rather, community measures were purely subjective as they were based on the mothers' perceptions. Nevertheless there was still some intragroup variation in these perceptions that justifies an analysis. Third, the study did not include a comparison of perceived early community and family supportive control and youth self-selection factors on how they predict different types of after-school involvement. Research has shown some mixed outcomes when the after-school activities are broken down into categories (Barber et al., 2001; Feldman & Matjasko, 2005; Holland & Andre, 1987). However, the inability to parcel out effects by after-school activities is a limitation of the dataset. While research has found differential effects of involvement in athletics, arts, and academic activities on healthy outcomes (Barber et al., 2001; Feldman & Matjasko, 2005), in the dataset, the after-school involvement questions combine all three arenas of involvement. Furthermore, whether or not an adolescent participates in after-school activities or clubs usually depends on the availability or access to those programs in the school or community. The dataset lacks this information.

In the future, researchers should aim to utilize a multilevel bioecological systems approach to better understand and account for the cross-level effects of the community and family mesosystem on adolescent outcomes. Path analyses could also be conducted to see how early self-selection and environmental factors and changes in after-school involvement relate to late adolescent academic, behavioral and psychosocial outcomes or transitions to adulthood. Future research can also look at the changing relations between contexts rather than the contexts themselves. Additionally, qualitative research of adolescents in after-school programs could help identify more factors that reveal why youth choose to get involved, stay involved or not get involved.

Conclusion and Policy Implications

Overall, the results did provide support for Bronfenbrenner's bioecological model and the inclusion of multiple contexts to describe and predict adolescent outcomes. Furthermore, given the large influence of early after-school involvement and notable differences found between those included in the sample and those not included lend support to the argument for early intervention. These findings illuminate some important considerations for the use of after-school programs, especially the early use of such programs for adolescents living in at-risk or poor communities. Indeed, research has found that the positive influence of after-school involvement is particularly salient in low-income youth and early adolescents (Anderson et al., 2007; Holland & Andre, 1987; Pierce & Shields, 1998; Pettit et al., 1999; Posner & Vandell, 1994).

In addition, recent research evaluating the state of after-school involvement and programs in the United States has found that just 6.5 million children are in after-school program, and 15.3 million parents would enroll their children in after-school programs if such programs were made available (National Collaboration for Youth, 2007). Therefore, policymakers as well as other community members should work toward increasing the accessibility and availability of such programs in low-income, urban neighborhoods where the need may be acute considering that the presence and prevalence of unstructured after-school care is compounded in low-income families (Coley, Morris, & Hernandez, 2004). In addition to living in, perhaps, unsafe environments, parents may work nonstandard work hours, which increases the likelihood that the adolescent will have to rely on unstructured care and in some instances, self-care, during the after-school hours. Therefore, the need for after-school

programs may be particularly strong for adolescents in families that lack resources for supervised care.

For fiscal year 2009, congress agreed to add $50 million dollars to the 21st century community learning centers legislation, which is the main source of support to funding after-school programs (National Collaboration for Youth, 2007). Therefore, there is approximately $1.08 billion available to maintain existing after-school programs and build new programs so that more adolescents have access to these safe, structured environments. It should be an imperative to provide adolescents with a positive and productive outlet during the after-school hours. The key findings of the present study offers support for the importance of after-school programs, particularly among a vulnerable adolescent population, by showing that to encourage long-term involvement youth must first and foremost have access to after-school activities early so they can initiate that early involvement.

FIGURES AND TABLES

Figure 1: A Bioecological model of community, family, and adolescent influences on later after-school involvement

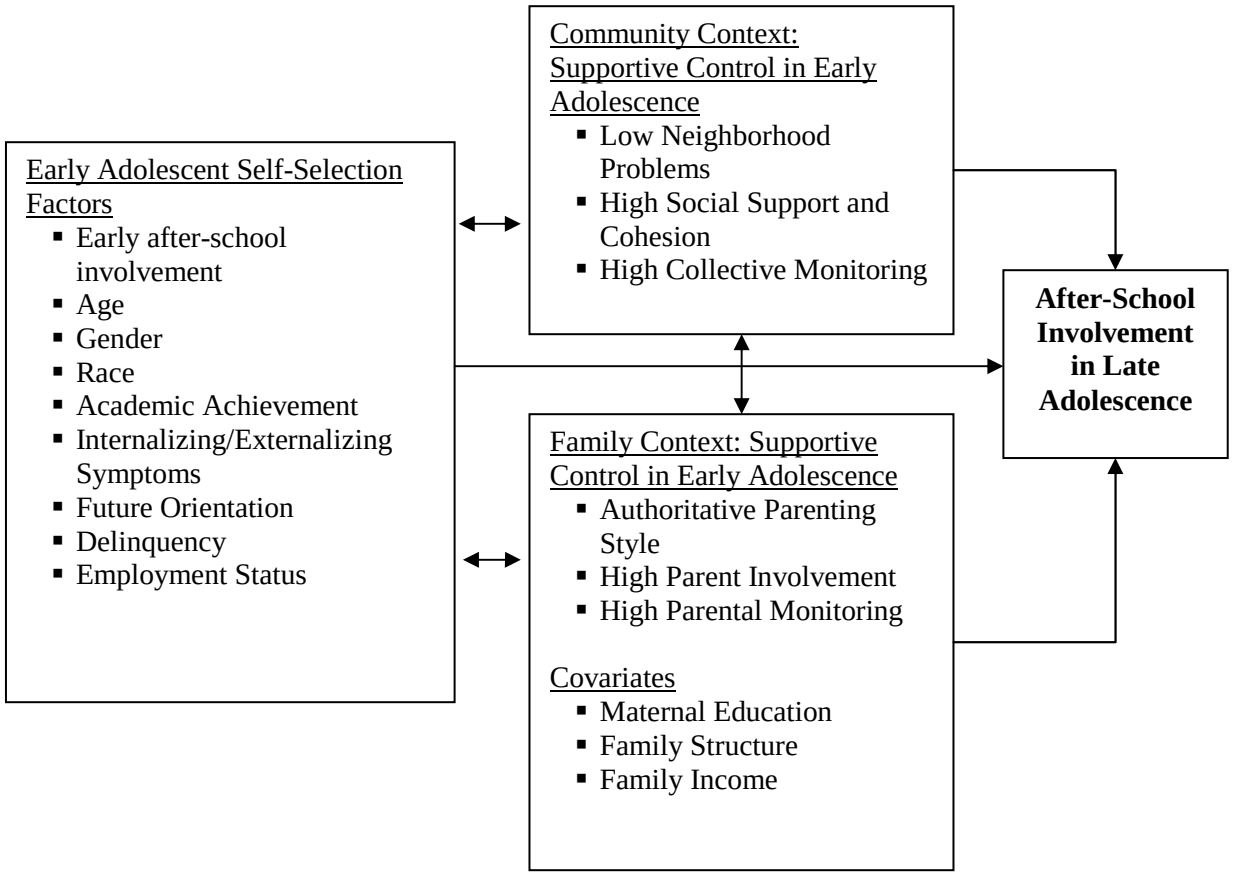
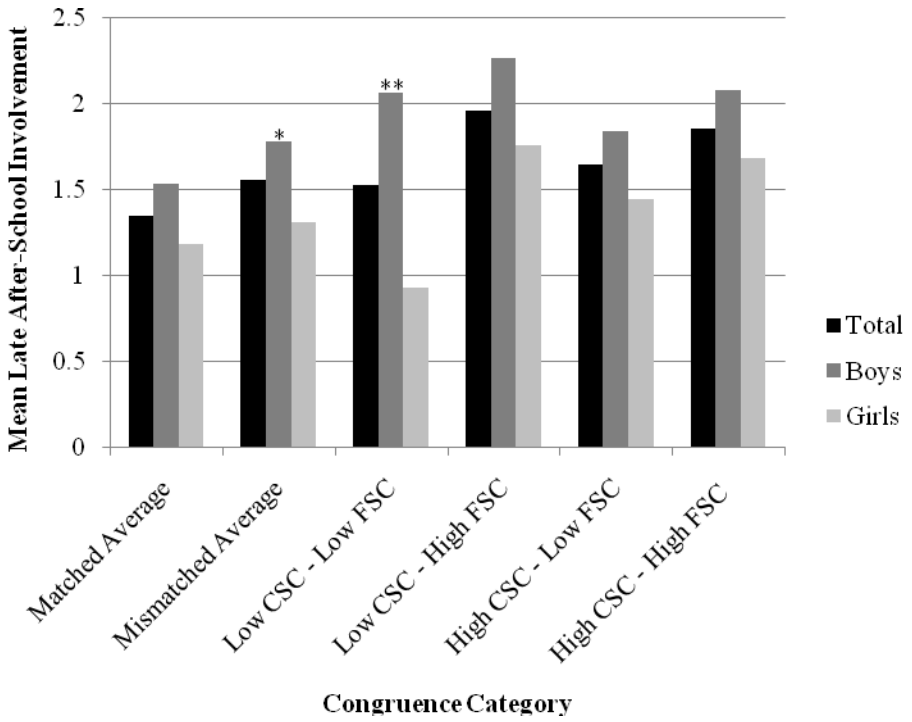


Figure 2: Congruency categories by tertiary split

		Family Supportive Control		
		Low	Average	High
Community	Low	57	63	56
Supportive	Average	59	55	62
Control	High	60	58	58

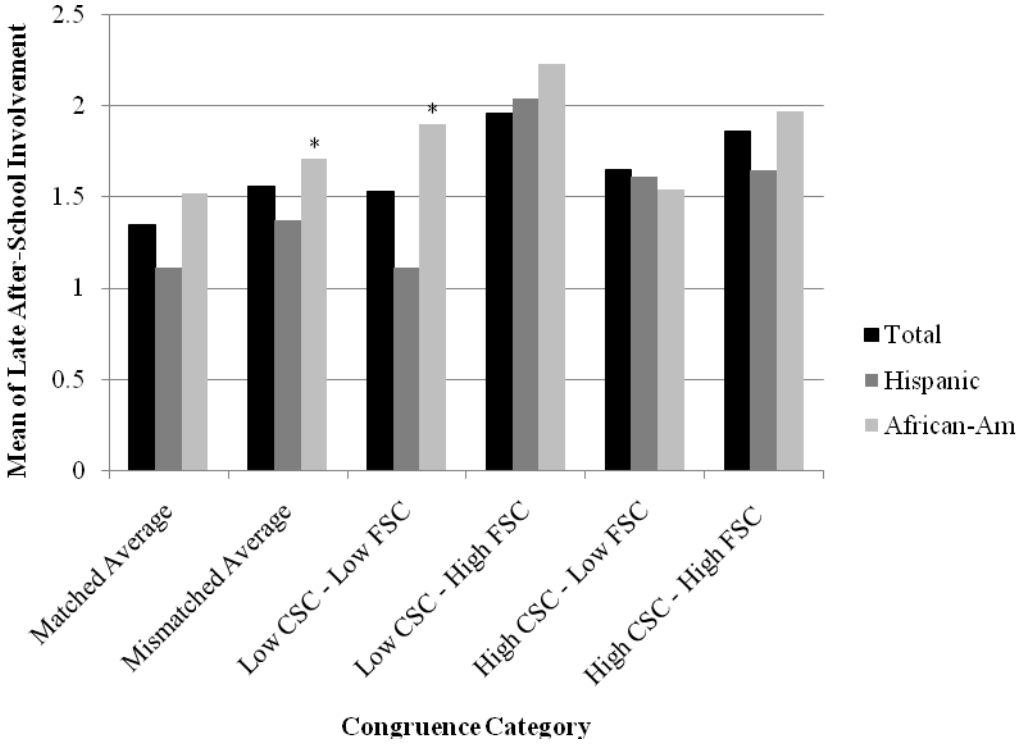
Notes: (1) Sample sizes for each environmental pair are presented; (2) Shaded boxes represent environmental pairs collapsed into the mismatched average group.

Figure 3: Comparison of mean late after-school involvement for congruency categories by gender



Notes: (1) *** $p < .001$; ** $p < .01$; * $p < .05$; (2) CSC, community supportive control; (3) FSC, family supportive control.

Figure 4: Comparison of mean late after-school involvement for congruency categories by race



Notes: (1) *** $p < .001$; ** $p < .01$; * $p < .05$; (2) CSC, community supportive control; (3) FSC, family supportive control.

Table 1: Attrition analysis

	Retained N=528 Mean or %	Omitted N=355 Mean or %	t/χ2
Early After-School Involvement	2.15	2.08	-.65
Self-Selection Factors			
Age	11.18	13.16	27.48***
Race			
White	5.9	9.5	4.28*
Hispanic	47.9	54.1	3.23
African-American	46.2	36.3	8.48**
Gender			4.17*
Male	50.7	42.3	
Female	49.2	57.7	
Academic Achievement	2.84	2.51	-5.59***
Internalizing Symptoms	30.6	30.5	.00
Externalizing Symptoms	24.0	33.8	10.08**
Delinquency	.13	.02	5.58***
Future Orientation	8.80	9.56	2.79**
Youth Employed	16.1	16.6	.03
Maternal Covariates			
Marital Status			3.30
Single	69.6	63.8	
Other	30.4	36.2	
More than HS degree	51.2	49.9	.16
Income-to-Needs	.90	.91	.32

Notes: *** $p < .001$; ** $p < .01$; * $p < .05$.

Table 2: Unweighted descriptive statistics for categorical study variables

	Percentage	N
Gender		
Male	49.2	260
Female (omitted)	50.8	268
Race		
White	5.9	31
Hispanic	47.9	253
African-American (omitted)	46.2	244
Internalizing Symptoms	30.6	162
Externalizing Symptoms	24.1	127
Youth Employed, Wave 1	16.2	85
Maternal Marital Status, Single	69.7	368
Maternal Education, HS Degree	51.3	271

Table 3: Unweighted descriptive statistics for continuous study variables

	N	Mean	SD	Range
After-School Involvement, Wave 1	528	2.15	1.56	0.00-6.00
After-School Involvement, Wave 3	528	1.62	1.51	0.00-6.00
Adolescent Age, Wave 1	528	11.18	1.09	10.00-15.00
Academic Achievement	528	2.84	0.82	0.00-4.00
Delinquency	528	-0.13	0.30	-0.57-1.42
Future Orientation	528	8.78	3.61	2.00-29.00
Income-to-Needs Ratio	528	0.90	0.50	0.00-3.48
Community Supportive Control (total)	528	0.01	0.61	-1.38-1.21
Boston	213	.003	0.54	-1.20-1.13
Chicago	179	0.01	0.54	-1.07-1.26
San Antonio	136	-.001	0.58	-1.30-1.03
Family Supportive Control (total)	528	-0.01	0.56	-3.86-0.69
Boston	213	-0.02	0.58	-3.91-0.65
Chicago	179	-.001	0.54	-2.52-0.67
San Antonio	136	-.001	0.56	-1.82-0.70

Table 4: Late adolescent after-school involvement: T-tests and ANOVA results

	Mean (SD)	F/t	Post-Hoc
Self-Selection Factors			
Race		3.35*	
White[A]	1.81 (1.45)		C > B*
Hispanic[B]	1.44 (1.51)		
African-American[C]	1.78 (1.51)		
Gender		3.79***	
Male	1.87 (1.55)		
Female	1.38 (1.44)		
Internalizing Classification		-.02	
Normal	1.62 (1.52)		
Borderline-Clinical Symptoms	1.62 (1.49)		
Externalizing Classification		1.32	
Normal	1.67 (1.55)		
Borderline-Clinical Symptoms	1.46 (1.38)		
Youth Employment		-1.31	
Not Employed	1.58 (1.51)		
Employed	1.81 (1.53)		
Maternal Covariates			
Marital Status		.87	
Single	1.71 (1.50)		
Other	1.58 (1.52)		
Education		8.60**	
Less than HS degree	1.42 (1.40)		
More than HS degree	1.80 (1.59)		
Congruence		1.38	
Low Community – Low Family[A]	1.63 (1.49)		
Low Community – High Family[B]	1.96 (1.74)		
High Community – Low Family[C]	1.65 (1.48)		
High Community – High Family[D]	1.86 (1.64)		
Mis-matched Average[E]	1.56 (1.48)		
Average[F]	1.34 (1.26)		

Notes: *** $p < .001$; ** $p < .01$; * $p < .05$.

Table 5: Unweighted correlations among study variables (N=528)

	1	2	3	4	5	6	7	8	9	10	11	12
1. After-School Involvement, Wave 3												
2. After-School Involvement, Wave 1	**.26***											
3. Adolescent Age	**-.09***	**.05***										
4. Academic Achievement	**.06***	.10	**-.12***									
5. Internalizing Symptoms	.00	**-.06***	-.01	**-.13***								
6. Externalizing Symptoms	**-.06***	-.00	**.11***	**-.18***	**.46***							
7. Delinquency	-.03	**.05***	**.17***	**-.17***	**.13***	**.24***						
8. Future Orientation	.02	-.01	-.01	**-.15***	**.23***	**.30***	**.23***					
9. Youth Employment	.06	**.12***	.00	**.13***	.01	.06	**.05***	.02				
10. Income-to-Needs	-.01	.01	**.14***	.00	.00	-.02	-.02	**-.04***	-.01			
11. Community Supportive Control	**-.06***	**.04***	-.03	.01	**-.11***	**-.10***	**-.09***	**-.10***	**-.04***	**.04***		
12. Family Supportive Control	**.07***	**.07***	**-.12***	**.05***	**-.16***	**-.15***	**-.32***	**-.16***	**-.04**	**.06***	**.05***	

Notes: * $p < .05$

Table 6: OLS regressions predicting late adolescent after-school involvement

	Total Sample	**Gender Comparisons**		**Race Comparisons**	
Full Model		**Boys**	**Girls**	**African-American**	**Hispanic**
After-School Involvement, Wave 1	**.23*** **	**.24*** **	**.23*** **	**.30*** **	**.18** **
Self-Selection Factors					
Age	-.08+	-.05	-.12+	-.09	-.09
Race[A]					
White	.00	-.02	.03		
Hispanic	-.07	-.00	-.12+		
Male[A]	**.16*** **			.07	**.22** **
Academic Achievement	.04	.05	.04	.00	.02
Internalizing Symptoms	.04	.04	.05	-.02	.07
Externalizing Symptoms	-.06	-.09	-.02	-.10	.00
Delinquency	-.03	-.04	.00	.01	-.12
Future Orientation	.02	.02	.04	**.16***	-.08
Youth Employment	.02	.06	-.01	.02	.06
Maternal Covariates					
Marital Status[A]	-.03	.04	-.11+	-.03	-.04
Education[A]	.08+	.06	.10	.09	.07
Income-to-Needs	-.02	-.11	.08	.01	-.05
Community Supportive Control	-.08+	-.12+	-.03	-.12+	-.08
Family Supportive Control	.05	.10	.04	.13+	-.04
F, prob >F	4.77***	2.37**	2.70***	3.91***	2.25**
R2	.13	.13	.14	.19	.12

Note: (1) *** $p < .001$; ** $p < .01$; * $p < .05$; + $p < .10$; (2) Unweighted Standardized Betas are presented; (3) A, African-American adolescents, Female adolescents, non-single mothers, and mothers with more than a high school degree are the omitted comparison groups.

Table 7: OLS regressions predicting late adolescent after-school involvement with congruency categories

	Total Sample	**Gender Comparisons**		**Race Comparisons**	
Full Model		**Boys**	**Girls**	**African-American**	**Hispanic**
After-School Involvement, Wave 1	**.24*** **	**.26*** **	**.22*** **	**.31*** **	**.17** **
Self-Selection Factors					
Age	-.08+	-.06	-.12	-.09	-.09
Race[A]					
White	.00	.00	.02		
Hispanic	-.01	.01	-.11+		
Male[A]	**.16*** **			.07	**.22** **
Academic Achievement	.04	.05	.04	-.01	.02
Internalizing Symptoms	.03	.03	.06	-.04	.07
Externalizing Symptoms	-.06	-.09	-.03	-.10	-.00
Delinquency	-.03	-.07	.03	-.00	-.08
Future Orientation	.03	.04	.05	**.17***	-.07
Youth Employment	.02	.05	-.02	.01	.06
Maternal Covariates					
Marital Status[A]	-.02	.05	-.10+	-.02	-.04
Education[A]	.09+	.07	.10	.07	.08
Income-to-Needs	-.02	-.10	.09	.02	-.05
Congruence[B]					
Low Community – Low Family	.04	.12	-.06	.06	.06
Low Community – High Family	**.13***	.15+	.10	.15+	**.19***
High Community – Low Family	.06	.08	.00	.01	.10
High Community – High Family	.09	.13	.06	.10	.10
Mis-matched Average	.05	.12	-.01	.06	.07
F, prob >F	4.17***	1.85*	2.56***	2.97***	2.18**
R2	.13	.12	.15	.18	.14

Note: (1) *** $p < .001$; ** $p < .01$; * $p < .05$; + $p < .10$; (2) Unweighted Standardized Betas are presented; (3) A, African-American adolescents, Female adolescents, non-single mothers, and mothers with more than a high school degree are the omitted comparison groups; (4) B, average community and family supportive control is the omitted comparison group.

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