BUILDING TRANSFORMATIVE SCHOOL—COMMUNITY COLLABORATION:
A CRITICAL PARADIGM

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Dedication

This work is dedicated to my wife, Areum, and daughter, Hannah. I also dedicate this work to my father, Nam-Guk Kim, mother, Bong-Sun Park, mother in law, Keum-Yeon Seo, brothers, and sisters in Korea. Without their support, love, and sacrifice, it would not be possible to successfully complete this dissertation work.
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School-community collaboration has received increasing attention in social work because of its potential for enhancing the quality of services to meet the multifaceted needs of students. However, there is little understanding of how to create and maintain successful school-community collaboration. The purpose of this research is to develop and validate a comprehensive framework for transformative school-community collaboration based on a critical paradigm and its corresponding theories. Using school survey data, an exploratory factor analysis identified the four dimensions of transformative school community collaboration, including (1) critical member capacity, (2) equal relations, (3) democratic network governance, and (4) empowering coordination. The results of multiple regression analyses showed that the identified dimensions were positively associated with the quality outcomes of Out-of-School Time programs although their significant effects varied across different quality outcomes: high-quality activities, student engagement, and linkages with family/community. Another key finding was that structural dimensions—democratic network governance and empowering coordination—appeared to be stronger factors. However, this research suggested that critical member capacity and equal relations may be associated indirectly with the quality outcomes. This dissertation paper concludes with practical implications and future research agenda to successfully build transformative school-community collaboration.
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Chapter One: Introduction

The Benefits and Challenges of School-Community Collaboration

In recent years, schools and community organizations have increasingly developed collaborative partnerships within and outside schools. Such school-community collaboration has become popular because of current policy and social contexts. For example, the 21st Century Community Learning Centers (21st CCLC) programs under the No Child Left Behind (NCLB) Act encourage school-community collaboration as an effective approach to supporting students and their families, especially within high poverty and low performing schools (Anderson-Butcher, Stetler, & Midle, 2006). In 2011, 9,141 collaborative initiatives between school and community organizations were implemented by the 21st CCLC programs (U.S. Department of Education, 2011). These school-community partnerships provided a wide range of services for students, their families, and communities. But, the most common type of program was Out-of-School Time (OST) programs. OST programs can be defined as school- or community-based programs that offer a variety of services and activities to support students’ educational, social, physical, and behavioral outcomes in out-of-school time (American Youth Policy Forum, 2006).

In addition, current social conditions under high levels of uncertainty and complexity lead to multifaceted needs of students. For example, risk and protective factors at individual, family, school, and community levels affect various student outcomes, and then their outcomes are further influenced by complex interactions within and between risk and protective factors at multidimensional levels (McMahon, Ward, Pruett, Davidson, & Griffith, 2000). Moreover, students cannot improve their learning
outcomes without addressing other individual needs and environmental issues, such as income, housing, health, or safe environments (Warren, 2005). As a result, a consensus has emerged between schools and community organizations that student development can be improved if they deal simultaneously with various obstacles in schools, families, and communities (Anderson-Butcher & Ashton, 2004; Dryfoos, 1994; Valli, Stefanski, & Jacobson, 2014). These complex social conditions encourage them to work together because any single agency does not have sufficient knowledge and resources to provide comprehensive services to meet the multifaceted needs of students (Dryfoos, 1994; Pfeiffer & Cundari, 2000).

Previous studies have provided substantial evidence about the effectiveness of school-community collaboration on a wide range of outcomes for students, families, schools, and communities (Anderson-Butcher et al., 2010; Blank, Jacobson, & Melaville, 2012; Cook, Murphy, & Hunt, 2000; Dryfoos, 2003; Johnson, Zorn, Tam, Lamontagne, & Johnson, 2003; Whalen, 2007). However, collaboration is not a panacea to solve all complex problems that students face within their families, schools, and communities. Collaboration can fall into “a state of ‘collaborative inertia’ in which the rate of output seems slow and even successful outcomes are achieved only after much pain or hard grind” (Huxham & Beech, 2003, p. 70).

Many researchers argue that this collaborative inertia is closely linked to turf issues, power struggles, and/or inequality issues between collaborating members when they set agendas, implement integrated services, and evaluate outcomes (Chavis, 2001; Hardy, Lawrence, & Phillips, 2006; Mizrahi & Rosenthal, 1993). Such power-related issues are more prevalent and severe in school-community collaboration because of its
interdisciplinary and cross-sectorial membership with different purposes, interests, and backgrounds (Dryfoos, 1994). Previous studies have consistently shown that school-community collaboration is frequently confronted with power-related issues between diverse collaborating members (Abrams & Gibbs, 2000; Cousins, Jackson, & Till, 1997; Dryfoos, 1994; Hillier, Civetta, & Pridham, 2010; Warren, 2005). If these issues are not addressed proactively and adequately within school-community collaboration, they can prevent accomplishing collective goals, decrease the quality of collaborative services, discourage members' commitments and active community engagement, and even hinder future collaboration (Abrams & Gibbs, 2000; Altshuler, 2003; Anderson-Butcher et al., 2010; Tapper, Kleinman, & Nakashian, 1997).

Theoretical Framework: A Critical Paradigm

Although school-community collaboration has been examined from a number of perspectives and theories, this dissertation research draws primarily on a critical paradigm and its corresponding theories—critical theory, empowerment theory, and social justice theory—particularly employed at the intra- and interorganizational level. A critical paradigm can offer a useful framework for building successful school-community collaboration for both instrumental and normative purposes.

Instrumentally, a critical paradigm can be used to effectively address power inequality that is more prevalent in school-community collaboration as discussed above. This perspective is primarily concerned with eliminating injustice, inequality, oppression, and/or domination embedded in individual, relational, cultural, and structural contexts (Alvesson & Deetz, 2000; Barros, 2010; Deetz, 1996; M. Jackson, 2000). Some researchers have attempted to examine interagency collaboration based on a critical
paradigm and its relevant theories (Hardy & Phillips, 1998; Lotia & Hardy, 2008; Weiner, Alexander, & Shortell, 2002; Wineman, 1984; Zeitz, 1980). A few similar attempts have also been made in school-community collaboration (Bryan & Henry, 2012; Jones & Bodtke, 1998; Miller & Hafner, 2008). These studies have shown that a critical paradigm is beneficial for uncovering systemic patterns of inequality within collaboration. It also helps create alternative and innovative approaches to enhancing both processes and outcomes of collaboration, such as the quality and effectiveness of collaborative services.

Normatively, a critical paradigm can provide useful insight into promoting equality, democracy, and empowerment within collaborative structures and processes. Furthermore, it can empower underrepresented members to freely express their needs and to make their voices heard in collaborative decision-making (Hardy & Phillips, 1998; Himmelman, 1996). This normative reason can be particularly important in social work because the underlying principles and values of a critical paradigm are highly congruent with the social work’s mission and values. According to National Association of Social Workers’ Code of Ethics (2008), social workers should promote social change and social justice with special attention to the empowerment of underrepresented individuals, families, groups, organizations, and communities. In this regard, a critical paradigm could contribute to the development of a comprehensive model for school-community collaboration that fully reflects social work’s mission and core values.

Despite the usefulness of a critical paradigm, there are several research gaps to be further examined in order to develop transformative school-community collaboration that comprehensively reflects the theoretical principles and values of a critical paradigm. First
and foremost, previous studies do not provide a logical and consistent framework for transformative school-community collaboration designed to promote individual and social transformation as both process and outcome. Thus, there is little understanding of and consensus on the core dimensions of transformative collaboration between schools and community organizations. Not surprisingly, no valid and reliable instrument has been developed to measure the full dimensions and their specific indicators of transformative school-community collaboration.

Second, transformative school-community collaboration and its promising outcomes are still highly conceptual and are not fully supported by empirical evidence. Some studies of school-community collaborations offer partial evidence supporting the assumptions of a critical paradigm (e.g., decentralized structure and flexible procedures) on collaborative outcomes through qualitative or qualitative research (Anderson-Butcher et al., 2010; Sanders & Lewis, 2005; Warren, Hong, Rubin, & Uy, 2009). The literature on general collaboration, however, has shown the positive effects of its opposing factors, such centralized structures and standardized procedures (Foster-Fishman, Berkowitz, Lounsbury, Jacobson, & Allen, 2001; Provan & Milward, 2010; Wohlstetter, Smith, & Malloy, 2005). These contradictory findings can result in considerable confusion or even paradoxical explanations about how to develop and maintain successful school-community collaboration.

Finally, little empirical research has directly examined how school-community collaboration derived from a critical paradigm is associated with the quality outcomes of OST programs. This research gap would become more problematic in that school-community collaboration is commonly designed to provide students with high-quality
OST programs. Collaboration with community organizations has been emphasized as “a core organizing principle” to improve the success of OST programs (Baker, 2013, p. 5). It is also important to note that the quality of OST programs is a broad concept that can be operationalized by a wide range of elements (Yohalem & Wilson-Ahlstrom, 2010). Consequently, additional research should be conducted to explore dynamic relationships between the major dimensions of transformative school-community collaboration and the different outcomes of OST programs.

**The Purpose of the Research**

In light of these concerns, the primary purpose of this research is to develop and validate transformative school-community collaboration in order to improve the quality outcomes of OST programs. More specifically, this research identifies the multiple dimensions of transformative school-community collaboration and then creates a new scale to comprehensively measure its identified dimensions. Next, it explores the current status and scope of transformative school-community collaboration. Finally, it examines how its multiple dimensions identified are associated with three outcomes of OST programs: high-quality activities, student engagement, and linkages with family/community.

The results of this research will provide both theoretical and practical implications for building successful school-community collaboration. The proposed framework for school-community collaboration is developed from the paradigm, theories, and methods within the same ideological orientations toward social justice and human liberation. Thus, this research could provide empirical evidence to build transformative school-community collaboration. In this paper, the term “transformative school-community collaboration”
represents a comprehensive model of collaboration, whose major principles are grounded in a critical paradigm and its corresponding theories. Thus, special attention is given to promoting equality, democracy, and empowerment within collaborative structures and processes.

Furthermore, this research could provide social workers with practical knowledge and skills required to create and maintain successful school-community collaboration. Social workers can become active leaders in building school-community collaboration (Altshuler, 2002; Anderson-Butcher et al., 2006; Bronstein, Ball, Mellin, Wade-Mdivanian, & Anderson-Butcher, 2011; Franklin & Streeter, 1995). However, social workers tend not to participate actively in school-community collaboration due to the lack of knowledge of collaboration (Whalen, 2007). This research will suggest significant areas of improving practice competencies for social workers who wish to play important roles in school-community collaboration.

This paper is organized in the following ways: it begins with a general overview of school-community collaboration. Second, it describes the basic assumptions of a critical paradigm and discusses how its relevant theories suggest the major dimensions of collaboration and their potential outcomes. Third, this paper illustrates research methods, including research questions and hypotheses, research design, sample and data collection, measures, and data analysis. Fourth, it presents the findings of the data analyses. Finally, it concludes with the discussions of implications for social work practice and research.
An Overview of School-Community Collaboration

The concept of school-community collaboration is not entirely independent from that of general collaboration. It has been developed from the basic foundations of interorganizational, community-based collaboration across a variety of disciplines, such as social work, education, nonprofit management, public policy and administration, health and mental health, psychology, and sociology. This section describes the common assumptions of general collaboration and then discusses how these assumptions have been applied to school-community collaboration.

**Definition.** A simple definition of collaboration would be “a form of working together”. However, several researchers have defined collaboration in many different ways. For example, Mattessich and Monsey (1992) define collaboration as “a mutually beneficial and well-defined relationship entered by two or more organizations to achieve common goals” (p. 11). Wood and Gray (1991) suggest that “collaboration occurs when a group of autonomous stakeholders of a problem domain engages in an interactive process, using shared rules, norms, and structures, to act or decide on issues related to that domain” (p. 146). Although there is no unified definition of collaboration, Longoria (2005) identifies four common themes shared by many authors’ definitions of collaboration:

(a) the fundamental nature of collaboration is that of a joint activity in the form of a relational system between two or more organizations; (b) an intentional planning and design process result in mutually defined and shared organizational goals and objectives; (c) structural properties emerge from the relationship between organizations; and (d) emergent “synergistic” qualities characterize the process of collaboration (p. 127).
Similarly, school-community collaboration has been recognized as a partnership between schools and community organizations to accomplish collective goals, such as improving student outcomes, supporting their families, and increasing school/community development and change, through joint planning, processes, and actions (Abrams & Gibbs, 2000; Anderson-Butcher et al., 2006; Sanders & Lewis, 2005; Pfeiffer & Cundari, 2000; Tapper et al., 1997). Although schools and community organizations are fundamental constituencies in school-community collaboration, certain collaboration involves parents as their equal partners. This form of the collaboration is often called school-family-community collaboration (Bryan & Henry, 2012; Epstein, 1995).

In school-community collaboration, schools work together with numerous community organizations in public, nonprofit, and for-profit sectors. Sanders and Lewis (2005) found that various community organizations were engaged in school-community collaboration, including business/corporations, universities and educational institutions, health care organizations, government agencies, volunteer organizations, faith-based organizations, senior citizens organizations, cultural and recreational institutions, and other community organizations. Anderson-Butcher et al. (2006) assessed school-community partnerships and indicated that mental health organizations were most frequently involved in school-community collaboration, followed by the juvenile justice system, youth development organizations, and parents/community members.

Programs and services offered by school-community collaboration vary according to its purposes and contexts. In general, there are four areas of services: student-focused activities (e.g., OST programs), school-focused activities (e.g., school reform initiatives), family-focused activities (e.g., family support programs), and community-focused
activities (e.g., adult literacy classes) (Anderson-Butcher et al., 2006; Sanders & Lewis, 2005). More recently, 21st CCLC programs strengthen school-community collaboration to enhance student development through OST programs (Anderson-Butcher et al., 2006). According to the U. S. Department of Education (2011), the prevalent clusters of activities in the 21st CCLC centers included educational enrichment activities, recreational activities, homework help, and tutoring. Likewise, Anderson-Butcher et al. (2006) found that extracurricular activities, such as performing arts, field trip, and recreational activities, were the most common type of the OST programs offered by school-community collaboration.

**Forms.** Collaboration can take various forms. Some studies have attempted to classify the different types of collaboration (Bailey & Koney, 2000; Franklin & Streeter, 1995). Bailey and Koney (2000) propose the four forms of collaboration based on levels of formality and integration: cooperation, coordination, collaboration, and coadunation. According to them, cooperation is a least formal and integrated relationship between autonomous organizations to exchange information. Coordination represents an organizational relationship designed to provide integrated services in the pursuit of members’ comparable goals. Collaboration is different from coordination in that it provides integrated services by creating common structures, rules, and strategies. Finally, coadunation indicates an interagency relationship with highest formalization and integration, where partner organizations incorporate their cultures into one single structure.

Similarly, Franklin and Streeter (1995) propose five different approaches to school-community collaboration, including informal relations, coordination, partnership,
collaboration, and integration. This categorization is organized based on the different degree of changes in collaboration in terms of eight dimensions: commitment, planning, training, leadership patterns, resources, funding, scope of change, and impact. For example, informal relations have no change in a collaborative system in that schools only share information or make referrals to community organizations. Coordination requires a minimal change to the structure, but linkages are still informal. A partnership requires some changes to reorganize an organizational structure to provide integrated services. Collaboration needs major restructuring to jointly develop common goals and strategies although member organizations still have their own autonomy to make decisions. Finally, integration requires the total reform of both organizational structure and process by combining members’ vision and resources into one system, like a single organization.

The researchers discussed above have argued that collaboration would differ from other forms of collaborative relationships in terms of the degrees of formality, integration, commitment, and complexity. However, it is difficult to distinguish different forms clearly in practical contexts because they tend to fall along a continuum. School-community collaboration may begin by developing a simple and informal relationship and then move into more formal and integrated collaboration (Adelman & Taylor, 2003). Furthermore, there is little consensus on how to define and operationalize the different forms of collaboration in actual research (Huxham, 1996). In previous studies, the term, school-community partnership is interchangeably used with school-community collaboration without recognizing their clear distinction. Therefore, in this paper, collaboration is broadly defined in order to more comprehensively review collaborative
efforts between schools and community organizations. It is also interchangeably used with a school-community partnership.

**Processes and dimensions.** Collaboration involves a dynamic process with multiple stages. Many researchers acknowledge that collaboration generally involves three phases: formation (antecedent or precondition), process (implementation or action), and outcome (impact or production) (Gray & Wood, 1991; Thomson & Perry, 2006). According to Gray and Wood (1991), a formation is concerned with antecedents that encourage or discourage the creation of collaboration. The second stage indicates the process of implementing collaboration to achieve shared goals. The outcome refers to final achievement throughout collaborative work.

Although there is little research on identifying significant factors that affect the formation of school-community collaboration, other studies have examined the formation of collaboration in human service delivery systems (Guo & Acar, 2005; Gazley, 2008; Oliver, 1990). The motivation to collaborate includes multidimensional factors at individual, organizational, and environmental levels (Gazley, 2008). For example, Guo and Acar (2005) showed that nonprofit organizations were more likely to participate in formal collaboration when they were older, had larger resource sufficiency, received government funding, and had more board members from other community organizations. However, Oliver (1990) contends that no single factor completely explains why organizations are willing or unwilling to participate in interagency collaboration.

The second stage, a process, is a primary concern for this dissertation research because this stage includes multiple dimensions and indicators that are necessary to manage day-to-day operations for successful collaboration. Previous literature suggests a
wide range of process dimensions (Bailey & Koney, 1996; Butterfoss & Kegler, 2002; Foster-Fishman et al., 2001; San Martín-Rodríguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005; Thomson, Perry, & Miller, 2007; Mattessich & Monsey, 1992). Thomson et al. (2007) indicate that key dimensions of the implementation stage include collaborative governance, administration, organizational autonomy, mutuality, and norms. Foster-Fishman et al. (2001) develop an integrative framework with the core elements of successful collaboration, including member capacity, relational capacity, organizational capacity, and programmatic capacity. Bailey and Koney (2000) also classify eight core components for successful collaboration, including leadership, membership, environmental linkages, strategy, purpose, tasks, structure, and systems.

It is much more difficult to identify key dimensions in implementing collaboration because its process is iterative, dynamic, and contextual (Thomson & Perry, 2006). In this research, the four process dimensions of collaboration are predominantly highlighted: (1) member capacity, (2) member relations, (3) network governance, and (4) collaborative coordination. These four areas represent comprehensive, but distinctive dimensions that encompass a wide range of indicators suggested by previous studies. Similar results are found in previous studies that seek to identify core dimensions in implementing school-community collaboration even though they use different terms to explain the same dimension (Adelman & Taylor, 2003; Anderson-Butcher et al., 2010; Blank et al., 2012; Bronstein, 2003; Hillier et al., 2010; Johnson et al., 2003; Pfeiffer & Cundari, 2000; Wohlstetter et al., 2005).

As seen in Table 1, three studies propose a full range of the core dimensions while others partially emphasize two or three dimensions. However, specific indicators
representing each dimension are not consistent across the literature because of different values, perspectives, and emphases on collaboration. Various indicators of the core dimensions and these effects on the effectiveness of collaboration will be discussed in more detail later in this chapter.

Table 1. Summary of the Core Dimensions of School-Community Collaboration

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<td>Anderson-Butcher et al., 2010</td>
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<td>Blank et al., 2012</td>
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<td>Bronstein, 2003</td>
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<td>Johnson et al., 2003</td>
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<td>Pfeiffer &amp; Cundari 2000</td>
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Finally, some researchers have identified specific indicators of the effectiveness of collaboration (Gray, 2000; Provan & Milward, 2001; Zakocs & Edwards, 2006). They highlight multidimensional outcomes for collaboration itself, partners, and clients/communities although some studies focus more on a particular level of outcomes. Zakocs and Edwards (2006) conducted a literature review on community-based collaboration and indicated that previous studies were more likely to test and approve network- and partner-level outcomes than service user/community-level outcomes.
Similar results are found in the literature on the effectiveness of school-community collaboration. School-community collaboration can produce multidimensional outcomes for students, families, schools, and communities. For example, school-community collaboration helps create comprehensive and integrated service delivery systems to meet the complex needs of students and their families, increase access to services, and reduce the duplication of services (Adelman & Taylor, 2003; Johnson et al., 2003; Pfeiffer & Cundari, 2000). It also encourages schools to improve their curriculum and instruction, to build safe school environments, and to increase parental involvement (Anderson-Butcher et al., 2010; Sanders & Lewis, 2005; Whalen, 2007). Finally, it has positive effects on students’ learning and development (Cook et al., 2000; Dryfoos, 2003; LaFrance Associates, 2006) as well as community development and change (Blank et al., 2003; Melaville, 2004; Warren, 2005).

From the literature review, the common aspects of school-community collaboration can be summarized as follows: (1) school-community collaboration is a strategic process of working relationships between schools and community organizations to accomplish their shared goals; (2) it involves dynamic and cyclical processes, and each stage includes specific dimensions and indicators; and (3) it provides various benefits for students, families, schools, and communities. It is also important to note that different paradigms and theories provide different or even paradoxical explanations about why, how, and for whom schools and community organizations should create and maintain their collaboration to achieve its intended goals. Figure 1 displays a basic framework for school-community collaboration based on those assumptions.
Critical Paradigm and Corresponding Theories

This research draws largely on a critical paradigm and its corresponding theories in order to develop a conceptual framework for successful school-community collaboration. This section presents the underlying assumptions of a critical paradigm with respect to understanding knowledge generation and social phenomena. Next, it discusses how collaboration is understood in three critical-oriented theories: critical theory, empowerment theory, and social justice theory.

Critical paradigm. Burrell and Morgan (1979) provide a useful typology of organizational paradigms. They define paradigm as “very basic meta-theoretical assumptions which underwrite the frame of reference, mode of theorizing and modus operandi of the social theorists who operate within them” (p. 23). This definition infers that a paradigm is a set of metaphors or theories that share similar beliefs, values, and methods in understanding social and organizational phenomena. Burrell and Morgan also
clearly emphasize that although theories within a given paradigm have commonalities to some degrees they have somewhat different ways of understanding the shared reality.

Burrell and Morgan (1979) propose four paradigms: functionalist, interpretive, radical structuralist, and radical humanist paradigms. Of the four paradigms, the combination of both radical structuralist and radical humanist paradigms provide a paradigmatic orientation for this research. Both radical perspectives are politically and ideologically driven to promote individual and social transformation. A significant difference between them is an emphasis on the prerequisite for the transformation based on the different perceptions of objective-subjective reality (Burrell & Morgan, 1979). Radical structuralists supporting objective reality focus more on identifying the structural and systemic patterns of oppression, discrimination, and injustice to promote social transformation, whereas radical humanists supporting subjective reality focus more on uncovering dominant discourses and taken-for-granted assumptions to enhance individual transformation (Gioia & Pitre, 1990; Hazen, 1994).

Although Burrell and Morgan (1979) distinguish radical humanism from radical structuralism, some scholars tend to combine these two paradigms into one paradigmatic framework and call it “critical paradigm” (Thomas, Netting, & O’Connor, 2011) or “emancipatory paradigm” (M. Jackson, 2000). This collapsed framework integrating both radical paradigms to some degree can be justified by a subjective-objective dualism. As Freire (1970) notes, subjectivism and objectivism cannot be separated clearly because they interact with each other in a constant way. Therefore, a clear division between objectivism and subjectivism would not be effective in understanding complex and dynamic realities (Mullaly, 2007). Furthermore, as Deetz (1996) argues, the intent of the
research is more important than the debate about subjectivism versus objectivism for critical researchers.

Similar paradigmatic assumptions for this research are also found in so-called “critical realism”. It can be considered as a blended perspective between radical structuralism and radical humanism or be placed in what Gioia and Pitre (1990) called a transition zone between the two radical paradigms, where a clear distinction between the paradigms is blurred. Consistent with radical paradigms, the primary goal of critical realism is social and individual transformation. However, critical realism recognizes that although objective reality can exist independent of human minds, the process of discovering it (epistemology) is influenced by social constructions; this assumption helps “overcome the ‘false oppositions’ between ‘objectivism’ and ‘subjectivism’ and ‘agency’ and ‘structure’ that have traditionally beset social theory” (Houston, 2001, p. 852).

Consistent with these suggestions, this research incorporates both radical humanism and structuralism into one paradigm although each paradigm has some unique characteristics in addition to their commonalities. The term, “critical paradigm” is selected for this blended paradigm since it has been more commonly used in previous literature. In a critical paradigm, organizations are viewed as “social and historical creations accomplished in conditions of struggle and domination, a domination that often hides and suppresses meaningful conflict” (Deetz, 1996, p. 202). Accordingly, the primary goal of research in this paradigm is to discover injustice, oppression, and inequality as well as to identify alternative approaches to promoting social and individual transformation (Alvesson & Deetz, 2000; Barros, 2010; Deetz, 1996). Likewise, proponents of critical realism attempt to explore social and structural factors of injustice
at multiple levels and explain complex mechanisms among these multifaceted factors (Houston, 2001).

Moreover, a critical paradigm suggests that a dialectical approach is useful to identify an alternative option for organizational change (Alvesson & Deetz, 2000; O’Connor & Netting, 2009). Benson (1977) argues that a dialectical approach is guided by four principles: (1) social construction refers to the continuous process of constructing social reality; (2) totality assumes that a certain social phenomenon consists of multiple parts as a whole and the parts are interconnected with one another; (3) contradiction indicates that every social phenomenon contains contradictory natures that shape the basis for change; and (4) praxis emphasizes humans as active agents for social constructions on the basis of their own analysis. Praxis also emphasizes the pragmatic uses of research procedures and methods to create practice-oriented knowledge (Barros, 2010). On the basis of these principles, this research attempts to identify multiple dimensions necessary for enhancing the effects of transformative school-community collaboration and explore dynamic and complex relationships among the key dimensions.

**Corresponding theories.** Although a paradigm includes a set of theories with similar viewpoints, each theory within a given paradigm provides a unique approach to understanding social phenomena as well (Burrell & Morgan, 1979). In this regard, it is necessary to examine how specific theories within a critical paradigm suggest similar or different indicators of transformative collaboration. A complete consensus has not been reached on what particular theories can be categorized into a critical paradigm. Traditionally, theories of a critical paradigm include the Frankfurt School of critical theory, Marxian structural approach, structuration theory, conflict theory, Freire’s critical
pedagogy, critical feminist theory, and other power and political perspectives (Alvesson & Deetz, 2000; Burrell & Morgan, 1979; M. Jackson, 2000).

The Frankfurt School of critical theory has been considered as the theory that best represents a critical paradigm and is frequently used to study collaboration (Hardy & Phillips, 1998; Hazen, 1994; Lotia & Hardy, 2008; Zeitz, 1980). However, recent researchers who explicitly or implicitly pursue the major purpose of a critical paradigm and support its basic tenets in examining collaboration have paid additional attention to empowerment theory (Fawcett et al., 1995; Himmelman, 1996, 2001; Speer & Hughey, 1995) and/or social justice theory (Bryan & Henry, 2012; Marullo & Edwards, 2000; Mulroy, 1997; Jones & Bodtker, 1998). It seems reasonable to categorize both theories into the critical paradigm in addition to critical theory. Several scholars and researchers clearly note that social justice and empowerment can be viewed as the critical paradigm’s core principles (Breton, 2004; Deetz, 2005; Hardy & Leiba-O’Sullivan, 1998; Mullaly, 2007; Young, 1990). Furthermore, it would be beneficial to include these theories in a critical paradigm particularly for social work research since the concepts of social justice and empowerment are important values to achieve social work’s mission. Accordingly, this research intentionally selects critical theory, social justice theory, and empowerment theory as the major theories of collaboration which can best fit a critical paradigm.

**Critical theory.** Although critical theory frequently refers to the Frankfurt School of critical theory (Alvesson & Deetz, 2000), it draws on several philosophical traditions, such as Marxism, Lukácian sociology, Gramsci’s sociology, conflict theory, or poststructuralism (Burrell & Morgan, 1979; Deetz, 2005). Despite such diverse origins, critical theories share common assumptions about organizational realities that are
consistent with a critical paradigm. For example, critical theory aims primarily at promoting individual and social emancipation (Burrell & Morgan, 1979; Thomas et al., 2011). Critical theorists assume that subordinate groups tend to be alienated from gaining access to rights, opportunities, and resources by dominant groups (Mullaly, 2007). Thus, it is particularly interested in reducing and eliminating “exploitation, repression, social injustice, asymmetrical power relations, distorted communication, and misrecognition of interests” (Deetz, 2005, p. 86).

Habermas, the German political philosopher, has made a significant contribution to the development of the contemporary critical theory (M. Jackson, 2000). Habermas (1984) claims that social realities are socially constructed by intersubjectivity through constant argumentation. In this sense, his theory of communicative action is concerned with how people can reach a genuine consensus. Habermas (1970) argues that particular procedures and standards, what he called “ideal-speech-situation”, must be established to gain such mutual reality. The ideal-speech-situation represents undistorted communication devoid of any domination, coercion, and suppression (Habermas, 1970). All participants should have equal opportunities to express their ideas, call into question dominant preconceptions, and participate equally in decision-making processes (Deetz, 2005). For Habermas, emancipation is to allow people to be free from any constraints imposed by power inequality in engaging in open and free discussions, which can be accomplished through individual autonomy, empowerment, participatory democracy, and fairness (Barros, 2010; M. Jackson, 2000).

These basic principles of critical theory can be easily applied to collaboration. From critical theory, collaboration is viewed as a political process by which powerful
organizations control less powerful members to preserve their privileged positions and interests (Hardy & Phillip, 1998; Lotia & Hardy, 2009). Hence, this theory focuses on an equal distribution of power, members’ liberation, and social transformation as collaborative outcomes (Lotia & Hardy, 2008; Miller & Hafner, 2008). Critical theory also provides useful insight into sociopolitical barriers to the formation of collaboration. In fact, preventing collective action is another form of oppression to protect dominant group’s interests (Mullaly, 2007). In this sense, history and social conditions that sustain social divisions can be seen as significant barriers to the formation of collaboration (Mullaly, 2007; Wineman, 1984).

Critical theory can provide comprehensive dimensions for successful collaboration. First, it underscores members’ capacity for critical consciousness because it is essential to identify and challenge dominant ideologies that are deeply ingrained in cultures, beliefs, norms, attitudes in collaboration (Hazen, 1994; Lotia & Hardy, 2009). The concept of critical consciousness is well-developed by Freire (1970). Freire argues that critical consciousness is the process of analyzing the root causes of problems from socioeconomic, political, and cultural contexts. It allows oppressed individuals and groups to be aware of their situations and take collective action against the oppression identified (Freire, 1970). Furthermore, the process of critical consciousness encourages people to build open consensus by recognizing each other’s diverse experiences (Deetz, 1996; O’Connor & Netting, 2009).

Second, critical theorists claim that equal power relationships are vital to successful collaboration. In other words, collaborating members should view and treat each other as equal partners and also equally distribute their opportunities, outcomes, and
responsibilities (Lotia & Hardy, 2008). Equal power encourages members to fully experience mutuality, develop emotional connectedness, and enhance solidarity (Wineman, 1984). However, Hardy and Phillips (1998) indicated that certain partner organizations with more formal authority, critical resources, and legitimacy were more likely to take control of collaborative decision-making processes and activities.

Tomlinson (2005) identified two more sources of power in collaboration, including a better position to pursue self-interests and greater control over information flow. These types of power enable powerful members’ interests to be privileged in setting agendas, identifying solutions, and evaluating outcomes (Lotia & Hardy, 2008; Zeitz, 1980).

Therefore, working relationships that foster equal power sharing can become a critical dimension of successful collaboration.

Third, critical theorists assert that democratic governance enables all members to input their voices in decision-making by freely expressing their thoughts, feelings, and interests (Deetz, 2005; Hazen, 1994; Mullaly, 2007). As discussed above in the Habermas’ theory, all members should have equal rights and opportunities to engage in communicative action. This means that collaboration should intentionally build governance structures and processes that facilitate participatory and inclusive decision-making processes. Some studies of collaboration in policy or organizational settings suggest several criteria for assessing democracy in collaboration (Agger & Löfgren, 2008; Leach, 2006). Agger and Löfgren (2008) suggest five criteria for assessing democratic collaboration: (1) full and equal inclusion of participants; (2) open discussion in decision-making processes; (3) fair rules in making decisions; (4) transparent information structure; and (5) member empowerment as a democratic identity. Similarly, Leach (2006) suggests
that collaboration can promote democratic governance when it: (1) provides inclusive processes; (2) includes the representatives of all stakeholders; (3) treats all members equally; (4) makes decisions through transparent rules; (5) offers deliberative processes that allow members to freely discuss their ideas; (6) supports regulations; (7) and empowers members to influence outcomes.

Finally, shared goal and action toward collective benefits are necessary for successful collaboration. Such solidarity is frequently emphasized by critical theorists because a certain group of people faces similar types of oppression (Mullaly, 2007). Solidarity helps overcome barriers to building collaboration, such as social divisions among members (Wineman, 1984). It also promotes sustainable collaboration by recognizing collective benefits for not only collaborating members but also broader communities (Mullaly, 2007). In a similar vein, it encourages people to perceive a target issue as their collective problem that they equally face, thereby increases collective power and empowerment (Lederach, 1995). This does not mean that collaborative work should be coordinated in a standardized way in the name of solidarity. Rather, collaboration requires flexible procedures for implementing collaborative tasks because the flexibility enables members to learn from their diverse ideas and respond to their different interests (Bronstein, 2003; Syna & Rottman, 2012). On the other hand, rigid boundaries with clear task divisions can limit frequent interactions between the members and reduce a sense of collective membership (Hoge & Howenstine, 1997).

**Empowerment theory.** Although empowerment theory has consistently received significant attention in social work, meanings of empowerment and ways of empowering are quite diverse. For instance, there have been substantial debates about whether
empowerment is an outcome or a process. Many researchers, however, acknowledge that empowerment can become both outcome and process (Guiérrez, GlenMaye, & DeLois, 1995; Schulz, Israel, Zimmerman, & Checkoway, 1995). As an outcome, the primary goal of empowerment is to increase personal, interpersonal, or political power to control all aspects of situations faced by individuals, groups, or communities (Zimmerman, 1995). As a process, empowerment is to create social and structural mechanisms through which people become aware of their situations and take action to improve their empowerment (Rappaport, 1987). The process of empowerment occurs at multidimensional levels—personal, cultural, and structural levels (Carr, 2003; Guiérrez et al., 1995; Schulz et al., 1995; Speer & Hughey, 1995). There is no fixed process of empowerment; its process and meaning differ across different social, political, and cultural contexts at the different period of time (Rappaport, 1987; Zimmerman, 1995).

Traditionally, empowerment tends to be considered as individual competency, thus focuses more on increasing a sense of power to improve individual functioning (Riger, 1993). Although this psychological approach contributes to the development of empowerment, it is often criticized by critical-oriented empowerment researchers (Carr, 2003; Hardy & Leiba-O’Sullivan, 1998; Riger, 1993). They insist that a psychological approach to empowerment is less interested in promoting the actual power of disempowered people by focusing too much on an individual sense of power. They also contend that the psychological approach tends to ignore the effects of social forces that limit peoples’ empowerment, such as injustice, oppression, and inequality.

Thus, the primary purpose of critical-oriented empowerment is to promote individual liberation and social change (Breton, 2004; Hardy & Leiba-O’Sullivan, 1998).
In collaboration, empowerment is emphasized as an effective strategy to obtain collective power, increase community support, and promote social change (Fawcett et al., 1995; Himmelman, 1996, 2001). Critical researchers also emphasize a holistic process of empowerment (Hardy & Leiba-O’Sullivan, 1998; Mullaly, 2007). An empowerment intervention should be designed to promote individuals’ critical consciousness about their situation and then moved toward collective action to confront oppressive conditions that prevent their empowerment (Breton, 2004; Speer & Hughey, 1995).

A handful of studies have developed practice models and strategies to enhance empowerment in collaboration (Bryan & Henry, 2012; Fawcett et al., 1995; Himmelman, 1996, 2001; Powell & Peterson, 2014) although many studies have examined empowerment in organizational settings (e.g., Foster-Fishman, Salem, Chibnall, Legler, & Yapchai, 1998; Hardina, 2005). Nevertheless, they propose similar principles and elements to improve empowerment. For instance, they propose several elements of member capacity. Similar to critical theory, critical consciousness is crucial to the development of empowerment (Breton, 2004; Hardy & Leiba-O’Sullivan, 1998). In addition, members’ skills for negotiation and advocacy are required to reach collective decisions agreed by all members and change existing services and policies (Hardina, 2006; Himmelman, 1996). Finally, leadership development is a critical component of empowerment (Breton, 2004; Guiérrez et al., 1994; Hardina, 2005). Powell and Peterson (2014) found that effective leadership in community-based coalitions tended to increase members’ empowerment, which in turn led to their perceptions of management and program effectiveness.
Power is another primary concern in empowerment theory. However, unlike critical theory that views power as the root cause of problems, empowerment theory considers it as people’s capacity to achieve intended goals (Himmelman, 1996). Thus, empowerment should be linked to increasing members’ actual power in allocating resources, defining issues, and creating shared purposes (Speer & Hughey, 1995). To do so, it is necessary to strengthen diversity as well as to understand member diversity as an asset of collaboration (Bond & Keys, 1993; Wolff, 2001a, b). Pease (2002) insists that valuing diversity allows everyone’s voices to be equally heard and respected in the process of empowerment. Particularly, it empowers marginalized members to engage in group dialogue and create local knowledge from their own experiences (Pease, 2002).

Third, the term empowerment is normally equated with the active participation (Hardina, 2005). This is largely derived from democratic management theory, which highlights equally sharing power and information, cooperative decision-making processes, and members’ involvement in whole processes (Israel, Checkoway, Schulz, & Zimmerman, 1994). For critical theorists, full and equal participation is more important for less powerful groups so that they receive the opportunities to make appropriate decisions for their own benefits and challenge organizational obstacles that prevent their access to decision-making (Hardy & Leiba-O’Sullivan, 1998). As a result, a participatory decision-making process is a significant component in empowerment-oriented models of collaboration (Bryan & Henry, 2012; Himmelman, 2001).

Finally, empowerment can be enhanced when organizations or partnerships operate through flexible, responsive, and supportive procedures. Flexibility empowers people to make their own decisions on operational strategies to achieve shared goals on a
regular basis (Damianakis, 2006) and promotes the active participation of diverse stakeholders in collaboration (Griffith et al., 2008). Furthermore, empowerment requires responsive processes to deal effectively with internal and external challenges (Maton, 2008). Flexibility is closely tied to responsiveness. Flexible procedures provide collaborating members with sufficient time to negotiate their differences and restructure an existing coordination system so that they can be more responsive to their mutual needs and objectives (Mattessich & Monsey, 1992).

Administrative support is also an important component to provide easy access to participation and strengthen members’ capacities to coordinate collaboration (Griffith et al., 2008; Guiérrez et al., 1995; Fawcett et al., 1995; Himmelman, 2001). Guiérrez et al. (1995) identified administrative support and staff development as the key elements of empowerment in human service organizations. More specifically, they found that administrative support required for staff empowerment included: (1) providing advanced training and in-service training; (2) entrepreneurial support to develop programs and professional skills; (3) being rewarded through promotion and salary increases; and (4) providing flexible hours, roles, and tasks.

Social justice theory. The concept of social justice is ambiguous because it is historically and morally constructed (Reisch, 2002). Van Soest (1994) and Finn and Jacobson (2008) propose three different perspectives on social justice. A utilitarian perspective understands social justice as maximizing “the greatest good for the greatest number of people” (Van Soest, 1994, p. 714), while a libertarian perspective emphasizes individual freedom as social justice. Thus, the libertarian perspective rejects an equal distribution of resources, rights, and opportunities for all citizens. An egalitarian
perspective, however, supports an equal distribution. In social work, the concept of social justice relies mostly on the egalitarian perspective, such as Rawls’ (2001) social justice theory or a more radical perspective, such as Young’s (1990) social justice theory (Finn & Jacobson, 2008).

Rawls (2001) considered social justice as “fairness” and suggested two fundamental principles of justice by modifying his earlier work:

- Each person has the same indefeasible claim to a fully adequate scheme of equal basic liberties, which scheme is compatible with the same scheme of liberties for all; and
- Social and economic inequalities are to satisfy two conditions; first, they are to be attached to offices and positions open to all under conditions of fair equality of opportunity; and second, they are to be to the greatest benefit of the least-advantaged members of society (the different principle). (pp. 42-43).

In the first statement, Rawls underscores an equal distribution of social benefits to all citizens. He also proposes that inequality can be accepted only if benefits were greater for marginalized populations in the different principle of the second statement. This second proposition provides a strong motivation for social workers to transform unfair social systems to maximize the benefits of marginalized populations (Reisch, 2002).

In addition, Young (1990) defines social justice as “eliminating institutionalized domination and oppression” (p. 15). Young argues that there are five types of oppression that create and maintain injustice in contemporary society, including exploitation, marginalization, powerlessness, cultural imperialism, and violence. This notion of social justice is originated from critical theory and explicitly criticizes unjust social and economic relations caused by capitalism. Young’s social justice is important because it expands the concerns of fairness to non-material goods, such as rights, power, and opportunities (Mullaly, 2007). Moreover, Young turns attention from an equal
distribution of outcomes to procedural justice (Finn & Jacobson, 2008). Procedural justice refers to democratic decision-making processes that ensure full and equal participation in making decisions on resource allocation and its processes (Young, 1990).

Similar to empowerment theory, social justice can be considered as both outcome and process (Deutsch, 2006). Collaboration can be designed to promote social justice as an outcome while the principles of social justice can be used to manage collaboration in a just way. Bryan and Henry (2012) state that social justice-oriented collaboration between schools and community organizations is designed to work with marginalized students and their families to promote social justice. Its major strategies include equal access to information and resources, active participation in decision-making processes, and challenging social injustice that affects target populations (Bryan & Henry, 2012).

In general, three types of justice have been emphasized as significant factors that affect intra- and interorganizational outcomes: distributive justice, procedural justice, and interactional justice (Leach, Weible, Vince, Siddiki, & Calanni, 2013; Colquitt, 2001; Nabatchi, Bingham, & Good, 2007; Weiner et al., 2002). As noted above, distributive justice is concerned with an equal distribution of outcomes while procedural justice is concerned with fair procedures in decision-making. Leventhal (1988) suggests the six elements of procedural justice. A decision-making process appears to be fair when it is consistent across people (e.g., equal opportunity); is unbiased to suppress self-interest; is guided by accurate information; offers opportunities to modify incorrect decisions; is representative of all stakeholders’ needs, which is closely linked to participatory decision-making and open information sharing; and is congruent with one’s ethical values (Leventhal, 1988). Finally, interactional justice is defined as the quality of fair
treatment that people receive when they work together to achieve shared goals (Greenberg, 1993). It consists of two subcomponents: interpersonal justice and informational justice. Interpersonal justice reflects a fair treatment with politeness, dignity, and respect based on the reaction to outcomes, whereas informational justice indicates open and equal information sharing based on structural aspects of decision-making (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Greenberg, 1993).

Some researchers (e.g., Tyler, 2000) consider interactional justice as a social form of procedural justice and measure procedural justice without separating fair decision-making structures and interpersonal relations. However, other empirical or meta-analysis studies show that interactional justice is different from procedural justice and has different effects on organizational outcomes (Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Nabatchi et al., 2007). In other words, procedural justice is more concerned with a fair decision-making process at the structural level, whereas interactional justice is more concerned with an equal treatment at the interpersonal level. However, these studies note that the three types of organizational justice reinforce each other in influencing organizational outcomes, suggesting that they all should be incorporated into organizational structures and relations to maximize the positive benefits of justice.

**Multidimensional Factors for Transformative Collaboration**

This section presents the comprehensive literature review on collaboration to see if the basic dimensions and specific indicators that critical-oriented theories suggest have been empirically supported. The literature review, however, is not necessarily limited to school-community collaboration. This paper also involves a broad literature review on collaboration in different settings and sectors because there is still insufficient data to
fully understand school-community collaboration. Despite the fact that the success of collaboration is contingent on its internal and external characteristics, this broad literature review can provide useful insight into understanding the key dimensions of school-community collaboration for two reasons. First, previous studies extensively share theoretical orientations on collaboration regardless its different purposes, settings, sectors, and/or environmental contexts. Second, it, sometimes, is difficult to distinguish school-community collaboration from other community-based collaborations serving children and youths because they often involve schools as part of their partners.

Many researchers have investigated how the four dimensions of collaboration—member capacity, member relations, network governance, and collaborative coordination—affect a range of outcomes at network, partner, or client/community levels. The focus of this paper is on the network-level effectiveness since it is most frequently tested by previous studies (Zakocs & Edwards, 2006) and is a greater concern for policymakers, funders, and practitioners (Provan & Milward, 2001). More specific discussions about the relationships between each dimension of collaboration and network-level effectiveness are seen as follows:

**Member capacity.** Previous studies examining collaboration have found that the capacities of collaborative members and/or leaders are important factors affecting the effectiveness of collaboration. Four areas of member capacity are commonly identified as collaborating members’ core competencies for successful collaboration. These include organizing, interpersonal, analytical, and leadership skills (Adelman & Taylor, 2003; Bayne-Smith, Mizrahi, & Garcia, 2008; Foster-Fishman et al., 2001; Korazim-Körösy et al., 2007; Kreuter, Lezin, & Young, 2000; Muijs, 2007; Pfeiffer & Cundari, 2000). Many
studies generally indicate that basic organizing skills are required to mobilize collaborative work and create effective programs (Bayne-Smith et al., 2008; Foster-Fishman et al., 2001; Franklin & Streeter, 1995; Kegler, Steckler, McLeroy, & Malek, 1998; Pfeiffer & Cundari, 2000). In addition to the common indicator, critical researchers also emphasize distinctive indicators of members’ capacity to improve the success of collaboration.

For analytical skills, members’ ability to identify the roots of social problems is an important factor for successful collaboration (Abrams & Gibbs, 2000; Fawcett et al., 1995; Korazim-Körösy et al., 2007). According to Korazim-Körösy et al. (2007), the members of the interdisciplinary collaboration in both Israel and the US commonly perceived that members’ capacity to critically analyze social and structural inequalities faced by target communities was one of the core competencies to achieve their shared goals. Such critical consciousness is particularly important for school-community collaboration in low-income communities because students and their families in these communities face more challenges due to the high level of power imbalances and disparities (Warren, 2005). Therefore, collaborating members should improve their skills to examine injustice issues that alienate marginalized students and their families from the institutions of public schools to meet their needs (Abrams & Gibbs, 2000).

Some studies also show that interpersonal skills for respecting, negotiating, and advocating diverse ideas have positive effects on the effectiveness of collaboration (Himmelman, 1996; Huxham & Beech, 2003; Korazim-Körösy et al., 2007; San Martín-Rodríguez et al., 2005). These skills are more important in cross-sectorial collaboration, such as school-community collaboration, because the lack of understanding each other
from different sectors is one of the biggest barriers to a productive working partnership (Altshuler, 2003; N. Keith, 1999; Weist et al., 2012). The importance of interpersonal skills can be supported by critical-oriented theories, such as critical theory and empowerment theory. Respecting diverse ideas is necessary to avoid a coercive decision by dominant groups (Agger & Löfgren, 2008). Furthermore, negotiating and advocating skills are important for empowering members in collaboration (Himmelman, 1996). These skills enable them to build the mission and action plan agreed by all stakeholders and encourage less powerful members to improve their political power (Bond & Keys, 1993; Mulroy, 1997; Wells, Feinberg, Alexander, & Ward, 2009).

Finally, leadership is one of the major elements of successful collaboration (Horwath & Morrison, 2007). In particular, empowerment theory stresses leadership committed to sharing power with members (Breton, 2004; Bryan & Henry, 2012; Hardy & Leiba-O’Sullivan, 1998; Himmelman, 2001). This leadership style is different from a task-oriented leadership style which stresses a clear division of roles between leaders and members, linear procedures, and observable outcomes (Muijs, 2007). Unlike the task-oriented leadership, such distributed leadership puts an emphasis on distributing partners’ power and responsibilities, respecting diverse voices, promoting their active participation in decision-making processes, and inspiring collective efforts (Bryan & Henry, 2012; Huxham & Beech, 2003).

It is still inconclusive which style produces better outcomes in school-community collaboration. Wohlstetter et al. (2005) reported that the task-focused leadership was beneficial in managing ongoing tasks and activities in school-community collaboration. However, this leadership style tends to exclude less powerful members, restrict
information sharing, and reduce members’ commitments (Huxham & Beech, 2003). In contrast, some studies show that the distributed leadership style is helpful to enhance members’ learning process and commitment to school-community collaboration (Coleman, 2011; Kegler & Wyatt, 2003).

**Member relations.** Positive working relationships among partners are essential for successful collaboration. Such internal relations promote access to critical resources, increase members’ commitments, facilitate effective program implementation, and ensure long-term sustainability in collaboration (Bryson, Crosby, & Stone, 2006; Foster-Fishman et al., 2001; Mattessich & Monsey, 1992; Provan & Sydow, 2008; San Martín-Rodríguez et al., 2005; Thomson & Perry, 2006). However, different aspects of internal relations are found to be significant factors. Some studies have reported that consensual relationships with shared values or reciprocal relationships with a higher level of trust lead to the increased effectiveness of collaboration (Foster-Fishman et al., 2001; Horwath & Morrison, 2007; Kegler et al., 1998; Mattessich & Monsey, 1992; Mulroy, 1997).

Critical researchers do not entirely reject the positive effects of trustful and reciprocal relationships. However, they are more interested in equal power relationships among partners because collaboration does not always provide equal opportunities and benefits to all members (Hardy & Phillips, 1998; Hardy, Phillips, & Lawrence, 2003; Lotia & Hardy, 2008). In previous studies, the effectiveness of collaboration is significantly increased when collaboration ensures equal power between collaborating members (Foster-Fishman et al., 2001; Hillier et al., 2010; Himmelman, 1996; Miller & Hafner, 2009; Warren et al., 2009). Hillier et al. (2010) reviewed the literature on collaboration between schools and health agencies and found that equal power was a
significant factor for program effectiveness, members’ cohesiveness, and an equal
distribution of leadership responsibilities. Similarly, Miller and Hafner (2009) reported
that equal power in university-school-community collaboration increased members’
opportunities to participate in collaborative activities, which led to successful
collaboration.

The issue of equality in member relations is also closely linked to interpersonal
justice suggested by social justice theorists. Although there is little research on the effects
of interpersonal justice on school-community collaboration, other studies examining
collaboration in public, nonprofit, or business sectors offers its potential explanation.
Glisson and Hemmelgarn (1998) showed that the positive organizational climate with
greater interpersonal fairness had positive effects on program quality in child welfare
collaboration. Mercado (1993) reported that in interdisciplinary collaboration for
minority youth, members’ fair treatment encouraged them to learn from each other,
thereby expanded their knowledge about youth problems in communities. Moreover,
Weiner et al. (2002) showed that a perceived fair treatment especially in resolving
conflict was positively associated with collaborative outcomes, such as satisfaction with
decisions, personal engagement, and organizational integration.

Finally, Wolff (2001b) claims that successful collaboration should involve diverse
membership as well as appreciate members’ diversity as their strengths. In particular,
valuing diversity helps increase member empowerment in collaboration. For example,
Bond and Keys (1993) found that the value of diversity promoted member empowerment
by allowing all members to engage equally in collaborative activities. Diversity also
affects performance outcomes (Mizrahi & Rosenthal, 1993; Mulroy, 1997; Tomlinson,
Tomlinson (2005) indicated that the most effective collaboration was characterized by productive working relationships with greater awareness of diversity, openness, and cooperation. This should not be interpreted as if critical researchers do not recognize the importance of solidarity or collectivity. In reality, successful collaboration should require reconciling unity to work together and diversity to represent stakeholders’ various needs (Wineman, 1984).

**Network governance.** Network governance can be defined as a joint decision-making process in determining policies and coordinating daily operations (Bryson et al., 2006; Provan & Milward, 2010; Thomson & Perry, 2006). This structural aspect of collaboration involves several questions to be answered: who will make decisions; how members will make a joint decision (rules, procedures, and actions); how they communicate with each other; and how they distribute collaborative benefits (Thomson & Perry, 2006). Many studies have shown that effective network governance is a strong predictor of the success of school-community collaboration (Abrams & Gibbs, 2000; Adelman & Taylor, 2003; Muijs, 2007; Wells et al., 2009; Wohlstetter et al., 2005). However, network governance can take different forms with different purposes and procedures. Provan and Kenis (2008) propose three types of network governance: (1) a participant-governing network; (2) a lead organization; and (3) a network administrative organization as a separate organization for managing collaboration. Of these types of the network governance, a participant-governing network would be in congruence with the network governance suggested by a critical perspective because it safeguards a horizontal and decentralized structure that facilitates democratic decision-making processes.
Critical-oriented researchers would argue that the critical elements of democratic network governance can promote both normative and instrumental outcomes of collaboration. For instance, equal participation is necessary to avoid powerful members’ exploitation and manipulation in the distribution of collaborative outcomes (Agger & Löfgren, 2008; Hardy & Phillips, 1998; Himmelman, 2001; Leach, 2006; Lotia & Hardy, 2009). The full inclusion of stakeholders in making decisions was a strong and positive predictor of the effectiveness of school-community collaboration, such as the perceived impacts of services (Wells et al., 2009) and student performance (Minke, 2000).

In addition, procedural justice (fairness) in a decision-making process is significantly associated with the effectiveness of collaboration (Leach et al., 2013; Weiner et al., 2002). It is more important when collaboration involves complex structures and procedures (Luo, 2008). Adelman and Taylor (2007) argue that school-community collaboration requires fair decision-making procedures so that its collective decisions made account for all stakeholders’ interests. Weiner et al. (2002) also suggest that procedural fairness is particularly important in collaboration due to its higher uncertainty and member diversity. They found that procedural fairness had positive effects on collaboration functioning, such as satisfaction with decisions. In addition to the network-level outcomes, Leach et al. (2013) reported that procedural fairness led to members’ increased knowledge acquisition in collaborative governance for environmental policy-making.

Lastly, open communication provides an equal opportunity for all members to input their voices in decision-making and allows them to negotiate different ideas (Hazen, 1994; San Martín-Rodríguez et al., 2005). Communication can be defined as “the
channels used by collaborative partners to send and receive information, keep one another informed, and convey opinion to influence the group’s action” (Mattessich & Monsey, 1992, p. 29). Previous studies have shown that formal and informal channels that ensure frequent and open communication are positively associated with collaborating members’ satisfaction, resource mobilization, program quality in school-community collaboration (Blank et al., 2012; Kegler & Wyatt, 2003; Wohlstetter et al., 2005).

Despite substantial evidence about the significant impact of democratic network governance characterized as representative, inclusive, and fair structure and process in decision-making, other studies also show its negative outcomes and provide empirical evidence supporting the opposing mode of network governance. Provan and Kenis (2008) point out that horizontal and decentralized network governance requires a large amount of time and long-term processes to reach final decisions, which can negatively affect the efficiency and effectiveness of collaboration. Jones, Hesterly, and Borgatti (1997) insist that hierarchical and centralized governance can maximize collaborative benefits and minimize coordination costs by easily controlling decision-making processes and access to information and resources. This proposition was empirically supported by Provan and Milward (2010). They found that client outcomes and financial funding were increased in mental health collaboration when collaborative decisions were highly controlled by few agencies. They also reported that such centralized network governance was more likely than decentralized network governance to be stable, resulting in little uncertainty from collaborating members.

**Collaborative coordination.** Collaboration requires effective collaborative coordination and management to achieve its purposes (Thomson & Perry, 2006).
Collaborative coordination can be defined as a set of collective activities to manage collaborative operations and services (Alvesson & Deetz, 2000). It consists of goal setting, planning, roles, responsibilities, tasks, procedures, and technical and administrative supports (Mulroy, 1997; Pfeiffer & Cundari, 2000). Collaborative coordination is another structural aspect of collaboration. It is highly correlated with network governance. But, collaborative coordination differs from the network governance in that it focuses more on operational mechanisms that implement and manage integrated services than on making collaborative decisions (Thomson et al., 2007). Overall collaborative coordination or its specific indicators have been found to be significant predictors of the effectiveness of school-community collaboration (Adelman & Taylor, 2003; Blank et al., 2012; Sanders & Lewis, 2005; Sanders & Simon, 2002; Tapper et al., 1997; Weist et al., 2012).

Similar to the findings of other dimensions, critical researchers propose the unique indicators of collaborative coordination for successful collaboration. Previous studies commonly indicate that a clear understanding of collective goals was positively associated the effectiveness of collaboration (Bryson et al., 2006; Horwath & Morrison, 2007; Huxham & Beech, 2003). Similarly, clear and shared visions and goals are significant concerns for critical researchers, but their emphasis is more on clear and shared goals toward social change and social justice for marginalized populations (Chavis, 2001; Fawcett et al., 1995; Himmelman, 1996; Lotia & Hardy, 2008). Mulroy (1997) found that a common vision toward transformation increased members’ long-term participation, strengthened community leadership, and created comprehensive neighborhood efforts in collaboration. Jones and Bodtker (1998) examined school-based
collaboration in South Africa and concluded that an emphasis on a broad community in setting goals motivated marginalized groups to act as independent advocates for their own and community interests.

Collaborative coordination involves specific implementation procedures with regard to clarifying rules, roles, responsibilities, and tasks for service provisions (Wolff, 2001a). Different types of collaborative coordination exist on the basis of the modes of network governance. Two opposing types have been equally identified as significant factors to improve the effectiveness of collaboration: a formalized and standardized procedure and a responsive and flexible procedure. A formalized and standardized procedure involves strict and codified rules, clear divisions of responsibilities, detailed work plans, strict time management, and limited sharing of information (Foster-Fishman et al., 2001; Stead, Lloyd, & Kendrick, 2004). On the contrary, a responsive and flexible procedure involves an operational system with flexible rules, interactive roles, responsive work plans, and open sharing of resources so that collaborating members continuously negotiate and respond to their varying interests (Hardy et al., 2003; Stead et al., 2004).

Critical researchers who support democratic network governance emphasize a responsive and flexible procedure in an effort to provide an equal opportunity and power for all members to engage in operating services (Hardy et al., 2003; Himmelman, 2001). Some studies show more positive impacts of a flexible and responsive procedure on the effectiveness of collaboration as compared to a formalized and standardized procedure (Glisson & Hemmelgarn, 1998; Hardy et al., 2003; Stead et al., 2004). Hardy et al. (2003) found that ongoing, informal, and unplanned coordination was more beneficial for the innovation of collaboration than formal collaborative coordination. Stead et al. (2004)
also indicated that a flexible-coordinated procedure was more likely than a formalized procedure to produce innovative and effective planning and increase a meaningful contribution of different professionals in school-community collaboration. Nevertheless, other studies provide contrasting evidence demonstrating that a formal and standardized procedure enhances goal accomplishment (Foster-Fishman et al., 2001) and strengthens consistent member commitments (Bailey & Koney, 1996; Butterfoss & Kegler, 2002).

In addition, joint efforts and interdependent activities are necessary to accomplish collective goals in collaboration (Ansell, 2011; Mullaly, 2007; Wineman, 1984). Such interdependence is characterized by frequent interactions, open communication, and respect for other’s ideas and input when collaborative members create goals, develop plans, and operate their day-to-day activities (Bronstein, 2003). Ansell (2011) suggests that in order to increase interdependence within collaboration, member organizations should respect each other as legitimate partners, actively commit themselves to collaborative processes, and develop a sense of joint ownership that makes them collectively responsible for their collaboration. This interdependent work enables members to consider their work as a collective solution to problems and strengthens their creativity to achieve shared goals (Bronstein, 2003; Hoge & Howenstine, 1997; Somech, 2008). However, it does not always produce positive outcomes. According to Syna and Rottman (2012), the negative consequences of task interdependence would occur when there are considerable power differences between collaborating members in setting goals and implementing activities. Hoge and Howenstine (1997) also point out that effective task integration necessitates a flexible implementation procedure so that members openly share their resources and increase their collective identity through frequent interactions.
Technical and administrative support is the last indicator of collaborative coordination to improve the effectiveness of collaboration. It is particularly emphasized by empowerment theory in order to build members’ capacities in collaboration (Fawcett et al., 1995; Himmelman, 1996, 2001). Previous studies have consistently shown that school-community collaboration with sufficient administrative support is better able to achieve positive outcomes, including program quality and resource mobilization (Bryan & Griffin, 2010; Mulroy, 1997; Sanders & Lewis, 2005; Sanders & Simon, 2002; Weist et al., 2012). More specifically, sufficient funding, human resources, time, and training are fundamental to the success of school-community collaboration. For example, Sanders and Simon (2002) found that enough funding was positively associated with the quality of school-parent-community collaboration. Mulroy (1997) revealed that hiring full-time staff was effective in managing daily operations, developing new programs, and building external relationships with other community organizations. Bryan and Griffin (2010) indicated that low time constraints for school professionals tended to increase positive working relationships with other community organizations.

**Summary of Literature Review**

From the comprehensive literature review, school-community collaboration seems to consist of four major dimensions that are fundamental to improve collaborative outcomes: member capacity, member relations, network governance, and collaborative coordination. The literature review also suggests that a critical paradigm offers different indicators of the major dimensions of collaboration as compared to other paradigms. However, the proposed relationship between the critical-oriented indicators and the
effectiveness of school-community collaboration are still inclusive due to a lack of empirical research and opposing results from other previous studies.

In addition, theories under a critical paradigm provide various indicators across the four dimensions of collaboration (see Table 2). Overall, critical theory and empowerment theory offer useful information about all the four dimensions, whereas social justice theory provides more information about member relations and network governance. Specific theories also suggest quite different, but highly related indicators of each dimension. For example, critical and empowerment theories acknowledge that negotiation, advocacy, and organizing skills are necessary for facilitating equal, democratic, and empowering collaboration. However, critical theory tends to more emphasize critical analysis skills (critical consciousness), whereas empowerment theory tends to more emphasize leadership skills. Furthermore, participatory decision-making and procedural justice under the network governance dimension are often considered as the sub-elements of democratic decision-making (Agger & Löfgren, 2008; Leach, 2006). Accordingly, potential indicators under each dimension may be loaded well together as a single construct because they are highly interrelated with one another and are congruent with the common principles of a critical paradigm.

The next chapter, Methods, will begin with discussing research questions and hypotheses based on the literature review, and then move to describing data collection procedures, measures, and data analysis. In particular, the next chapter includes detailed information about developing a new scale to measure the identified dimensions of school-community collaboration discussed in this Literature Review chapter.
Table 2. Dimensions and Potential Indicators of Transformative School-Community Collaboration

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Critical theory</th>
<th>Empowerment theory</th>
<th>Social justice theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Member capacity</strong></td>
<td>- Negotiation skills</td>
<td>- Negotiation skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Advocacy skills</td>
<td>- Advocacy skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Organizing skills</td>
<td>- Organizing skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Critical consciousness</td>
<td>- Distributive leadership</td>
<td></td>
</tr>
<tr>
<td><strong>Member relations</strong></td>
<td>- Equal opportunities and rewards</td>
<td>- Respect for diversity</td>
<td>- Interactional justice</td>
</tr>
<tr>
<td><strong>Network governance</strong></td>
<td>- Democratic decision-making</td>
<td>- Participatory decision-making</td>
<td>- Procedural justice</td>
</tr>
<tr>
<td><strong>Collaborative coordination</strong></td>
<td>- Clear and shared goals toward service users</td>
<td>- Flexible coordination</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Collective activities</td>
<td>- Responsive process</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Administrative support</td>
<td></td>
</tr>
</tbody>
</table>
Chapter Three: Methods

Research Questions and Hypotheses

The primary goal of this research is to develop and validate a comprehensive framework for school-community collaboration and then examine the relationships between the identified dimensions of the school-community collaboration and the quality outcomes of OST programs. The proposed collaboration framework is derived from a critical paradigm and its corresponding theories, which is named as “Transformative School-Community Collaboration (TSCC)” to reflect its ideological orientation and primary purpose. TSCC is grounded in the major assumptions and theories of a critical paradigm. Therefore, it is primarily concerned with promoting equality, democracy, and empowerment within school-community collaboration to better accomplish its collective goals.

TSCC consists of the four dimensions of collaboration at the individual, relational, and structural levels. This research creates specific names for the identified dimensions and defines them based on their potential indicators as can be seen in Table 2. Member capacity indicates a set of individual skills that are necessary for facilitating equal, democratic, and empowering collaboration. Member relations are characterized as equal power relationships between collaborating members. Network governance indicates fair, inclusive, representative, and transparent decision-making processes. Finally, collaborative coordination reflects a responsive, flexible, and supportive operating system that empowers collaborating members. The identified dimensions and their specific indicators of TSCC will be discussed in more detail in the Results chapter.
Two research questions are developed to achieve the ultimate goal of this research. A first research question is to what extent do school participants perceive the four dimensions of TSCC and how do their perceptions differ by school characteristics? This research question is exploratory to assess the overall and different perceptions of TSCC according to school participants’ characteristics (i.e., school types, grade levels, SES, and locations). A second research question is are the four dimensions of TSCC associated with the three outcomes of OST programs after controlling for school characteristics: high-quality activities, student engagement, and linkages with family/community? This question is explanatory to examine the relationships between the core dimensions of TSCC and the quality of OST programs. Specific hypotheses for each dependent variable are listed as follows:

- **High-quality activities**
  
  Hypothesis 1.1: critical member capacity will be positively associated with high-quality activities.
  
  Hypothesis 1.2: equal relations will be positively associated with high-quality activities.
  
  Hypothesis 1.3: democratic network governance will be positively associated with high-quality activities.
  
  Hypothesis 1.4: empowering coordination will be positively associated with high-quality activities.

- **Student engagement**
  
  Hypothesis 2.1: critical member capacity will be positively associated with student engagement.
Hypothesis 2.2: equal relations will be positively associated with student engagement.

Hypothesis 2.3: democratic network governance will be positively associated with student engagement.

Hypothesis 2.4: empowering coordination will be positively associated with student engagement.

• **Linkages with family/community**

Hypothesis 3.1: critical member capacity will be positively associated with linkages with family/community.

Hypothesis 3.2: equal relations will be positively associated with linkages with family/community.

Hypothesis 3.3: democratic network governance will be positively associated with linkages with family/community.

Hypothesis 3.4: empowering coordination will be positively associated with linkages with family/community.

**Research Design**

This research is an ideologically driven inquiry based on a critical paradigm and its theories. As discussed in the previous chapter, a critical paradigm is mainly concerned with analyzing the systematic patterns of injustice, domination, and oppression to promote individual and social transformation as both process and outcome. However, there is no consensus about the best methodology to achieve its primary purpose due to various philosophical streams within this paradigm (Alvesson & Deetz, 2006). In general, two approaches are equally emphasized in a critical paradigm. Some theorists with more emphasis on radical humanism prefer using qualitative methods to identify dominant
discourses and distorted meanings embedded in human interactions. Others with more emphasis on radical structuralism prefer using objective and quantitative methods to analyze systematic patterns of domination, oppression, and exploitation embedded in social and institutional structures.

For this research, the radical structuralist methodology would be more applicable since it focuses more on developing social and structural infrastructures within school-community collaboration. This methodology is similar to a quantitative research design with well-defined research procedures and objective methods (O’Connor & Netting, 2009). But, it is more concerned with promoting social justice and social change as a primary goal of research, rather than simply generating objective knowledge or predicting a causal relationship (Alvesson & Deetz, 2006). Based on these assumptions, the research design of this research is explanatory and quantitative in nature, with a clear intention to shape equal, democratic, and empowering school-community collaboration.

**Sample and Data Collection**

**Sample.** Previous studies of collaboration have examined the multidimensional effectiveness of collaboration using either organizational (individual partner) or interorganizational (whole network) units of analysis. The unit of analysis for this research is derived from an interorganizational relationship between a public school and its community partners. In particular, this research focuses on school-community collaboration designed to provide OST programs because these programs are most commonly offered by school-community collaboration (Anderson-Butcher et al., 2006). Although the research unit is the interorganizational level, school-community collaboration was assessed by the public schools’ perceptions of their collaboration with
community organizations. Gathering data from a lead organization or key informant is frequently used in the study of collaboration because of its feasibility and cost benefits (Paulraj, Lado, & Chen, 2008). In school-community collaboration, schools often play a leading role in coordinating collaborative programs within school settings (Valli et al., 2014). Therefore, schools would become potential respondents with more knowledge about the dynamic aspects of school-community collaboration through direct and frequent interactions with their community partners.

In this regard, the target population for this research involves K12 schools located in Indiana that has at least one partnership with community organizations in providing school-based OST programs. No specific data are available that show all schools’ scope of school-community partnerships in providing OST programs in Indiana. However, the Indiana Department of Education (IDOE, 2014) reported that, during the school year 2013-2014, 23,298 students were served by 21st CCLC programs that provided a range of OST programs to support student education and development through community partnerships. The report also indicated that students attending high-poverty and low-performing schools were more likely to participate in the 21st CCLC programs. In addition, students in urban schools were more likely than those in rural schools to participate in the programs.

**Data collection procedures.** The data collection for this research was conducted as part of the research project integrated with a research mentoring program for undergraduate students. This project was sponsored by the Multidisciplinary University Research Institute (MURI) at Indiana University—Purdue University Indianapolis (IUPUI). It consisted of five undergraduate students and four researchers (two faculty
members and two doctoral students). The primary goal of the MURI project was to examine the associations among OST programs, students’ school bonding, and school outcomes using the three different sources of data: school surveys, student surveys, and administrative data from the Indiana Department of Education (IODE). The school surveys were designed to measure the outcomes of OST programs and school-community collaboration, whereas the student surveys were designed to measure students’ perceptions of school bonding. The IDOE data were used to measure schools’ demographics and student performance outcomes.

The school surveys were primarily utilized for this research and answered by school staff member(s) per school as school representatives. As Thomson (2002) suggests, individual members of an organization can become an agent for their organization. They can provide adequate and representative information about their organization’s experience in collaboration because their perceptions and behaviors are largely influenced by organizational characteristics (Thomson, 2002). A specific school staff member who completed the school surveys was selected if two selection criteria met: (1) current school staff members working in the selected schools and (2) those who took charge of coordinating collaborative OST programs or had sufficient information about school-community collaboration in their schools.

Multiple strategies were conducted to recruit school participants and administer the school surveys. First, the MURI team members contacted schools listed in the 2015-2016 Indiana school directory via emails or phone calls to solicit participation in the school surveys. The recruitment email included an information sheet describing research purposes and procedures, participants’ rights, and their potential risks and benefits from
the research (see Appendix A). The MURI team members contacted over 400 schools located in urban settings around Central Indiana from November 2015 to May 2016. The major reason for purposively selecting the schools in this geographically clustered area is because a relatively larger proportion of 21st CCLC programs required to collaborate with community organizations were concentrated in Central Indiana (IDOE, 2014). Once schools agreed to participate, they were asked to select the best person who met the above selection criteria and asked them to complete the online-based school survey.

Second, the paper-based school surveys were administered to school social workers in Indiana who attended a fall conference on November 6, 2015, and a spring seminar on May 12, 2016, held by Indiana School Social Work Association (ISSWA). School professionals (e.g., school social workers, counselors, or psychologists) often play an important role in connecting schools with communities for enhancing student development (Altshuler, 2002; Anderson-Butcher et al., 2006; Cousins et al., 1997; Franklin & Streeter, 1995). Thus, they can become potential respondents who can provide useful information in assessing school-community collaboration within their schools. The MURI team members asked attendees to complete the paper-based school surveys if they met the same selection criteria discussed above. Participants voluntarily completed the school surveys and returned them back to the MUIR team members until the end of the events.

Finally, the online school surveys were administered to school social workers who were affiliated with ISSWA, but did not attend the two events in which the paper-based school surveys were collected. Furthermore, the same online surveys were administered to the members of Indiana School Counselor Association using its listservs. These
additional online surveys can provide other school professionals with an equal opportunity to participate in this research. An online survey method has been considered as a convenient tool for collecting data from participants anywhere (Rubin & Babbie, 2011). However, it tends to have relatively lower response rates as compared to other methods, such as mail, telephone, interview surveys (Nulty, 2008). As suggested by Nulty (2008), three reminder emails were sent to potential respondents to increase their survey completion after the first invitation was electronically delivered to potential respondents on January 26, 2016.

Table 3 presents the number of school participants in the school surveys collected from the three data collection strategies. The initial number of usable data was 99 cases after considering incomplete surveys. However, the initial data included 8 duplicated schools, where at least two school staff members within the same school completed the surveys. When this is the case, average scores between the respondents in the same school were used to represent school-community collaboration at the school level. Thus, the final data include a total of 91 school participants.

The almost half of school participants (n = 42) completed the paper-based school surveys at the school social workers’ events. The other school participants completed the online school survey via either the listservs of school professional associations (n = 29) or direct school contacts by the MURI project team (n = 20). The majority of respondents who completed the school surveys as the representative of their school were females (81.9%) and whites (81.9%). They also reported their current position as social workers (51.2%), counselors (16.3%), school administrators (12.8%), guidance directors (12.8%), and other staff members (6.9%, e.g., student services coordinator, school liaison, and
The average working experience in current positions was 10 years (SD = 8.6).

Table 3. Data Collection Sites, Survey Types, and School Participants

<table>
<thead>
<tr>
<th>Data Collection Sites</th>
<th>Survey types</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>School social workers’ events</td>
<td>Paper</td>
<td>42</td>
<td>46.2%</td>
</tr>
<tr>
<td>School professional associations</td>
<td>Online</td>
<td>29</td>
<td>31.8%</td>
</tr>
<tr>
<td>School contacts</td>
<td>Online</td>
<td>20</td>
<td>22.0%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>91</td>
<td>100%</td>
</tr>
</tbody>
</table>

Measures

The quality outcomes of Out-of-School Time (OST) programs. Program quality has been considered as the crucial area of network-level effectiveness in collaboration (Provan & Sydow, 2008). This research focuses on OST programs that are broadly defined as school-based programs that offer a variety of services and activities to support students’ educational, social, physical, and behavioral outcomes in out-of-school time: before school, after school, on weekends, and during the summer (American Youth Policy Forum, 2006). The term OST program is similar to an afterschool program that provides academic assistance and a safe place for children after school time, but this term is broader and more inclusive in that it includes comprehensive efforts and activities that meet the needs of students and their families (American Youth Policy Forum, 2006).

National Institute on Out-of-School Time (2000) states that OST programs include a variety of enrichment activities that:

- Keep young people safe.
- Provide opportunities for positive and consistent relationships with adults and peers.
- Offer time for physical recreation and unstructured play.
- Promote the development of skills and exploration of interests.
- Enhance positive character traits and life skills.
- Help strengthen academic skills. (p. 1)
Yohalem and Wilson-Ahlstrom (2010) reviewed various assessment tools that measured the quality outcomes of student support programs. They identified the major components of the quality outcomes, such as programming/activities, student participation, or linkages with family/community. Consistent with their findings, this research focuses on the three elements of the quality outcomes in providing OST programs including high-quality activities, student engagement, and linkages with family/communities. These outcomes are also utilized by the U.S. Department of Education to inform the quality and progress of OST programs (Naftzger et al., 2007).

The Quality Self-Assessment (QSA) tool was used to assess the three selected elements of the program quality. This tool was developed by New York State Afterschool Network (NYSAN) and designed for program staff to self-evaluate the quality of OST programs (NYSAN, 2005). The QSA originally consists of the ten quality outcomes of OST programs. Subscales for each outcome includes a large number of items that are rated on a four-point performance level. This instrument is chosen because it comprehensively includes all the quality outcomes of OST programs for this research. It is also easy for program staff to complete the questionnaires in a user-friendly way and is available for a revision regarding its length and/or a rating scale.

The original version of the QSA was revised to make the instrument parsimonious by selecting essential items recommended by NYSAN (2005). The customized version of the instrument is composed of three subscales to measure high-quality activities, student engagement, and linkages with family/community, respectively. The instrument involves total 12 items on a five-point Likert scale from 1=strongly disagree to 5= strongly agree. An average score of the items within sub-scales was used to represent each element of the
program quality, with higher scores indicating higher levels of program quality (See Table 4 for the specific items of each construct).

*Table 4. Constructs and Items for the Quality of OST Programs*

<table>
<thead>
<tr>
<th>Elements</th>
<th>items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
</table>
| **High-quality activities**    | • The programs provide activities that are commensurate with the age and skill level of the students.  
                                 | • The programs offer high-quality academic support, including tutoring or homework help.  
                                 | • The programs offer enrichment opportunities in core academic areas as well as in the arts, technology, recreation, and health.  
                                 | • The programs include activities that take into account the language/culture of students. | .72              |
| **Student engagement**         | • The programs engage students with a variety of strategies.  
                                 | • The programs promote students’ consistent and active participation.  
                                 | • The programs encourage students to recruit others into the program.  
                                 | • The programs allow students to be meaningfully involved in program planning, implementation, and evaluation. | .79              |
| **Linkages with family/community** | • The programs communicate with families on matters of the well-being of the students.  
                                     | • The programs involve families in decision-making and planning.  
                                     | • The programs involve families and communities in program events.  
                                     | • The programs seek opportunities to share community resources with families. | .83              |

*High-quality activities* are measured by the mean of four items that reflect the extent to which a school program provides a variety of OST programs with age-appropriate, culturally responsive, quality, and comprehensive activities. The Cronbach’s alpha for this sub-scale was .72.
• **Student engagement** is characterized by students’ active, consistent, and inclusive participation in OST programs, which is measured by the mean of four items. The Cronbach’s alpha for this sub-scale was .79.

• **Linkages with family/community** are operationalized by the mean of four items that measure the extent to which OST programs establish linkages with families and communities within their activities and events. The Cronbach’s alpha for this sub-scale was .83.

**Transformative School-Community Collaboration (TSCC).** Since the concept of TSCC was newly developed in this research, no valid and reliable scale exists to measure the multiple dimensions of TSCC. As a result, this research developed and validated a new scale to fully measure the identified dimensions. This scale development was mainly guided by DeVellis’ (2012) specific steps and guidelines.

The first step in scale development is to clearly define a construct to be measured (DeVellis, 2012). TSCC is operationalized with four dimensions with specific indicators that reflect each dimension conceptually: (1) member capacity, (2) member relations, (3) network governance, and (4) collaborative coordination. The second step is to generate an item pool (DeVellis, 2012). A deductive approach to item generation was used to identify potential items (indicators) for each of the four dimensions of TSCC. In other words, potential items were initially developed from a thorough review of theoretical and empirical literature that examines or measures similar principles and concepts of TSCC in organizational or interorganizational settings (e.g., Colquitt, 2001; Heck & Hallinger, 2009; Mellin et al., 2010; Menon, 1999; Rahim et al., 2000; Wolff, 2003). However,
selected items were revised to make them appropriate for the sample or context of this research.

The third step is to determine an appropriate scale format (DeVellis, 2012). For the scale format, a Likert scale that allows respondents to indicate the extent to which they agree with items was selected because it is beneficial to measure people’s perceptions, opinions, or attitudes (DeVellis, 2012). All items were equally weighted, ranging from 1 (strongly disagree) to 5 (strongly agree). An average score of the items within sub-scales was used to represent each dimension of TSCC so that higher scores represent higher levels of the dimensions. In addition, all items were positively described in order to prevent potential confusion and inconsistency as suggested by DeVellis.

Once initial items are generated with an appropriate scale format, it is necessary to review the items from an expert panel. This expert panel review helps evaluate the face validity of the initial scale and refine the items’ clarity and readability (DeVellis, 2012). Three faculty members with expertise in school social work and/or scale development reviewed the initial scale and provided feedback about individual items’ appropriateness and relevance to the construct that was supposed to measure (face validity). Furthermore, the MURI project members carefully read all the items and offered useful suggestions to improve the scale’s clarity and readability.

The initial items were further refined by useful comments and suggestions from experts and peers. For example, one expert reviewer indicated that a certain item had multiple ideas: “your collaboration provides adequate time, budget, and personnel to effectively coordinate the collaboration.” Such a double-barreled item can engender reliability and validity issues because respondents interpret the item in varying ways by
focusing on a specific idea (Rubin & Babbie, 2011). In the revised scale, this original item was separated into three sub-items to measure each aspect of administrative support—adequate time, budget, and personnel—in coordinating collaborative activities. Consequently, the revised scale for TSCC included total 20 items: five items for member capacity, four items for member relations, four items for network governance, and seven items for collaborative coordination. The three sub-items of the administrative support were averaged as a single score representing the overall level of administrative supports for collaborative coordination in conducting a factor analysis; thus, the total number of items in a factor analysis became 18.

The next step suggested by DeVellis (2012) is to develop a questionnaire and administer it to the study sample. The sampling strategy and data collection methods have been already described in the section of the Data Collection and Procedures. Here, specific strategies to address the issue of a small sample size for scale development is discussed since the collected sample size was not sufficiently large (N = 91). Traditionally, 5-10 participants per item have been suggested as a minimum sample size for a factor analysis (Worthington & Whittaker, 2006). However, there is no clear rule to determine the adequate sample size to ensure an accurate exploratory factor analysis because the adequacy of the sample size is dependent on the results of a factor analysis (Cabrera-Nguyen, 2010).

Osborne and Costello (2005) argue that a small sample size becomes more problematic (1) when an item has a communality of less than 0.4; (2) when items’ factor loadings are less than 0.5 with cross-loading items that highly load on two or more factors; (3) a factor has fewer than three items. In addition, Worthington and Whittaker
(2006) suggest that a certain item can be deleted when it has a lower alpha coefficient or has low conceptual consistency with other items loaded together. Based on these suggestions, items confronted with one of the situations was considered to be dropped from the analysis to improve the accuracy of a factor analysis with a small sample size and optimize the length of the developed scale.

Finally, DeVellis (2012) suggests that instrument developers should evaluate the validity and reliability of items and then optimize a scale length based on the results of the item evaluation. Validity is concerned with whether or not the scale is designed to measure what it is intended to measure (Rubin & Babbie, 2011). Although the scale’s face validity was conducted by the expert panel review, the scale’s validity was additionally estimated by an exploratory factor analysis, which is suitable when a proposed scale has been newly developed and not been empirically evaluated yet. On the other hand, reliability is concerned with whether similar item scores are obtained by the same respondents during repeated measures (Rubin & Babbie, 2011). Internal consistency indicating the homogeneity of the items is a common approach to the scale’s reliability (DeVellis, 2012). It is estimated by Cronbach’s alpha examining the extent of correlations of items. Higher alpha scores represent higher internal consistency.

School characteristics. The quality of OST programs is influenced by school and community characteristics (Feldman & Matjasko, 2005). For example, OST programs are often underutilized in low-income schools due to the lack of resources and qualified staff (Halpern, 1999; Reisner et al., 2007). Some studies have also shown that schools in urban settings and/or serving older-aged students face more challenges in implementing OST programs (Feldman & Matjasko, 2005; Leos-Urbel, 2015; Pelcher & Rajan, 2016).
Therefore, it is necessary to take into account these school characteristics in examining the relationship between school-community collaboration and the quality outcomes of OST programs.

School characteristics in the school year 2015-2016 were gathered from the public data collected from the Indian Department of Education (IDOE), and then they were matched with each school participant’s surveys according to the identification number of school participants. Specific variable measured from the IDOE data include: school type (public school = 1; non-public school = 0), school grade level (elementary school = 1; middle/high schools = 0), and school socioeconomic status (SES) measured by the percentage of students receiving free price meals out of the total students enrolled in the school. School location (urban = 1; rural/suburban = 0) was measured from the school survey answered by school professionals or administrators.

Data Analysis

Several data analyses were conducted in this research to validate a developed scale, describe the basic characteristics of school participants and their school-community collaboration, and test research hypotheses. First, factor analysis and Cronbach’s alpha tests were conducted to estimate the developed scale’s validity and reliability. In conducting a factor analysis with a principal components method for a factor extraction, the Kaiser-Meyer-Olkin (KMO) was used to assess the adequacy of conducting a factor analysis; higher than 0.6 is acceptable to conduct a good factor analysis (Worthington & Whittaker, 2006). The number of factors to extract was assigned to four factors as the scale was developed conceptually to measure the four dimensions of TSCC. This research also used an oblique rotation method (promax) to clarify factor structures. The
oblique rotation is preferred when factors are assumed to be correlated based on theory or research (Costello & Osborne, 2005; Worthington & Whittaker, 2006). After completing a factor analysis, Cronbach’s alpha was computed for each sub-scale as well as the overall scale. DeVellis (2012) proposes that Cronbach’s alpha coefficients greater than 0.7 represent good internal consistency.

Second, a descriptive analysis was conducted to describe school participants’ characteristics and assess their collaboration with community organizations (i.e., a scope of collaboration, types of organization partners, and obstacles to collaboration). In addition, a t-test was conducted to investigate how school participants’ perceptions of TSCC differ by the schools’ characteristics, such as school types, school grade levels, school SES, and school locations.

Finally, a series of multiple linear regression analyses were employed to test the major hypotheses for three dependent variables: high-quality activities, student engagement, and linkages with family/community. Each dependent variable includes five separate regression models. More specifically, a single independent variable (one dimension of TSCC) was entered separately into the regression model from Model 1 to 4, along with school characteristics as control variables. Model 5 is a full model with all independent variables and control variables. This analytical approach can provide useful information to explore not only the independent effects of the four dimensions of TSCC respectively but also their relative importance or their potential relationships in influencing the quality outcomes.

The major assumptions of a multiple regression analysis were assessed with appropriate approaches. For example, the normality of residuals was checked by a Q-Q
plot of residuals. Homoscedasticity was evaluated by a scatter plot of the standardized residuals by the regression standardized predicted value. The presence of multicollinearity was detected based on Variance Inflation Factor (VIF); a VIF of 6 or higher can be considered serious multicollinearity to be treated (T. Keith, 2014). Power analysis was also conducted to evaluate if multiple regression analyses for hypotheses testing had acceptable power (0.8) to correctly reject a false null hypothesis. The power analysis was also used to estimate if the sample size was adequate for the regression analyses based on the obtained values (i.e., effect size, number of predictors, and significance level). A G*Power 3 program was used for a power analysis developed by Faul, Erdfelder, Buchner, and Lang (2009).
Chapter Four: Results

School Participants’ Descriptive Information

Table 5 presents school participants’ descriptive information. The majority of school participants were public schools (90.1%). More than 37% of the school participants served elementary students, and almost 54% were located in urban areas. The average school SES, measured by the percentage of students receiving free price meals out of the total enrolled students, was 46.8% (SD = 25.3). According to the IDOE reports in the school year 2015-2016, the majority of schools in Indiana were public schools (84%) and almost half of the schools were elementary schools (45%). On average, the percentage of students receiving free price meals was approximately 40% across the Indiana schools. Although there is no available information about student enrollment by regions in the school year 2015-2016, 30.4% of the Indiana students attended schools in urban areas during the school year 2012-2013 (National Center for Education Statistics, 2013). The results may imply that the sample better represents middle/high, low-SES, and/or urban schools as compared to the population of Indiana schools.

Table 5. School Participants’ Descriptive Information

<table>
<thead>
<tr>
<th></th>
<th>Frequency/M</th>
<th>Percent/SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>82</td>
<td>90.1%</td>
</tr>
<tr>
<td>Non-public</td>
<td>9</td>
<td>9.9%</td>
</tr>
<tr>
<td><strong>School Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>34</td>
<td>37.4%</td>
</tr>
<tr>
<td>Middle/High</td>
<td>57</td>
<td>62.6%</td>
</tr>
<tr>
<td><strong>School Location</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>48</td>
<td>53.9%</td>
</tr>
<tr>
<td>Rural/Suburban</td>
<td>41</td>
<td>46.1%</td>
</tr>
<tr>
<td><strong>School SES</strong></td>
<td>46.8</td>
<td>25.3</td>
</tr>
</tbody>
</table>
Validity and Reliability Analysis

An exploratory factor analysis was conducted to assess how well items under the same dimensions of TSCC are loaded together as a single construct. More specifically, a principal components method with an obilimin rotation method (promax) was employed to extract four factors that have been already supported by the theoretical framework of this research. Finally, specific items were retained or deleted by the criteria discussed in the Methods chapter to address the issue of the small sample size and obtain the optimal length of the instrument.

An initial factor analysis indicated that the Kaiser-Meyer-Olkin (KMO) was 0.86, which exceeded an acceptable KMO value of 0.7. This suggests that the data are appropriate to conduct a factor analysis. The initial factor analysis produced the four-factor model using 18 items that accounted for 65.71% of the total variance. However, some items that failed to meet one of the predetermined criteria were deleted from the initial factor analysis. For example, one item’s communality value did not exceed the minimum criterion of 0.4: “partners respect each other’s points of view, opinions, and ideas even if they might disagree.” Two items were highly cross-loaded on two factors: “partners work together to get specific tasks done to achieve the shared goals.” and “leaders gives members the freedom to handle difficult situations in a way that the partners feel is best.”

The second factor analysis after deleting three items that did not meet the criteria indicated that a KMO value was the same as the initial factor model (.86), but the second version of the four-factor model accounted for a total variance of 70.01%, which was higher than the initial factor model (65.71%). Table 6 displays 15 items and factor
loadings for the second factor analysis. All items of this scale exceeded the proposed minimum communality score of 0.4. Their factor loadings ranged from 0.54 to 0.94 without high cross-loading items. Four factors extracted included at least three items.

Consequently, it can be suggested that the results of the second factor analysis meet all the predetermined criteria for an accurate factor analysis with a small sample size.

Table 6. Items and Factor Loadings for Transformative School-Community Collaboration

<table>
<thead>
<tr>
<th>Item</th>
<th>Component</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1 (Critical member capacity)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Partners/leaders have organizing skills needed to achieve collaborative goals and objectives.</td>
<td>0.94</td>
<td>0.79</td>
</tr>
<tr>
<td>• Partners/leaders have negotiation skills needed to work effectively with each other.</td>
<td>0.84</td>
<td>0.77</td>
</tr>
<tr>
<td>• Partners/leaders have advocacy skills needed to work effectively with each other.</td>
<td>0.85</td>
<td>0.74</td>
</tr>
<tr>
<td>• Partners/leaders are aware of current local issues that affect students and their families.</td>
<td>0.65</td>
<td>0.65</td>
</tr>
<tr>
<td>Factor 2 (Equal relations)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Partners consider themselves as equal.</td>
<td>0.79</td>
<td>0.74</td>
</tr>
<tr>
<td>• Partners receive fair opportunities and rewards from the collaboration.</td>
<td>0.78</td>
<td>0.78</td>
</tr>
<tr>
<td>• Partners treat each other with kindness and consideration.</td>
<td>0.73</td>
<td>0.64</td>
</tr>
<tr>
<td>Factor 3 (Democratic network governance)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Your collaboration allows partners to engage in all aspects of decision-making.</td>
<td>0.92</td>
<td>0.79</td>
</tr>
<tr>
<td>• Your collaboration includes diverse partners with different interests in decision-making.</td>
<td>0.60</td>
<td>0.75</td>
</tr>
<tr>
<td>• Your collaboration has formal or informal channels that allow partners to express their opinion before making decisions.</td>
<td>0.58</td>
<td>0.75</td>
</tr>
<tr>
<td>• Your collaboration utilizes fair procedures that allow every partner’s voice to be heard in making decisions.</td>
<td>0.58</td>
<td>0.66</td>
</tr>
<tr>
<td>Factor 4 (Empowering coordination)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The service coordination procedures are</td>
<td>0.87</td>
<td>0.74</td>
</tr>
</tbody>
</table>
flexible and responsive to the partners’ interests and requirements.

- Partners know and understand the clear vision, goals, and objectives of the collaboration. \( .71 \quad .65 \)
- Your collaboration enough time, budget, and training to coordinate joint tasks (average score of three items) \( .64 \quad .51 \)
- Partners have a shared understanding of the needs of students who participate in activities. \( .54 \quad .60 \)

Note. The table shows the results of the pattern matrix with a promax rotation. Factor loadings lower than 0.5 were not reported for the sake of clarity.

Factor 1 including four items was labeled as “critical member capacity”, which reflected collaborating members’ organizing, interpersonal, and analytical skills necessary for facilitating equal, democratic, and empowering collaboration. Three items were loaded together into Factor 2. This factor was named as “equal relations” since all the items indicated the degree of equal power between partner organizations with regard to joint membership, treatment, and resource distribution. Factor 3 was labeled as “democratic network governance” given that all the four items were initially designed to measure the basic elements of democracy in decision-making: fair procedures, representativeness, inclusive participation, and transparency with open communication. Finally, Factor 4 was named as “empowering coordination”, as the items within Factor 4 seemed to reflect the major aspects of organizational empowerment. The empowering coordination can be characterized as a responsive, flexible, and supportive operating system that empowers partner organizations to achieve their clear vision, goals, and objectives for students.

Cronbach’s alpha to measure the scale’s internal consistency reliability was computed for the final version of the four-factor model with 15 items (see Table 7). A Cronbach’s alpha coefficient for the overall scale was 0.91 and represented excellent
reliability. Cronbach’s alpha coefficients for the sub-scales that measured each of the four dimensions of TSCC ranged from 0.76 to 0.88. All alpha coefficients were greater than the acceptable value of 0.7. The sub-scales for equal relations and empowering coordination had relatively lower levels of Cronbach’s alpha coefficients than the other two sub-scales.

Table 7. Cronbach’s Alpha Coefficients for the Overall Scale and Sub-scales

<table>
<thead>
<tr>
<th>Sub-scales</th>
<th>Number of Items</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical member capacity</td>
<td>4</td>
<td>.84</td>
</tr>
<tr>
<td>Equal relations</td>
<td>3</td>
<td>.76</td>
</tr>
<tr>
<td>Democratic network governance</td>
<td>4</td>
<td>.88</td>
</tr>
<tr>
<td>Empowering coordination</td>
<td>4</td>
<td>.77</td>
</tr>
<tr>
<td>Overall</td>
<td>15</td>
<td>.91</td>
</tr>
</tbody>
</table>

Scope and Status of TSCC

Descriptive analyses were conducted to assess the current status of school-community collaboration. School participants were asked to rate the frequency of school-community collaboration in offering the six domains of OST programs that Fredricks and Eccles (2006) suggested (1 = never to 5 = very often). As can be seen in Figure 2, schools more commonly provided students with academic clubs (n = 74 schools) and performing arts (n = 71 schools) than other types of OST programs. However, schools most frequently collaborated with community organizations in providing prosocial activities such as mentoring, counseling, volunteer or service activities, and youth development programs (M = 3.39, SD = 0.93). The frequencies of other types of OST programs ranged from 2.20 to 2.69, suggesting that they were “sometimes” offered by school-community collaboration.
School participants also reported the types of partner organizations in their school-community collaboration (see Figure 3). The most common community organization with which school participants collaborated in offering OST programs was health care organizations such as hospitals, health care centers, and mental health providers (65.1%), followed by national service and volunteer organizations such as the YMCA and Boy and Girl Scouts (64.1%), and faith-based organizations and universities/educational institutions (61.6%, respectively). Limited collaboration occurred with social service organizations such as child welfare agencies (48.8%), cultural and recreational organizations (38.4%), senior citizen organizations (16.8%), and other organizations such as the Lions club or community foundation (3.5%).

Finally, Figure 4 depicts schools’ perceived barriers to successful school-community collaboration using a four-point scale (1 = not a barrier to 4 = extreme barrier). The most significant barrier perceived by school participants was a lack of funding (M = 3.12, SD = 0.82), followed by time constraints (M = 2.85, SD = 0.84), and limited community organizations (M = 2.42, SD = 0.92). In contrast, they were less likely
to perceive leadership, communication, and organizational differences as the significant barriers to successful school-community collaboration.

*Figure 3. Multiple Response Analysis of the Types of Partner Organizations*

![Bar chart showing the percentage of responses for different types of partner organizations.]

Table 8 presents the results of a descriptive analysis with respect to a perceived level of TSCC. School participants were asked to rate an overall level of TSCC if they operated more than one partnership for different OST programs. School participants noted a moderately high level of the overall TSCC ($M = 3.56$, $SD = 0.49$). More
specifically, school participants rated relatively higher scores on critical member capacity (M = 3.77, SD = 0.53) and equal relations (M = 3.60, SD = 0.62). In contrast, they rated relatively lower scores on democratic network governance (M = 3.36, SD = 0.66) and empowering coordination (M = 3.53, SD = 0.56).

Table 8. Average Ratings of TSCC

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>M</th>
<th>SD</th>
<th>Mix.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical member capacity</td>
<td>3.77</td>
<td>.53</td>
<td>2.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Equal relations</td>
<td>3.60</td>
<td>.62</td>
<td>1.67</td>
<td>5.00</td>
</tr>
<tr>
<td>Democratic network governance</td>
<td>3.36</td>
<td>.66</td>
<td>1.50</td>
<td>5.00</td>
</tr>
<tr>
<td>Empowering coordination</td>
<td>3.53</td>
<td>.56</td>
<td>2.13</td>
<td>5.00</td>
</tr>
<tr>
<td>Overall TSCC</td>
<td>3.56</td>
<td>.49</td>
<td>2.28</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Several t-tests were conducted to investigate if school participants’ perceptions of TSCC differed by their characteristics: school types, grade levels, SES, and locations. The results show that public and middle/high schools tended to report relatively higher scores on all the four dimensions of TSCC as compared to their private and elementary schools; yet, these differences were not statistically significant (see table 9 and 10).

Table 9. Differences in TSCC by School Types

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Public M</th>
<th>SD</th>
<th>Non-public M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical member capacity</td>
<td>3.80</td>
<td>.51</td>
<td>3.61</td>
<td>.63</td>
<td>.76</td>
</tr>
<tr>
<td>Equal relations</td>
<td>3.65</td>
<td>.62</td>
<td>3.43</td>
<td>.57</td>
<td>.91</td>
</tr>
<tr>
<td>Democratic network governance</td>
<td>3.38</td>
<td>.69</td>
<td>3.21</td>
<td>.34</td>
<td>.89</td>
</tr>
<tr>
<td>Empowering coordination</td>
<td>3.54</td>
<td>.56</td>
<td>3.52</td>
<td>.62</td>
<td>.65</td>
</tr>
<tr>
<td>Overall</td>
<td>3.59</td>
<td>.49</td>
<td>3.44</td>
<td>.50</td>
<td>.080</td>
</tr>
</tbody>
</table>
Table 10. Differences in TSCC by School Grade Levels

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Elementary</th>
<th></th>
<th>Middle/High</th>
<th></th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Critical member capacity</td>
<td>3.72</td>
<td>.65</td>
<td>3.81</td>
<td>.44</td>
<td>-.68</td>
</tr>
<tr>
<td>Equal relations</td>
<td>3.52</td>
<td>.67</td>
<td>3.68</td>
<td>.59</td>
<td>-1.09</td>
</tr>
<tr>
<td>Democratic network governance</td>
<td>3.33</td>
<td>.83</td>
<td>3.39</td>
<td>.56</td>
<td>-.33</td>
</tr>
<tr>
<td>Empowering coordination</td>
<td>3.50</td>
<td>.63</td>
<td>3.55</td>
<td>.53</td>
<td>-.43</td>
</tr>
<tr>
<td>Overall</td>
<td>3.52</td>
<td>.57</td>
<td>3.61</td>
<td>.44</td>
<td>-.76</td>
</tr>
</tbody>
</table>

Some significant differences were found between school SES levels (see Table 11). School participants were divided into low-SES schools (n = 51) and high-SES schools (n = 38) using the statewide average SES (40%) as a cut-off point. An overall level of TSCC did not significantly differ by school SES (t = -1.87, p = 0.07). However, low-SES schools (M = 3.48, SD = 0.66) reported a significantly lower level of equal relations than high-SES schools (M = 3.81, SD = 0.52; t = -2.36, p < 0.05). A similar significant difference existed in the perceptions of empowering coordination (t = -2.07, p < 0.05). Low-SES schools (M = 3.42, SD = 0.62) were less likely than high-SES schools (M = 3.68, SD = 0.45) to perceive empowering coordination.

Table 11. Differences in TSCC by School SES Levels

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Low-SES</th>
<th></th>
<th>High-SES</th>
<th></th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Critical member capacity</td>
<td>3.77</td>
<td>.53</td>
<td>3.79</td>
<td>.52</td>
<td>-.16</td>
</tr>
<tr>
<td>Equal relations</td>
<td>3.48</td>
<td>.66</td>
<td>3.81</td>
<td>.51</td>
<td>-2.36*</td>
</tr>
<tr>
<td>Democratic network governance</td>
<td>3.27</td>
<td>.71</td>
<td>3.50</td>
<td>.58</td>
<td>-1.55</td>
</tr>
<tr>
<td>Empowering coordination</td>
<td>3.42</td>
<td>.62</td>
<td>3.68</td>
<td>.45</td>
<td>-2.07*</td>
</tr>
<tr>
<td>Overall</td>
<td>3.49</td>
<td>.51</td>
<td>3.69</td>
<td>.43</td>
<td>-1.87</td>
</tr>
</tbody>
</table>

*p < .05

Finally, as can be seen in Table 12, there was a significant difference in an overall level of TSCC between urban schools (M = 3.45, SD = 0.46) and rural/suburban schools.
(M = 3.68, SD = 0.50; t = -2.10, p < 0.05). In particular, urban schools (M = 3.46, SD = 0.58) reported a significantly lower score on equal relations than rural/suburban schools (M = 3.74, SD = 0.65; t = -2.00, p < 0.05). They also had a significantly lower score on empowering coordination (urban: M = 3.36, SD = 0.57 and rural/suburban: M = 3.70, SD = 0.48; t = -2.86, p < .01).

Table 12. Differences in TSCC by School locations

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Urban M</th>
<th>Urban SD</th>
<th>Rural/Suburban M</th>
<th>Rural/Suburban SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical member capacity</td>
<td>3.72</td>
<td>.49</td>
<td>3.82</td>
<td>.57</td>
<td>-.780</td>
</tr>
<tr>
<td>Equal relations</td>
<td>3.46</td>
<td>.58</td>
<td>3.74</td>
<td>.65</td>
<td>-2.00*</td>
</tr>
<tr>
<td>Democratic network governance</td>
<td>3.26</td>
<td>.64</td>
<td>3.45</td>
<td>.67</td>
<td>-1.28</td>
</tr>
<tr>
<td>Empowering coordination</td>
<td>3.36</td>
<td>.57</td>
<td>3.70</td>
<td>.48</td>
<td>-2.86**</td>
</tr>
<tr>
<td>Overall</td>
<td>3.45</td>
<td>.46</td>
<td>3.68</td>
<td>.50</td>
<td>-2.10*</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

Correlation Analysis

A Pearson correlation analysis was performed to explore correlations among the major variables included in regression analyses. The results of a correlation analysis are presented in Table 13. All dependent variables were positively correlated with independent variables: critical member capacity, equal relations, democratic network governance, and empowering coordination. Correlation coefficients among them varied, ranging from 0.32 to 0.68 (p < 0.01 to 0.001). In particular, democratic network governance and empowering coordination tended to have a relatively stronger correlation with dependent variables than did critical member capacity and equal relations. For example, empowering coordination was strongly correlated with linkages with family/community (r = 0.68, p < 0.001), whereas it was somewhat moderately correlated with the linkages with family/community (r = 0.33, p < 0.01).
Three dependent variables had a moderately strong correlation with each other ($r_s = 0.62 - 0.72$, all $p_s < 0.001$). Similarly, the four dimensions of TSCC as independent variables were positively correlated with each other, with correlation coefficients ranging from 0.52 to 0.64 (all $p_s < 0.001$). The results also indicated that serious multicollinearity did not exist because correlation coefficients between independent variables were lower than the generally recommended criterion of 0.8 for a multicollinearity issue. This issue was further investigated in regression analyses using VIF values.
<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 High-quality activities</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Student engagement</td>
<td>.66***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Linkage</td>
<td>.72***</td>
<td>.62***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 School type (1 = Public)</td>
<td>-.19</td>
<td>-.15</td>
<td>-.07</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 School grade (1 = Elementary)</td>
<td>-.18</td>
<td>-.31**</td>
<td>-.09</td>
<td>.12</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 School SES</td>
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<td>-.29**</td>
<td>-.24*</td>
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<td>.29**</td>
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<td></td>
</tr>
<tr>
<td>7 School location (1 = Urban)</td>
<td>-.10</td>
<td>-.19</td>
<td>-.28*</td>
<td>-.05</td>
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<td>.62***</td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td>8 Critical member capacity</td>
<td>.32**</td>
<td>.32**</td>
<td>.33**</td>
<td>.10</td>
<td>-.08</td>
<td>.13</td>
<td>-.09</td>
<td>1</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>9 Equal relations</td>
<td>.33**</td>
<td>.49***</td>
<td>.41***</td>
<td>.10</td>
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<td>-.23</td>
<td>-.22*</td>
<td>.52***</td>
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</tr>
<tr>
<td>10 Democratic network governance</td>
<td>.59***</td>
<td>.53***</td>
<td>.56***</td>
<td>.08</td>
<td>-.04</td>
<td>-.15</td>
<td>-.15</td>
<td>.62***</td>
<td>.59***</td>
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</tr>
<tr>
<td>11 Empowering coordination</td>
<td>.50***</td>
<td>.59***</td>
<td>.68**</td>
<td>.09</td>
<td>-.05</td>
<td>-.26*</td>
<td>-.31**</td>
<td>.52***</td>
<td>.50***</td>
<td>.64***</td>
<td>1</td>
</tr>
</tbody>
</table>
Hypotheses Testing

A series of multiple regression analyses were conducted to test major hypotheses for three dependent variables: (1) high-quality activities, (2) student engagement, and (3) linkages with family/community. Each dependent variable includes five separate regression models. Before proceeding with multiple regression analyses, the major assumptions of multiple regression were diagnosed. This research did not find any significant violations of the major assumptions. For example, a Q-Q plot suggested that residuals tended to be normally distributed for all multiple regression models. Severe heteroscedasticity was not detected in that residuals seemed randomly scattered around the horizontal line in the scatter plot of the standardized residuals. The range of VIF was between 1.02 and 2.34 across the multiple regression models, suggesting no serious multicollinearity between independent variables.

In addition, the observed power of multiple regression models was estimated using a G*Power 3 software program. Statistical power was computed across all multiple regression models as a function of their obtained effect size (range of Cohen’s $\rho^2 = 0.21-1.05$), the number of predictors (range = 5-8), significance level (0.05), and sample size ($n = 84$). It should be noted that the original sample size ($n = 91$) was slightly decreased to 84 cases in conducting regression analyses because some cases had missing values, in part, within certain variables. Power analyses reported that power levels of all multiple regression models were greater than a commonly acceptable level of 0.8, ranging from 0.90 to 1.00. This finding suggests that the sample size of this research appears to be adequate to obtain an acceptable level of power.
High-quality activities. The results of multiple regression models for high-quality activities are reported in Table 14. As can be seen in Model 1 to 4, all independent variables, the dimensions of TSCC, were positively associated with high-quality activities of OST programs even after controlling for school characteristics. In other words, school participants were more likely to report that their schools offered high-quality activities when school-community collaboration involved higher levels of critical member capacity, equal relations, democratic network governance, and empowering coordination. In particular, democratic network governance in Model 3 appeared to be the stronger predictor of high-quality activities than the other independent variables ($\beta = 0.50, p < 0.001$). In contrast, equal relations had a significant, but relatively small effect on the high-quality activities ($\beta = 0.32, p < 0.01$).

Table 14. Multiple Regression Models for High-Quality Activities

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>Model 3</th>
<th></th>
<th>Model 4</th>
<th></th>
<th>Model 5</th>
<th></th>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School grade (1=Elementary)</td>
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<td>.29</td>
<td>-.21</td>
<td>.29</td>
<td>-.22</td>
<td>.24*</td>
<td>-.17</td>
<td>.26</td>
<td>-.20</td>
<td>.25*</td>
</tr>
<tr>
<td>School SES</td>
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<td>.00</td>
<td>-.09</td>
<td>.18</td>
<td>-.09</td>
<td>.18</td>
<td>-.11</td>
<td>.15</td>
<td>-.12</td>
<td>.16</td>
</tr>
<tr>
<td>School location (1=Urban)</td>
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<td>.20</td>
<td>.03</td>
<td>.21</td>
<td>.03</td>
<td>.17</td>
<td>.10</td>
<td>.19</td>
<td>.06</td>
<td>.18</td>
</tr>
<tr>
<td>Critical member capacity</td>
<td>.34</td>
<td>.15**</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>-.09</td>
<td>.18</td>
</tr>
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<td>Equal relations</td>
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<td>.14**</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Democratic governance</td>
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<td></td>
<td></td>
<td>.59</td>
<td>.11***</td>
<td>.54</td>
<td>.16***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empowering coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.50</td>
<td>.14***</td>
<td>.22</td>
<td>.18</td>
</tr>
<tr>
<td>F</td>
<td>3.34**</td>
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<td>3.33**</td>
<td></td>
<td>11.32***</td>
<td></td>
<td>6.88***</td>
<td></td>
<td>7.55***</td>
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</tr>
<tr>
<td>Adjusted $R^2$</td>
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<td>.123</td>
<td>.383</td>
<td>.262</td>
<td>.387</td>
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</tbody>
</table>
The full model that included all independent and control variables (Model 5) was significant ($F = 7.55$, $p < 0.001$) and accounted for 38.7% of the total variance of high-quality activities. One interesting finding in this full model is that the significant effects of critical member capacity, equal relations, and empowering coordination disappeared when all independent variables were entered into the regression model. In Model 5, democratic network governance was the only significant factor affecting the perceptions of high-quality activities ($\beta = 0.54$, $p < 0.001$). In addition, school participants in public schools were less likely than those in non-public schools to report the high-quality activities of OST programs ($\beta = -0.20$, $p < 0.001$).

**Student engagement.** Table 15 presents the results of multiple regression models for another quality outcome of OST program, student engagement. Similar to the results of the high-quality activities, all the dimensions of TSCC had significant, positive effects on student engagement perceived by school participants (see Model 1-4). Unlike the high-quality activities, empowering coordination was found to be a stronger factor in predicting active student engagement in OST programs ($\beta = 0.57$, $p < 0.001$). Critical member capacity in school-community collaboration tended to have a relatively lower effect on the student engagement as compared to other independent variables ($\beta = 0.32$, $p < 0.01$).

The full model (Model 5) had the improved total variance accounted for in student engagement ($F = 9.88$, $p < 0.001$; adjusted $R^2 = 0.461$) in comparison to the regression models examining the single effect of independent variables, respectively. Model 5 shows that empowering coordination ($\beta = 0.39$, $p < 0.001$) and equal relations ($\beta = 0.21$, $p < 0.05$) remained as significant factors to increase student engagement in OST.
programs after controlling for other independent variables. On the other hand, critical member capacity ($\beta = -0.14, p = 0.22$) and democratic network governance ($\beta = 0.23, p = 0.06$) were no longer significant factors in the full model. Of school characteristics, participants in middle/high schools tended to perceive a higher level of student engagement in OST programs than those in elementary schools ($\beta = -0.23, p < 0.05$).

*Table 15. Multiple Regression Models for Student Engagement*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
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<td>$\beta$</td>
<td>SE</td>
<td>$\beta$</td>
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<td>.14</td>
<td>-.23</td>
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<td>.00</td>
<td>-.12</td>
</tr>
<tr>
<td>School location (1=Urban)</td>
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<td>.17</td>
<td>-.01</td>
<td>.16</td>
<td>-.03</td>
</tr>
<tr>
<td>Critical member capacity</td>
<td>.32</td>
<td>.13**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal relations</td>
<td></td>
<td></td>
<td>.46</td>
<td>.10***</td>
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</tr>
<tr>
<td>Democratic governance</td>
<td></td>
<td></td>
<td></td>
<td>.51</td>
<td>.09***</td>
</tr>
<tr>
<td>Empowering coordination</td>
<td></td>
<td></td>
<td></td>
<td>.57</td>
<td>.11***</td>
</tr>
<tr>
<td>F</td>
<td>5.14***</td>
<td>8.18***</td>
<td>10.32***</td>
<td>12.42***</td>
<td>9.88***</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
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<td>.302</td>
<td>.359</td>
<td>.408</td>
<td>.461</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001

**Linkages with family/community.** The same results occurred for linkages with family/community as can be seen in the previous regression analyses for the two dependent variables. Model 1-4 show that all independent variables had independently positive effects on linkages with family/community, respectively (see Table 16). The strongest factor was empowering coordination ($\beta = 0.64, p < 0.001$), followed by
democratic network governance ($\beta = 0.52, p < 0.001$), equal relations ($\beta = .37, p < .01$), and critical member capacity ($\beta = 0.31, p < 0.01$).

The full model (Model 5) accounted for 43.9% of the variance of linkages with family/community. Of the four independent variables, the two variables—democratic network governance and empowering coordination—remained to be significant factors after controlling for all the variables. However, the strength of the significant effects was greater for empowering coordination ($\beta = 0.52, p < 0.001$) than democratic network governance ($\beta = 0.28, p < 0.05$). There were no significant control variables in influencing linkages with family/community across all the multiple regression models.

Table 16. Multiple Regression Models for Linkages with Family/Community

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
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<td>$\beta$</td>
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<td>.00</td>
<td>-.03</td>
</tr>
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<td>.18</td>
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<td>.17</td>
<td>-.18</td>
</tr>
<tr>
<td>Critical member capacity</td>
<td>.31</td>
<td>.13**</td>
<td></td>
<td></td>
<td>-.16</td>
</tr>
<tr>
<td>Equal relations</td>
<td></td>
<td></td>
<td>.37</td>
<td>.11**</td>
<td></td>
</tr>
<tr>
<td>Democratic governance</td>
<td></td>
<td></td>
<td>.52</td>
<td>.10***</td>
<td>.28</td>
</tr>
<tr>
<td>Empowering coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.64</td>
</tr>
<tr>
<td>$F$</td>
<td>3.35**</td>
<td>4.21**</td>
<td>8.47***</td>
<td>12.77***</td>
<td>9.11***</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.125</td>
<td>.162</td>
<td>.310</td>
<td>.415</td>
<td>.439</td>
</tr>
</tbody>
</table>

*p < .05, ** p < .01, *** p < .001
Chapter Five: Discussion and Conclusion

The purpose of this dissertation research is to develop and validate a comprehensive framework for Transformative School-Community Collaboration (TSCC). This proposed framework was primarily derived from a critical paradigm and its corresponding theories. In this regard, this research is value-laden with a clear intention to promote equality, democracy, and empowerment within school-community collaboration. This is based on the underlying assumption that equal, democratic, and empowering structures and processes within school-community collaboration can produce better outcomes for students, their families, or even broader communities. To achieve the major purpose, this research attempted to identify the multiple dimensions of TSCC from a comprehensive literature review. Next, it validated an initial scale to measure the identified multiple dimensions and examined their effects on the quality outcomes of OST programs using school survey data. The key findings of this research are discussed below.

Summary of Key Findings

Dimensions of TSCC. The results of an exploratory factor analysis suggested that TSCC consisted of multiple dimensions at the individual, relational, and structural levels: (1) critical member capacity, (2) equal relations, (3) democratic network governance, and (4) empowering coordination. Critical member capacity includes collaborating members’ organizing, interpersonal (i.e., negotiation and advocacy), and critical analysis skills necessary for facilitating the key principles of TSCC, such as equality, democracy, and empowerment. Equal relations represent relational equality between partner organizations with respect to their joint membership, treatment, and resource distribution. Democratic
network governance is defined as a collaborative governance structure that allows partner organizations to make right decisions through fair, inclusive, representative, and transparent processes. Finally, empowering coordination is characterized as a responsive, flexible, and supportive coordination system that empowers collaborating members to successfully achieve their clear vision, goals, and objectives for students. The overall four-factor model also showed excellent internal reliability with the Cronbach’s alpha coefficient of 0.91; Cronbach’s alpha coefficients for four sub-scales were also acceptable, ranging from 0.76 to 0.88.

**Scope and status of TSCC.** School participants reported that they more frequently collaborated with community organizations when they provided prosocial activities and academic clubs. Major collaborators included health care organizations, national service/volunteer organizations, faith-based organizations, and universities/educational institutions. The results are similar to the findings of previous studies (Anderson-Butcher et al., 2006; U. S. Department of Education, 2011). For the current status of TSCC, school participants indicated relatively higher levels of critical member capacity and equal relations than the other structural dimensions of TSCC—democratic network governance and empowering coordination. However, low SES and urban schools reported significantly lower levels of equal relations and empowering coordination than their counterparts.

A critical theory can provide a useful explanation about these significant differences by schools’ SES and location. As discussed in the literature review section, the formation and maintenance of collaboration are influenced by social contexts that create and sustain social divisions (Mullaly, 2007). Schools located in urban and/or low-
SES communities tend to face high social exclusion and competition within their school-community collaboration due in part to insufficient human and financial resources (Cohen-Vogel, Goldring, Smrekar, 2010; Sander, 2001). Consequently, these disadvantaged school contexts may prevent collaborating members from building constructive relationships and coordinating collective activities. Future research warrants investigating the effects of community conditions on school-community collaboration.

**Hypotheses Testing.** This research examined the relationships between the major dimensions of TSCC and the three quality outcomes of OST programs, respectively: high-quality activity, student engagement, and linkages with family/community. Table 17 depicts the summarized results of hypotheses testing. Overall, the four dimensions of TSCC as independent variables were found to be significant factors for the three quality outcomes of OST programs when they were entered independently into the regression models along with control variables. However, some significant relationships disappeared when all independent variables were taken into consideration (full model). In this case, the result of testing a hypothesis is noted as “partially supported”. In contrast, the result is noted as “fully supported” if the effect of an independent variable remained significant in the full model. Consequently, it can be suggested that all hypotheses are either partially or fully supported by the findings of this research.

Positive relationships between the identified dimensions and collaborative outcomes are not entirely new. However, previous studies tend to focus partially on the effects of specific dimensions or examine their effects on different outcomes of school-community collaboration (Anderson-Butcher et al., 2010; Minke, 2000; Sanders & Lewis, 2005; Warren et al., 2009). Similar results are also found in different collaborative
contexts (Hardy & Phillips, 1998; Leach et al., 2013; Weiner et al., 2002). This research expands existing knowledge by providing empirical evidence supporting the positive effects of the more comprehensive and multiple dimensions of TSCC on the quality outcomes of OST programs. The results of this research suggest that successful school-community collaboration requires critical member capacity, equal relations, democratic network governance, and empowering coordination to enhance the quality outcomes of OST programs.

*Table 17. Summarized Results of Hypotheses Testing*

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High-quality activities</strong></td>
<td><strong>Hypothesis 1.1:</strong> critical member capacity will be positively associated with high-quality activities.</td>
<td>Partially supported</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 1.2:</strong> equal relations will be positively associated with high-quality activities.</td>
<td>Partially supported</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 1.3:</strong> democratic network governance will be positively associated with high-quality activities.</td>
<td>Fully supported</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 1.4:</strong> empowering coordination will be positively associated with high-quality activities.</td>
<td>Partially supported</td>
</tr>
<tr>
<td><strong>Student engagement</strong></td>
<td><strong>Hypothesis 2.1:</strong> critical member capacity will be positively associated with student engagement.</td>
<td>Partially supported</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 2.2:</strong> equal relations will be positively associated with student engagement.</td>
<td>Fully supported</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 2.3:</strong> democratic network governance will be positively associated with student engagement.</td>
<td>Partially supported</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 2.4:</strong> empowering coordination will be positively associated with student engagement.</td>
<td>Fully supported</td>
</tr>
<tr>
<td><strong>Linkages</strong></td>
<td><strong>Hypothesis 3.1:</strong> critical member capacity will be positively associated with linkages with family/community.</td>
<td>Partially supported</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 3.2:</strong> equal relations will be positively associated with linkages with family/community.</td>
<td>Partially supported</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 3.3:</strong> democratic network governance will be positively associated with linkages with family/community.</td>
<td>Fully supported</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 3.4:</strong> empowering coordination will be positively associated with linkages with family/community.</td>
<td>Fully supported</td>
</tr>
</tbody>
</table>
Furthermore, this research provides in-depth information about which dimensions are more strongly associated with the different quality outcomes of OST programs. Overall, the identified dimensions of TSCC seems to better explain the total variance of student engagement than the other quality outcomes (adjusted $R^2 = 46.1\%$). Of the independent variables, structural dimensions—democratic network governance and empowering coordination—appear to be significant factors that directly affect most quality outcomes as compared to individual and relational dimensions. Democratic network governance was significantly associated with high-quality activities and linkages with family/community, while empowering coordination was significantly associated with student engagement and linkages with family/community (see Model 5 in Table 14-16, pp. 76-79). Equal relations were only a significant factor of student engagement after taking into account all the independent variables (see Model 5 in Table 15, p. 78).

Another interesting finding is that although critical member capacity and equal relations were found to be significant factors when being entered independently into the regression model, these significant effects did not exist in the full regression models. These results imply that they may be associated indirectly with the quality outcomes of OST programs through either democratic network governance or empowering coordination or both. In fact, the previous literature on collaboration argues that the multiple dimensions of collaboration are highly interconnected with one another although the directions of the relationships among them are unclear and reciprocal. For example, relational factors tend to affect network governance and collaborative coordination (Huxham & Beech, 2003; Miller & Hafner, 2009), but the reverse directions are also found in previous studies (Mulroy, 1997; San Martín-Rodríguez et al., 2005). The results
raise a future research agenda investigating the dynamic relationships among the four dimensions of TSCC in improving its effectiveness. One possible hypothesis for future research is that critical member capacity and equal relations may become preconditions to ensure democratic network governance and empowering coordination, which in turn leads to the increased quality outcomes of OST program.

**Limitations**

Some limitations of this research should be highlighted. First, the sample data may have limited representativeness to the population of Indiana K12 schools because of the use of a purposive sampling method. The results of this research revealed that the sample was more likely to represent schools that served students in higher grade levels, involved a relatively higher proportion of low-income students, and were located in urban areas as compared to the Indiana school population. Thus, the interpretation of the results to other schools and communities should be done cautiously.

Second, some limitations stem from the measures of collaboration and quality outcomes. For example, the results of this research may underestimate community organizations’ perspectives on school-community collaboration because the data were collected solely by school participants. Although schools act as lead organizations in operating school-community collaboration, a wide range of community stakeholders are also involved as equal partners within it. Similarly, it is important to evaluate the effectiveness of collaboration from service users’ perspectives in order to make programs more responsive to their needs. For future research, a multiple stakeholder analysis can become a useful tool in that it is demonstrated to be effective in identifying innovative strategies for problem-solving from multiple perspectives (Brugha & Varvasovszky,
2000). This method can also provide all members with the equal opportunity to make their voices heard in developing and evaluating collaboration.

Another relevant issue is that this research investigated overall TSCC in providing a wide range of OST programs. It does not reflect school-community collaboration with specific OST programs (e.g., prosocial activities and educational clubs), with particular collaborative purposes (e.g., joint funding and service provision), or with different community organizations (e.g., health care organizations and national service/volunteer organizations). Thus, future research should be conducted to examine how the effectiveness of TSCC differs by different OST programs, purposes, and/or member characteristics. This additional information would be useful to better understand the complexities of school-community collaboration and develop contextual knowledge for successful TSCC.

Finally, this research does not provide full information about the dynamic relationships among the identified dimensions of TSCC although the results suggest the potential possibility of the indirect effects of critical member capacity and/or equal relations on the quality outcomes of OST programs. The process of collaboration is dynamic, complex, and ever-changing. Future research should pay more attention to understanding a holistic, comprehensive, or even paradoxical process of school-community collaboration. For example, additional research is needed to examine collaborative mechanisms through which the dimensions of collaboration interact with one another in predicting its effectiveness (Emerson, Nabatchi, & Balogh, 2012). It would be also necessary to identify internal and external factors that facilitate or constrain effective school-community collaboration. Finally, future research should
address potential paradoxes within collaboration to promote transformative purposes, such as unity versus diversity (Chavis, 2001). Kim and Siddiki (2016) found that despite the premise of a positive effect of diversity on procedural justice in collaboration, collaborating members’ perceptions of procedural justice were highest at a moderate level of diversity in member affiliations.

**Implications for Social Work**

There are several implications for social work practice. First, this research provides a comprehensive roadmap for social workers working with children and youth in community or school settings as they seek to create school-community collaboration. For example, they should pay attention to creating democratic and empowering structures in school-community collaboration, given that these structural dimensions were found to be stronger factors for improving the quality outcomes of OST programs. However, the importance of critical member capacity and equal relations should not be undervalued.

This research indicated that individual and relational dimensions may become preconditions to ensure democratic network governance and empowering coordination.

Although additional research is needed to further investigate the dynamic relationships among the multiple dimensions, it can be suggested, from a practical standpoint, that TSCC should encompass all required components as a whole collaboration model to successfully achieve its intended goals. This is based on the fact that collaboration cannot be fully explained by any single factor. Collaboration is composed of multiple dimensions which are interconnected with one another (Thomson et al., 2009). Recent research on school-community collaboration also offers a practical suggestion that all principles and dimensions of a particular collaboration model should
be considered comprehensively and implemented simultaneously to maximize its desired outcomes; implementing part of the model could have negative effects on the outcomes (Adams, 2010; Valli et al., 2014).

Second, the results of this research show core competencies that social workers should develop to become more active leaders in building school-community collaboration. Franklin (1995) recommends that social workers require several areas of expertise in building school-community collaboration, such as assessment, mediation, political action, and goal attainment. Similarly, this research suggests that social workers should develop their knowledge and skill to organize and facilitate collaborative processes, negotiate group differences, advocate for marginalized members, and critically analyze community issues that students face. This set of skills is vital to ensuring equal partnerships, making democratic decisions, and developing empowering coordination within school-community collaboration.

Third, special attention should be given to urban and low-SES schools in building school-community collaboration. Specifically, school participants reported a lower level of equal relations between their collaborating members and empowering coordination. Open and multiple-layered communication channels can encourage collaborating members not only to equally share their information and resources but also to respect their different perspectives and needs as equally important (Weiner et al., 2002). Furthermore, perceptions of fairness are positively related to interpersonal trust (Cohen-Charash & Spector, 2001). Informal and formal interactions can help collaborating members reduce social distance and enhance interpersonal trust, which can lead to an equal working relationship.
Finally, school participants in this research noted that the lack of funding and time constraints were the most significant barriers to the development of school-community collaboration. To address these barriers, schools and community organizations should seek to identify additional resources from federal, state, or community grants. Furthermore, it is necessary for schools to hire or assign a full-time coordinator who can communicate with community organizations and manage school-community collaboration on a daily basis (Warren, 2005). It would be more beneficial to provide these financial and human resources for urban and/or low-income schools in order to enhance their capacity for effectively coordinating school-community collaboration.

Conclusion

This research attempted to propose the comprehensive model of TSCC and explore its relationships with the quality outcomes of OST programs. In particular, the results of this research suggest that the proposed TSCC would be more beneficial for promoting students’ active participation in collaborative activities and establishing strong linkages with families and communities. However, it should be clearly noted that the major intention of this research is not to suggest “cookie cutter solutions” which can be applicable to every context of collaboration. Rather, it provides structural infrastructures and social mechanisms through which collaborating members can develop effective strategies that have the best fit with their unique contexts through equal, democratic, and empowering processes. Ongoing efforts should be made to conduct a dialectical analysis in order to better understand how TSCC is effective for what purposes, with whom, under what circumstances, and through what processes and strategies.
It should be also acknowledged that different or even competing paradigms could be integrated partly with TSCC to maximize its strengths and minimize its limitations. However, different paradigms often propose contradictory principles and strategies that may not coexist because the one’s strengths become the other’s limitations. It would be much more difficult to integrate competing paradigms into one framework until we find the adequate answers to important questions: (1) to what extent each paradigm’s assumptions need to be balanced and (2) what element of each paradigm can be integrated without seriously violating each other’s core values. In order to answer these questions, sufficient evidence supporting both competing perspectives must be equally ensured so that researchers and practitioners are allowed to compare or reconcile them in constructive ways. Otherwise, there may be a possibility that certain perspectives with less evidence are more likely to be assimilated to or dominated by those with more evidence (N. Jackson & Cater, 1991). In this regard, continuous attention needs to be paid to building TSCC since it is still conceptual and is not fully supported by empirical evidence in comparison to other paradigmatic frameworks for collaboration.
Appendix A: Information Sheet

Pathways to Productive School Climate

You are invited to participate in a study on the Pathways to Productive School Climate. You were selected as a possible participant because you are a school social worker or a school professional dedicated to promoting student development and learning through school- and community-based programs. Your response to this survey based on your experiences and observations about your school’s activity is crucial in providing the necessary information to improve productive school climate.

This study [Study #1111007374] is being conducted by Indiana University School of Social Work under the leadership of Dr. Carolyn Gentle-Genitty, Principal Investigator. It is funded by the Center for Research and Learning at Indiana University-Purdue University Indianapolis.

Study Purpose
The Pathway to Productive School Climate is a statewide study of school settings. It aims to better understand your school’s community partnerships, school-based programs, and students’ school bonds and examine their dynamic relationships with student success.

Procedures for the Study
If you agree to be in the study, you may either

1. Click here to take a survey

2. Copy-paste the entire following link: goo.gl/y2yP2n in a web browser

3. Scan the following QR code to complete the online survey using your phone

The survey will take approximately 15-20 minutes. Taking part in this study is voluntary. You may decline participation or leave the study at any time. This survey will inquire about your experience or observation of your school’s partnerships with community agencies/members in providing student support programs.

Confidentiality
All reports will be shared using only aggregate data, and no individuals or schools will be identified. Only your school will get full access to your school-level data.

Payment
You will not receive payment for taking part in this study. However, the results from this study may potentially benefit schools and students by providing information about effective school-based programs (i.e., extracurricular activity or out-of-school-time
programs) and school environments (i.e., school bonds) to improve student development and school reform. You are invited to request your school data with basic descriptive information. These results may be included in your end-of-year school assessments required by boards, school corporations, or funding sources.

Contacts for Questions or Problems
If you have any questions about this survey, please contact Jangmin Kim, Co-investigator, at kim795@iu.edu or Dr. Carolyn Gentle-Genitty at cgentleg@iupui.edu.
Appendix B: School Survey

### Out-of-School Time Programs

Q1. Please indicate the following characteristics of out-of-school time programs (extracurricular activities/afterschool programs) offered to students in your school.

<table>
<thead>
<tr>
<th></th>
<th>Offered in your school?</th>
<th>If yes, offered with any community partner(s)?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Academic clubs (Tutoring, language, science, math, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prosocial activities (Mentoring, volunteer activities, service activities, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performing arts (Band, dance, drama, art, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports (School sports teams, sports clubs, recreational clubs, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School involvement activities (Student government, cheerleading, pride events, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Please specify:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Q2. Please indicate the extent to which you disagree or agree with each of the following statements regarding the overall quality of your school’s extracurricular activities/afterschool programs provided with community partner(s).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The programs provide activities that are commensurate with the age and skill level of the participants.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The programs offer high-quality academic support, including tutoring or homework help.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The programs offer enrichment opportunities in core academic areas as well as in the arts, technology, recreation, and health.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The programs include activities that take into account the language/culture of participants.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The programs engage participants with a variety of strategies.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The programs promote consistent and active participation.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The programs encourage participants to recruit others into the program.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The programs allow participants to be meaningfully involved in program planning, implementation, and evaluation.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The programs recruit, hire, and develop staff members who reflect the diversity and culture(s) of the community.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The programs ensure staff members have competence in core academic areas.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The programs maintain staff-to-student ratio per state regulations when applicable.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The programs provide positive working conditions for staff and appropriate supervision, support, and feedback.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
The programs communicate with families on matters of the well-being of the students.  ○ ○ ○ ○ ○

The programs involve families in decision-making and planning.  ○ ○ ○ ○ ○

The programs involve families and the community in program events.  ○ ○ ○ ○ ○

The programs seek opportunities to share community resources with families.  ○ ○ ○ ○ ○

School-Community Collaboration

In this section, you will be asked about the school-community collaboration to provide any extracurricular/afterschool activity in your school. If your school has multiple partnerships for a different activity, please answer the following questions based on your perceptions of the overall level of partnerships that your school is currently operating with community partner(s).

Q3. Which type of community organizations listed are involved in the overall school-community collaboration in your school as partners? (Check all that apply)

- Business/corporations
- Cultural and recreational organizations (zoos, museums, libraries, etc.)
- Universities and educational institutions
- Nonprofit organizations for children and youth development
- Health care organizations (health care centers, mental health facilities, etc.)
- Faith-based organizations
- Government agencies (fire departments, police departments, etc.)
- Senior citizen organizations (nursing homes, senior volunteer organizations, etc.)
- National service and volunteer organizations (YMCA, Boy and Girl Scouts, etc.)
- Parents and community residents
- Social service providers (child welfare and family support agencies)
- Other (Please specify)  ___________________________
Q4. Please indicate your opinion on the following statements, which express general perceptions about the overall school-community collaboration in your school.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partners/leaders have negotiation skills needed to work effectively with each other.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Partners/leaders have advocacy skills needed to work effectively with each other.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Partners/leaders have organizing skills needed to achieve collaborative goals.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Partners/leaders are aware of current, local issues that affect students and their families.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Leaders give members the freedom to handle difficult situations in a way that the partners feel is best.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Partners consider themselves as equal.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Partners treat each other with kindness and consideration.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Partners receive fair opportunities and rewards from the collaboration.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Partners respect each other’s points of view, opinions, and ideas even if they might disagree.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Your collaboration utilizes fair procedures that allow every partner’s voice to be heard in making decisions.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Your collaboration allows partners to engage in all aspects of decision-making.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Your collaboration includes diverse partners with different interests in decision-making.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Your collaboration has formal or informal channels that allow partners to express their opinion before making decisions.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Partners have a shared understanding of the needs of students who participate in</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
collaborative activities.

<table>
<thead>
<tr>
<th></th>
<th>Not a barrier</th>
<th>Somewhat barrier</th>
<th>Moderate barrier</th>
<th>Extreme barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partners know and understand the clear vision, goals, and objectives of the collaboration.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Partners work together to get specific tasks done to achieve the shared goals.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The service coordination procedures are flexible and responsive to the partners’ interests and requirements.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Your collaboration provides enough time to coordinate joint tasks.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Your collaboration provides sufficient budget to coordinate joint tasks.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Your collaboration provides adequate training to coordinate joint tasks.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q5. Please check the appropriate box that best represents your opinion of the following obstacles in developing constructive partnerships with community organizations.

<table>
<thead>
<tr>
<th></th>
<th>Not a barrier</th>
<th>Somewhat barrier</th>
<th>Moderate barrier</th>
<th>Extreme barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Funding</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Available community partners</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Leadership</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Communication</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Knowledge of other organizations’ policies and services</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Respect for differing aims and expectations</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Background Information

Q6. What is your gender?
(Please type) ________________________
Q7. What is your race?
☐ Caucasian  ☐ African American  ☐ Hispanic  ☐ Asian
☐ Native American  ☐ Other (Please specify) ______________________

Q8. What is the highest level of education you have completed?
☐ High school/GED  ☐ Some college  ☐ Bachelor’s degree  ☐ Master’s degree
☐ Advanced graduate or PhD

Q9. What is your age? (Please type)
______________ Years

Q10. What is the title of your current position?
☐ Social worker  ☐ Guidance director  ☐ Counselor  ☐ School administrator
☐ Psychologist  ☐ Other (Please specify) ______________________

Q11. How long have you been in your current position? (Please type)
_______ Years
_______ Months

Q12. What is the community setting in which your school is located?
☐ Urban  ☐ Suburban  ☐ Rural
References


Websites

Curriculum Vitae
Jangmin Kim

Education

PhD Indiana University
(External Minor: Nonprofit Management)
Dissertation Title: *Building transformative school-community collaboration: A critical paradigm.*

MSW Portland State University
(Concentration: Community-Based Practice)

MSW Chonbuk National University
Thesis Title: *The process of influence of neighborhood disadvantage, community social capital, and family social capital on adolescents’ educational achievement.*

BA Jeonju University
(Major: Social Welfare)

Research Experience

Graduate Research Assistant August 2014-July 2015
Several research projects on youth delinquency under the supervision of Dr. Jeremiah Jaggers, Indiana University, IN

Data Analyst April 2014-April 2015
Youth violence in the Caribbean Community (CARICOM) (PI: Dr. Carolyn Gentle-Genitty), Indiana University, IN

Graduate Research Assistant August 2013-May 2014
Impacts of school bonding on student outcomes under the supervision of Dr. Carolyn Gentle-Genitty, Indiana University, IN

Graduate Research Assistant August 2012-May 2013
Child welfare education and training partnership under the supervision of Dr. Carol Hostetter, Indiana University, IN

Research Assistant January 2011-June 2012
Korean-American parenting management training, Portland State University, OR
Publications

Peer Reviewed Journals


Technical Reports


**Professional Presentations and Posters**

**International Conferences**


**National Conferences**


Regional/Local Conferences


Teaching

Instructor, Indiana University School of Social Work Fall 2016
S423- Organizational Theory and Practice, BSW program

Co-instructor, Indiana University School of Social Work Summer 2016
S372- Statistical Reasoning in Social Work, BSW program

Instructor, Indiana University School of Social Work Spring 2014
S433- Community Behavior and Practice within a Generalist Perspective, BSW program
Macro/Direct Practice Experience

Research Associate /Program Evaluator August 2015-present
Indiana University School of Social Work, IN
Title IV-E Waiver Evaluation Project contracted with the Indiana Department of Child Services

Social Work Intern (advanced practicum) September 2011-June 2012
Asian Pacific American Networks of Oregon, OR

Social Work Intern (practicum) September 2010-June 2011
Easter Seals Oregon, OR

Program Coordinator March 2007-March 2008
Health & Welfare Center, Korea
Community mentoring program for children living with grandparents

Project Manager/Policy Analyst March 2006-April 2007
Chonbuk National University, Korea
Community welfare plans contracted with Chonbuk province and Sunchang city governments