Sally Coleman Selden
Lynchburg College
Jessica E. Sowa
University of South Carolina
Jodi Sandfort
University of Minnesota

Technology, Communication, Collaboration

The Impact of Nonprofit Collaboration in Early Child Care and Education on Management and Program Outcomes

Sally Coleman Selden is an associate professor at Lynchburg College. Her current research focuses on strategic human resource management in state governments and the impact of collaboration on nonprofit organizational effectiveness. She has published articles in the *American Journal of Political Science, Administration & Society, American Review of Public Administration, Review of Public Personnel Administration, Journal of Public Administration Education, Public Administration Review,* and the *Journal of Public Administration Research and Theory.*
E-mail: selden@lynchburg.edu.

Jessica E. Sowa is an assistant professor in the Department of Political Science at the University of South Carolina. Her research focuses on public and nonprofit management, including human resource management, nonprofit organizational effectiveness, and collaborative service delivery.
E-mail: jsowa@sc.edu.

Jodi Sandfort is an associate professor at the Humphrey Institute of Public Affairs at the University of Minnesota, where she teaches courses on public and nonprofit management.
E-mail: jsandfort@hhh.umn.edu.

The use of interorganizational relationships such as collaboration, partnerships, and alliances between public, private, and nonprofit organizations for the delivery of human services has increased. This article contributes to the growing body of knowledge on collaboration by exploring one kind of interorganizational relationship—interagency collaboration—in the field of early care and education. It examines variations within interagency collaborations and their impact on management and program outcomes. The findings show that interagency collaboration has a clear impact on management, program, and client outcomes: Specifically, the intensity of the collaborative relationship has a positive and statistically significant impact on staff compensation, staff turnover, and school readiness.

Over the past several decades, scholars studying the management of human services have noted the increased use of various forms of interorganizational relationships—such as collaboration, partnerships, and alliances between public, private, and nonprofit organizations—for the delivery of services (Austin 2000). As Agranoff and Pattakos (1979) discuss, these structures are being formed at every level of service delivery and in a range of organizational domains and sectors. Changes are occurring in the organization of governmental administrative entities; interdepartmental task forces and teams regularly meet for planning, program, and policy development at the state and federal levels. At the local level, organizations from different sectors are coming together to link discrete services and resources into multifaceted delivery systems that, in theory, will decrease fragmentation and redundancy and increase access (Austin 2000; Sabatier et al. 2001). Finally, organizations are working together at the level of actual service delivery, using case management and other tools of coordination and service integration to better treat the needs of individual clients. Across sectors, collaboration and other interorgani-

zational structures have been consistently heralded as the way to find new solutions to complex problems (Lawrence, Hardy, and Phillips 2002). Although interorganizational relationships have proliferated in both usage and form, the existing research provides little conceptual clarity as to the functioning of these kinds of relationships and little understanding of the impact of interorganizational relationships on the clients receiving services and the organizations engaged in these relationships.

Using data from a comparative case study of 20 human services organizations that provide early care and education services in New York State and the Commonwealth of Virginia (the Investigating Partnerships in Early Childhood Education Study), we address both of these problems through the exploration of one kind of interorganizational relationship—interagency collaboration.[1] Although the motives for entering into these interagency collaborations range from providing better services to children and families to organizational survival (Sowa 2001), the impact of these collaborations should be evident at two levels—management and program—because of the influence of federal and state expectations on nonprofit organizations receiving public funding and the impact of shared resources, both fiscal and nonfiscal. No previous study of nonprofit collaboration has examined the impact of interagency collaboration on both dimensions simultaneously or examined their interconnections (O'Regan and Oster 2000; Stone 2000). This article makes a substantial contribution to the knowledge base on the interorganizational relationships being used to deliver public services in the "hollow state" or under the "new governance." The findings presented both strengthen our understanding of the variations that can occur within a single interorganizational form—interagency collaboration—and provide empirical validation of many previously

> Across sectors, collaboration and other interorganizational structures have been consistently heralded as the way to find new solutions to complex problems.

untested assumptions concerning the impact of collaboration (Milward 1996; O'Toole 1997).

The article is divided into five sections. First, we review previous research on collaboration, focusing primarily on studies that develop typologies of collaborative forms and impact studies. Second, we describe the policy context in which this project examines interagency collaboration. Third, we describe the nature of collaboration in early care and education and develop a set of hypotheses about the impact of interagency collaborations on management processes and program outcomes. Fourth, we introduce the data and methods used in this study. Finally, we examine the hypotheses using the data collected and discuss the implications of the findings.

Approaches to the Study of Collaboration

A number of scholarly and practitioner communities are engaged in research about collaborative service delivery, each with its own perspective on how best to approach the topic. Research has focused on the factors associated with successful collaboration, the motives underlying the decision to collaborate, the types of collaborative models, and the outcomes of collaborative relationships (Foster-Fishman et al. 2001; Gray 1989; Mattessich and Monsey 1992; Mulroy and Shay 1998; O'Regan and Oster 2000; Stone 2000). Because of the diversity of academic fields involved in the study of collaborative service delivery and the multiplicity of relationships, a considerable range and volume of research exists across disciplines. Therefore, we will limit our review of the research by focusing on two areas that are directly relevant to our study. First, the review explores a few of the myriad of approaches scholars have taken to classify various forms of interorganizational relationships, with a focus on typologies and classifications that illuminate the forms of interagency collaboration we have found in early care and education. Second, the review examines studies that assess the impact of collaborative service delivery on programs, services, and organizations as a whole to examine the kinds of outcomes that collaborative relationships may produce and highlight how our study contributes to this research base.

Classification of Interorganizational Relationships

The majority of research focused on interorganizational service delivery in human services describes the diversity of the relationships that have sprouted during the last 40 years. These sources document that "collaboration," "service integration," "vertical integration," and "community partnerships" are occurring and provide numerous strategies for making sense of this diversity through classification (Gray and Wood 1991; Whetten 1981). Some of these attempts at classification occur inductively, with scholars seeking to understand the service forms being used in a particular field and attaching labels to the variety they observe (Gans and Horton 1975; Kagan 1991). Other attempts start with social science theory, with the authors trying to glean principles from academic research that can help create a defensible typology (Martin et al. 1983; Mitchell and Shortell 2000). Still others start with an interest in organizational theory and come to the study of interorganizational relationships from that perspective (Oliver 1990; Powell 1990; Whetten 1981).

Scholars generally differentiate collaborative service-delivery arrangements along many different dimensions, such as classifying them at the level at which they occur. Along with other scholars (Agranoff and Pattakos 1979; Martin et al. 1983), Kagan (1993) provides a useful classification of the level at which these arrangements occur, distinguishing four levels of delivery:

- Policy-centered integration: Intergovernmental efforts such as commissions, advisory policy councils, and block grant funding allow information to be shared, programs to be developed, and revenues to flow beyond the traditional boundaries of categorical programs.
- Organization-centered integration: The reorganization and creation of unified "umbrella" agencies at the federal, state, and local levels improves the sharing of information and administration of existing programs.
- Program-centered integration: These strategies, which include colocation, linked information systems, integrated staffing, and joint planning or funding, focus on changing the scope and implementation of actual program delivery.
- Client-centered integration: This approach focuses on the coordination of services for individual clients or their families and may include single application or intake procedures and case management services.

This body of research has also classified the intensity of interorganizational relationships, with most authors agreeing that there is a continuum of relationships that bind organizations to each other (Austin 2000; Mattessich and Monsey 1992). Although there is some variation in terminology, this intensity varies from informal to various types of formalized relations. Figure 1 illustrates a continuum described by Kagan (1991) and others (Mattessich and Monsey 1992).

Cooperation   Coordination   Collaboration   Service Integration

Figure 1   Continuum of Collaborative Service Arrangements

On the one end is interorganizational *cooperation* supported by informal and personal relationships between management and staff of different organizations. On the other end is formalized *service integration*, in which two organizations work together to provide a new package of services to their mutual clients. Between these two extremes are *coordination,* in which both organizations make an effort to calibrate their actions (although the organizations themselves remain independent), and *collaboration*, in which organizations share existing resources, authority, and rewards. Collaboration, the particular focus in this article, can occur through multiple mechanisms, such as integrating staff, joint planning, or joint budgeting. Although these terms—cooperation, coordination, collaboration, and service integration—are often used interchangeably, the research distinguishes among them according to the intensity of the relationship.

The Impact of Interorganizational Relationships
Collaborative service delivery is often touted as providing important benefits to organizations as a whole, to the management systems within these organizations, and to the clients served through particular programs that are affected by collaboration. In an overview of the service-integration literature, Martin et al. (1983) report that service integration as a strategy for collaborative service delivery reduces duplication, improves coordination, prevents inefficiency, minimizes costs, and improves responsiveness and effectiveness. It also is depicted as more capable of resolving the issues of multiproblem clients and improving overall client access (Beatrice 1990; Farel and Rounds 1998; Poole and Van Hook 1997). However, other scholars have demonstrated that many of these purported benefits are not actually substantiated by empirical investigation (Chamberlain and Rapp 1991; Gans and Horton 1975; Glisson and James 1992; Kagan 1993; Martin et al. 1983; Weiss 1981; Zuckerman, Kaluzny, and Ricketts 1995). One of the main challenges facing scholars is the difficulty of precisely defining the desired consequences of these efforts. Some collaborative efforts are focused on systems change, such as working to alter the existing structure, create new linkages, and decrease service fragmentation. Others are focused on service change, such as increasing client access to services or providing more holistic treatment. Therefore, collaborations may have different objectives and consequences, both across and within policy fields, making the assessment of these outcomes or the consequences of collaboration especially difficult.

There is a small but growing body of empirical research examining the connections between interorganizational relationships and client outcomes. Some researchers have examined how network structures influence client outcomes. For example, Milward and Provan (1995, 1998) consider how the structure of

mental health community service networks influences client outcomes. Because they are primarily interested in the forces that influence network effectiveness, they develop a map of the network of organizations involved in the provision of mental health services to the severely mentally ill in four different communities. They probe characteristics of that network: Were participating agencies interconnected? Did formal service delivery ties exist? Were their actions coordinated by a central authority? Their rigorous research design and analysis lead to four interesting findings and hypotheses: (1) network effectiveness is enhanced when the organizations are integrated through a central authority; (2) networks that must respond to a single source of direct fiscal control are more effective; (3) all else being equal, network effectiveness will be enhanced by system stability, although stability alone is not sufficient for effectiveness; (4) in resource-scarce environments, networks are unable to be effective. Because the unit of analysis is the network of mental health providers, the study does not examine the effect of specific collaborative service arrangements on client well-being.

Second, empirical research has been conducted that explores case management as a tool for coordinating and integrating client services and its impact on client outcomes (Attkisson 1992; Buescher et al. 1991; Cohn and DeGraff 1982; Stein and Test 1985). However, the evidence linking case management and client outcomes is mixed. For example, a study of maternity care coordination for Medicaid recipients in North Carolina found that case management reduced the number of low-birth-weight babies, decreased infant mortality, and lowered the cost of medical care (Buescher, Roth et al. 1991). However, it is possible that the collaborative strategy probably had an indirect effect on these outcomes. For example, in the North Carolina Medicaid case, the explanation could lie in the quality of the prenatal care rather than the quality of case management. Another case management study of the severely mentally ill (Bond 1991) documents some evidence of improving access to services, but it does not find this same relationship for client well-being outcomes. Another study of the use of case management in child abuse cases found no discernible impact on child outcomes (Cohn and DeGraff 1982). Similarly, another experimental design evaluating case management in the national Comprehensive Child Development Program (St. Pierre and Layzer 1997) found no statistically discernible differences in well-being between clients who received case management and those in the control group.

Finally, one study looks at the relationship between state-level service coordination and program outcomes. Jennings and Ewalt (1998) construct a model that explores how both state-level administrative coordination and program coordination are related to

federal Job Training Partnership Act program performance. The programmatic coordination variable is a summation of the various strategies—such as information sharing, interagency committees, joint funding, marketing, and planning—used in each service-delivery area. In their multivariate model, administrative coordination shows a strong positive effect on the majority of outcome measures, whereas programmatic coordination has a more limited (but still) positive effect.

The present study builds on this research by examining interagency collaborations as one type of interorganizational relationship. We contribute to the knowledge base on interorganizational relationships by further differentiating one form of these relationships, interagency collaboration, to develop a continuum of collaboration itself. We also add to the knowledge base on the impact of interorganizational relationships by examining the impact of interagency collaboration on management and program outcomes.

Collaboration in Early Care and Education

Although early care and education is not traditionally a field that would encourage collaboration—most of the organizations providing early care and education services serve the same population of clients (i.e., children)—this policy field is nevertheless fertile ground for collaboration because of the fragmented nature of the public funding system for early care and education services. The public role in financing early care and education programs has developed along three parallel but distinct institutional tracks.[2] In 1965, the Head Start program was established as part of the antipoverty initiatives of the Great Society (Kuntz 1998). As a federal initiative, Head Start traditionally operated in a separate sphere from other early childhood programs, serving a particular population of children—those from families under the federal poverty limit. In addition, Head Start has detailed performance standards that serve as a blueprint for national implementation; teachers and managers were to receive similar professional development; and programs were to undergo standardized monitoring (Zigler and Styfco 1996). This infrastructure created by the U.S. Department of Health and Human Services has supported the delivery of comprehensive services to low-income families in part-day, part-year early care and education programs, which have been the hallmark of the Head Start intervention for more than 30 years (Mitchell, Ripple, and Chanana 1998; Schulman, Blank, and Ewen 1999). However, the new working requirements instituted by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 led to an increased demand for full-day, full-year services among parents with children enrolled in Head Start. This prompted many Head Start providers to look outside their organizational boundaries to find ways to answer this need.[3]

During the late 1970s and early 1980s, state governments began allocating resources to part-day preschool programs focused on three- and four-year-olds. Although some states elected to allocate these resources to expand services provided through Head Start, many other states established their own preschool initiatives and programs (Adams and Sandfort 1994; Schulman, Blank, and Ewen 1999). State commitment to preschool education has grown over time; by 1998, 39 states had funded at least one preschool initiative (Mitchell, Ripple, and Chanana 1998). Although state governments make policies, local school districts often hold considerable authority in making curricular decisions, developing teacher training, and monitoring quality. Typically, preschool programs operate during the school year, offering part-day sessions like many kindergarten programs. Preschool programs, however, also are striving to better meet the needs of working parents, prompting them also to look to other organizations in the community to find ways of expanding the nature of their services.

While states were launching preschool initiatives, they were simultaneously developing programs to help defray child care costs for low-income families involved in work or job training (Adams, Schulman, and Ebb 1998; Kisker and Ross 1997). Designed for families who have found their own child care arrangements, these subsidy programs, though funded primarily through federal dollars, are typically administered through state human services departments. Although several federal funding sources for child care subsidies existed during the 1980s and 1990s, they were consolidated as part of the 1996 welfare reform law into the Child Care and Development Fund (Cohen 1996; Schumacher, Greenberg, and Duffy 2001). States vary widely in the degree to which they supplement these federal child care dollars. Subsidies can be used to purchase full-day, full-year care, yet because child care subsidies provide a "service" to parents rather than a developed "program" for children, there is not much attention to monitoring quality, developing curricula, or educating teachers. Instead, the patchwork system that exists is not tied directly to the public subsidy. As a result, child care subsidy programs have suffered a lack of resources that has not affected the other two branches of the early childhood community as drastically.

These three public approaches to funding early care and education have developed at different levels of government and with different focuses. In addition, the administration of preschool and subsidized child care programs in many states occurs within different departments. As a result, although these programs are all focused on the care and education of disadvantaged children, three distinct early care and education systems have developed, each with different administrative rules, eligibility criteria, programmatic

requirements, and funding levels. Recently, however, the distinctions between these three public policy strategies have begun to blur because of institutional and community changes. Recognizing the demand for financially supported, high-quality programs that meet the scheduling needs of working parents, policy makers have developed new regulations and created incentives that encourage collaboration across these boundaries (Sandfort 2001). Since 1997, the annual Head Start appropriation has targeted funds toward local programs that extend their hours or weeks of service to meet the needs of working parents (Head Start Bureau 1999). In addition, special priority is given to organizations that use multiple sources of public dollars or partner with child care providers to deliver full-day, full-year services.

Similarly, state preschool programs have begun to allow nonschool providers to operate classrooms. According to the Children's Defense Fund, more than 75 percent of the states allow their state preschool dollars to go to non-school-based programs. In some cases, the state contracts directly with Head Start or nonprofit child care centers; in others, local school districts subcontract with these entities. States also have developed other policies—such as funding the cost of transporting children to other child care facilities, giving funding priorities to programs that operate on a full-day, full-year schedule, or providing technical assistance—to encourage preschool providers to collaborate with other early childhood programs (Schulman, Blank, and Ewen 1999). Like the Head Start community, state early childhood administrators are recognizing the diverse needs of families and adopting program innovations to encourage the blending of public monies to respond to these needs.

The way that organizations operating within these two systems blend their funding and services—along with federal and state child care subsidy dollars—to establish interagency collaborations for service delivery and the impact of these collaborations represent the primary focus of this article. The next section will discuss in greater detail the forms these collaborations have taken and hypotheses about how they affect management and program outcomes for nonprofit service providers.

The Impact of Nonprofit Collaboration in Early Care and Education

At the service-delivery level, nonprofit organizations are increasingly collaborating across policy and programmatic divides to provide full-day, full-year early care and education services to children. An early care and education collaboration, as it is defined in this study, involves working across at least two of the policy domains to provide full-day, full-year care to low-income children (Sandfort and Selden 2001). We depict the structural collaborative relationships along a continuum, as shown in figure 2. Collaborations involving two partners are considered less intense than those involving relationships across three policy domains. Because Head Start has formalized performance standards and a national-level programmatic and professional support network, we contend that the resources, scope of activities, interaction with stakeholders in the Head Start policy environment, and the managerial complexity of organizations engaging in this type of collaboration exceed that present in collaborations between state preschool programs and local department of social services (DSS) offices. Finally, when working across all three domains, we perceive the relationship as more intense and of greater potential strategic value to organizations and clients because of the increased access to resources and the opportunity to integrate the strengths of different programs. At the same time, managerial complexity is greater in three-way collaborative relationships because of multiple requirements and the need to broker with external stakeholders across policy domains. Because the policy domains still function relatively independently of each other, organizations engaged in such collaboration must address the majority of implementation issues at the local level.

Therefore, as figure 2 shows, although each of the organizations included in this study is involved in an interagency collaboration, these collaborations vary in intensity, complexity, and scope. We maintain that scholars should examine and model variation within the collaborative relationship to capture any differential effects of these diverse complexities and to truly capture the impact of collaboration. Therefore, although our definition of collaboration is similar to Kagan's (1991), we model the variations in structural arrangements that occur within the collaborative model.

Hypotheses on the Impact of Collaboration in Early Care and Education
Organizations that are engaged in collaborative relationships are actively affecting their environments by bringing in new resources, including financial
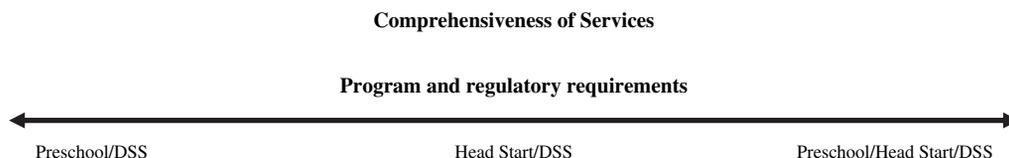

Comprehensiveness of Services

Program and regulatory requirements

Preschool/DSS   Head Start/DSS   Preschool/Head Start/DSS

Figure 2   Continuum of Complexity of Collaborations in Early Care and Education

resources, professional knowledge, and operating requirements to sustain and to improve their services (Hall 2002) through different structural arrangements. To develop hypotheses about how the nature of the collaborative relationship affects services, we draw primarily from the policy research on early care and education.

First, collaboration with another funding source or another organization may have important consequences for an organization with respect to the depth of services provided. Interagency collaboration can allow an organization to expand its overarching services based on the addition of fiscal and nonfiscal resources attached to a particular collaborative enterprise (Oliver 1997). In early care and education, this impact generally translates into increased availability of other supportive services to families, beyond direct classroom services. Unlike most child care centers, Head Start and preschool programs typically include additional services for children and families (Sandfort and Selden 2001). For example, federal Head Start rules require that programs provide health and developmental screenings; referrals to health, mental health, and social services; and parental education and involvement, most often facilitated by a family support worker assigned to the classroom (DHHS 2002). Similarly, according to the Children's Defense Fund, many state preschool programs have similar requirements or strongly encourage local programs to provide these types of comprehensive services (Schulman, Blank, and Ewen 1999; Selden and Chukwu 2001).

When a local child care center fiscally integrates Head Start or preschool funds into its agency or partners with another organization, it suddenly has both the mandates and the resources to provide these other services. Therefore, the requirements of the partner agencies will have an impact of the depth and diversity of their services, beyond direct classroom services. This invites the following hypothesis:

H1: The intensity of the collaboration will affect the diversity of services provided to clients.

From a resource-based perspective, improved program quality and outcomes are the result, at least in part, of management actions, whether voluntary or involuntary, in the allocation of available resources (Oliver 1997). In the field of early care and education, the different organizations involved bring various resources to the relationship. Head Start and state preschool dollars also often carry with them resources and requirements to enhance physical classroom

From a resource-based perspective, improved program quality and outcomes are the result, at least in part, of management actions, whether voluntary or involuntary, in the allocation of available resources.

quality. Formalized curricula are common, with attention to children's individual learning patterns, age-appropriate skills, and activities that integrate elements of health and nutritional services into the program. The regulations for Head Start and some state preschool programs also require formal child assessment and observation to assist teachers in appropriate curricular planning (DHHS 1999, 2002; Schulman, Blank, and Ewen 1999). Many early care and education researchers believe that higher-quality education and care are associated with better developmental outcomes (Bowman, Donovan, and Burns 2001; Lamb 1998). A National Research Council study found that "children who attend well-planned, high-quality early childhood programs . . . tend to learn more and are better prepared to successfully master . . . formal schooling" (Bowman, Donovan, and Burns 2001, 6). Since the National Education Goals Panel announced that "by the year 2000, all children in America will start school ready to learn" (Love, Aber, and Brooks-Gunn 1999, 1), considerable attention in early care and education has shifted to the concept of school readiness and how to measure that concept (Kagan 1999).

H2: The intensity of the collaboration will affect classroom quality (in terms of physical resources).

H3: The intensity of the collaboration will affect client outcomes (school readiness).

H4: Higher classroom quality will lead to better client outcomes (school readiness).

The blending of public early childhood resources may also lead to changes in human resource management and practices, such as increased pay and professional development among early childhood professionals. Traditionally, teachers in child care classrooms receive lower salaries and fewer benefits than teachers in Head Start or preschool classrooms (Whitebrook, Howes, and Phillips 1998). According to the U.S. Bureau of Labor Statistics, child care workers earned a median hourly wage of $7.03 in 1997, compared to $9.09 for preschool teachers. The salary differential reflects the different credentials required by the three systems, with preschool and Head Start generally requiring higher education and training credentials of lead teachers.[4] Formal early childhood education and training are consistently linked to positive caregiver behaviors and classroom quality (Bowman, Donovan, and Burns 2001). Even though teachers with particular educational credentials earn higher wages than those without, the salaries in the field are still considered low (Whitebrook, Howes, and Phillips 1998). The National

Child Care Staffing Study found that wages were the most important predictor of staff turnover (Whitebrook, Howes, and Phillips 1998, 74). Therefore, we believe that interagency collaboration in this field provides resources that can improve salaries or benefits, which will result in greater teacher satisfaction related to pay and benefits. In turn, teacher satisfaction with pay and benefits is likely to result in less teacher turnover.

> **H5:** The intensity of the collaboration will affect teacher pay.
>
> **H5a:** The intensity of the collaboration will affect teacher satisfaction with pay.
>
> **H5b:** The intensity of the collaboration will affect teacher salaries.
>
> **H6:** The intensity of the collaboration will affect teacher satisfaction with employee benefits.
>
> **H7:** The intensity of the collaboration will result in lower voluntary turnover.

Data, Measures, and Methods

The data used in this article are drawn from the research study Investigating Partnerships in Early Childhood Education (I-PIECE), which utilizes a structured, comparative case study design and multiple data-collection methods. The study includes 20 sites that are collaborating across at least two areas in early care and education in New York State and the Commonwealth of Virginia. These two states were selected because of similarities and differences in early care and education policy, and 10 sites were included from each state. Both states administer child care subsidies at the local level and allow for service variation across localities within the state. Both states developed preschool programs in their state departments of education and allow these programs to be run by both public agencies and community contractors. Local school districts can contract with an array of other agencies, including child care centers and Head Start grantees, to offer preschool care.

These preschool programs differ in terms of who is theoretically eligible for services and how services are funded, allowing for an exploration of differences in program design. In 1997, the New York State legislature enacted a law appropriating funds for the Universal Prekindergarten (UPK) program. Although the law mandates a part-day, school-year program, the program allows local agencies to develop strategies to meet the scheduling needs of families. To facilitate this, the law requires that *at least* 10 percent of UPK money be contracted out by local school districts to existing community agencies. In contrast to New York's mandate of collaboration with community agencies such as Head Start grantees and child care

providers, Virginia's preschool legislation was specifically crafted to target at-risk children who were not being served by Title 1 or Head Start. Moreover, unlike in New York, Virginia school districts must provide revenue to match the state dollars for the program. In New York, part of the day of four-year-old students may be funded by UPK and the other part by Head Start. In Virginia, an individual child cannot receive funding for part of the day from both sources. However, a classroom can have some children who are funded by the Virginia Preschool Initiative and others who are funded by Head Start (a three-way collaboration).

The paucity of knowledge regarding the nature of the population undertaking these collaborations rendered random sampling impossible for this study. Therefore, we selected sites in both states using purposeful theoretical and snowball sampling. The sites were selected to represent a range of collaboration types, organizational sizes, and geographic locations. Our sample contains seven sites collaborating with state preschool and the DSS, seven sites collaborating with Head Start and the DSS, and six sites collaborating across all three areas.

The data-collection techniques employed instruments that collected qualitative and quantitative data: semi-structured, in-depth interviews, surveys, structured observations, structured assessments of clients, and document analysis. In constructing the survey, interview, and document-analysis protocols, we first conducted preliminary ethnographic observations in three pre-test organizations to gain an understanding of how these organizations operate, the management structures prevalent in these organizations, and the particular characteristics of the programs they operate and the clients they serve. We received a 100 percent response rate to our organizational survey, early education and management survey, management survey, and teacher survey. We surveyed 367 parents and obtained an 80 percent response rate.[6]

In the appendix, we provide information on the operationalization of each variable included in the analysis and information about the construction of each index used in the analysis, including the range, mean, standard deviation, and alpha coefficient.

We examined the hypotheses using both bivariate and multivariate techniques. First, we used difference of means and correlation coefficients (controlling for the state policy context) to examine the relationship between the intensity of the collaborative relationship and particular management and program outcomes. Then, we used ordinary least squares to examine hypotheses predicting client outcomes, measured by school readiness. Although school readiness is only one outcome sought by some of the programs examined in this study, we contend that it is one of the

most important outcomes across state preschool and Head Start programs. Many state legislatures have invested in preschool programs believing that "participation in high-quality early childhood education programs increases children's readiness for school" (DHHS 1999, 2). Moreover, as the amount of public support for early care and education increases, external pressures increase to hold those programs accountable for school readiness (Bowman, Donovan, and Burns 2001). However, the best method of measuring school readiness has not yet been determined (Bowman, Donovan, and Burns 2001; DHHS 1999; Love, Aber, and Brooks-Gunn 1999). Kagan notes that "a decade after the call was issued, an agreed-upon standard [of school readiness] is not yet in place" (DHHS 1999, 3). A report by the National Research Council notes the potential misuses of traditional standardized tests and measurements (Bowman, Donovan, and Burns 2001). Love, Aber, and Brooks-Gunn (1999) suggest using a diversity of methods to gauge school readiness, including parental reports, kindergarten and first-grade teacher reports, principal and assistant principal reports, and community data. Because we did not track preschool students after they left their programs, we have limited our analysis to parental reports of school readiness.

Our multivariate analysis is limited to explaining school readiness because, in our study, measures of management outcomes and classroom quality were limited to 20 observations. We use the Early Childhood Environmental Rating Scale (ECERS) to measure process quality in the classroom.

Findings

Management Processes and Outcomes

The collaborative relationship is associated with some differences in management processes and outcomes. As table 1 shows, we found support for hypothesis 6. Teachers were significantly more satisfied with their benefits as the intensity of the collaborative relationship increased. It appears that working across policy domains does benefit staff through management processes. Whether it is the additional resources that are available to a center funded by preschool and Head Start dollars or whether it is that Head Start operated programs, unlike most child care centers, offer their

employees a comprehensive benefits package, staff are more satisfied with the benefits that are available through collaborations, with particularly high satisfaction associated with the three-way collaborations. In early education and care, one of the most important resources of an organization providing these services is their staff, with personnel representing the primary expenditures of these organizations. It makes sense that the more resources an organization can marshal, the better it can support its staff through salary and benefit increases. Therefore, as demonstrated, collaboration represents a sound management strategy for bringing in more resources to better support and promote greater satisfaction among staff.

Moreover, as expected, we found turnover significantly higher in the two-way collaborative relationships than in the more intense three-way collaborations. Based on our qualitative data, this may be because the three-way collaboration, as demonstrated by our previous finding, provides more incentive for teachers to remain in their positions. Most of the teachers with whom we spoke enjoyed their work and particularly enjoyed working in community-based organizations. For these teachers, providing early care and education services is a labor of love; few individuals working in this field have any expectation of receiving a high salary. However, especially for certified teachers, working in nonprofit organizations often represents a struggle to balance their love for their job with their need for a better salary; in the two-way collaboration, the impact on salary may not be enough to tip balance in favor of remaining with the nonprofit organizations. In addition, there may be a peculiarly adverse relationship between the preschool/DSS collaboration and turnover: Some teachers may view working in this form of collaboration as a way to make contact with the school district in the hope of moving into a position promising greater benefits and opportunity for advancement. Therefore, although collaborations benefit nonprofit organizations by increasing teacher satisfaction, they must be particularly intense in order to reduce voluntary turnover.

Program Services and Quality

As expected, we found that the nature of the collaborative relationship affected the array of services

Table 1 Management Processes and Outcomes

| | Collaborative Relationship | | | |
	PreK/DSS	HS/DSS	HS/PreK/DSS	Partial Correlation[a]
Satisfaction with pay	10.83*	14.15	12.90	.29*
Annual salary	$25,201*	$27,572	$29,105	.20*
Satisfaction with benefits	6.13**	13.47	14.77	.71**
Voluntary turnover	25.51**	18.6	15.82	−.22**

Note: Significance shown only in the first column for the difference of means tests.

[a] Controls for state policy context.

**Significant at .05 level; *significant at .10 level.

Table 2 Program Services, Quality and Outcomes

	Collaborative relationship			
	PreK/DSS	HS/DSS	HS/PreK/DSS	Partial Correlation[a]
Diversity of services	8.86**	12.14	13.20	.45**
Overall ECERS	5.09**	5.08	5.54	.28**
Space and furnishings	4.66**	4.98	5.39	.49**
Personal care routines	5.71	5.33	6.15	.14
Language reasoning	5.32	4.93	5.38	.05
Activities	4.68*	4.81	5.30	.24*
Interaction	6.00	5.02	6.08	.07
Program structure	5.43**	5.77	6.22	.36**
Parent and staff	4.64	5.02	4.83	.21
School readiness (parental perception)	6.30	6.60	6.45	.02

Note: Significance shown only in the first column for the difference of means tests.

[a] Controls for state policy context.

**Significant at .05 level; *significant at .10 level.

provided to children and their families (see table 2). From our qualitative data, we found that, especially for nonprofit child care centers, engaging in a collaboration that brings in preschool and/or Head Start funding can provide centers with additional services such as an on-site nurse; a full-time family worker to provide parent education and conduct home visits; and additional medical, social, and mental health services. We also found, as expected, that classroom quality, as measured by the ECERS, was significantly higher in the three-way collaborative relationships. We also examined the dimensions of the ECERS to identify whether there were any particular dimensions that stood out. We found that furnishings, activities, and program structure were greatly influenced by the collaborative relationships. These findings are explained by the fact that collaborations in early education and care provide resources and knowledge to providers, allowing them to improve the quality of the services they provide and the physical setting in which services are delivered. The influx of monetary resources provided to organizations through collaborations allows them to purchase additional materials for classrooms, such as furnishings for the developmental activity centers generally present in classrooms with high ECERS scores.[8] In addition, collaboration with preschool and Head Start programs generally brought more structured curriculums and more formalized schedules of activities, two aspects of programming that are likely to improve a provider's ECERS score. In our interviews with teachers, we also found that collaboration helped to involve teachers in their larger professional community, allowing them to attend inservice trainings where they could meet teachers from other programs. The impact of collaboration on aspects of the ECERS such as activities and program structure may be a result of teachers' ability to gain ideas and practices from their greater involvement in professional development and through their interactions with other professionals.

Client Outcomes

Table 3 presents the study's regression analysis predicting school readiness. We found that the collaborative relationship had a statistically significant impact on students' school readiness. This finding is particularly important because the study controls for many other factors, including the quality of care and parental demographics that influence school readiness. As expected and consistent with previous research, we found that classrooms of higher process quality were associated with greater student school readiness. From the parents' perspective, the quality of care does have a meaningful effect on a child's development and preparation for school. We found that parents' perceptions of teacher quality were significant predictors of school readiness. Our finding is consistent with Henry, Henderson, and Basile's (2000) research, which demonstrates a strong linkage between teaching styles and

Table 3 Results of Regression for Client Outcome, School Readiness

	B	s.e.
Intensity of collaboration	.32**	.16
Classroom quality (ECERS)	.31**	.14
Parental perception of teacher quality	.20***	.02
Lead teacher education	.00	.04
Floaters in classroom	−.23*	.13
Voluntary turnover	.00	.00
Child receives services for disability	.38**	.13
Program include home visits	−.47	.30
Program schedules regular activities for parents	−.43	.55
Individualized family plan for child	−.00	.10
Parental age	−.00**	.01
Parental gross income	−.00	.06
Parental education	−.00	.04
Policy context: New York	−.76**	.25
R^2 = .55		
F = 15.69	N = 198	

***Significant at .001 level; **significant at .05 level; *significant at .10 level.

child readiness for kindergarten. However, unlike previous research, we found no linkage between the education of the lead teacher and student readiness for school, another commonly used measure of quality (Vandell and Wolfe 2002). A possible explanation for this finding is the negative and statistically significant relationship between collaborative relationship and lead teacher qualifications. This may be a direct result of the requirement, particularly in New York State, that teachers in state preschool environments have a college education and early education certification.

We also found that using floaters was negatively associated with school readiness. The use of floaters may affect the quality of care that students receive because of the lack of continuity. Finally, we found that perceptions of school readiness were significantly lower in New York than in Virginia. There are many possible explanations for this, some of which may be beyond the purview of this article. However, a strong explanation may be that parents in New York have higher expectations for early education and care than those in Virginia. New York is generally considered one of the leading states in terms of resources and regulations in early education and care (*Education Week* 2002). Parents, possibly aware of this, may expect more from these collaborations in New York State. However, without a detailed exploration of parents' perceptions in the two states, it is difficult to posit a precise explanation for this finding.

Conclusion

Interagency collaboration is based on the premise that value is created—both for the organizations and for the clients they serve—when disparate organizations work together. This value may come in many forms, from reduced duplication of services to improved service technologies to treat the needs of clients. This article has examined interagency collaborations for the delivery of early education and care services. We found that collaborations have a demonstrable impact on management processes and outcomes, improving the working experience of teachers and frontline workers in these organizations, as shown by their increased satisfaction with benefits and career opportunities. In addition, we found that collaborations had a significant impact on programs operated by the collaborating organizations, with an increased array of services offered to families and improved quality of classroom facilities.

We also found that in addition to its impact on management and program processes, collaboration had a direct impact on the experiences of clients. Parents whose children were served through these collaborations believed they had a positive impact on school readiness, controlling for other factors that might influence school readiness. In line with the argument that early education and care exists partly to improve children's readiness to enter kindergarten—to give them a "head start" on their educational experience—this study concludes that interagency collaboration in early education and care can be a positive organizational tool for improving the ability of providers to achieve these outcomes.

However, it is important to note that interagency collaboration can have some negative, possibly unanticipated consequences. Interagency collaboration had a statistically positive impact on voluntary turnover in the 20 organizations investigated in this article, and this effect was particularly pronounced for organizations in two-way collaborations between preschool and DSS funds. Because nonprofit child care providers often operate on tight budgets with low salaries and benefits, collaboration may open a career door for teachers with high qualifications and experience, allowing them to move into the other institutional sectors of early education and care that provide better salaries and benefits, such as kindergarten programs provided through school districts.

More research is needed on the long-term impact of interagency collaborations, in particular for nonprofit child care centers. It is possible that these organizations experience some short-term gains in terms of more resources and the acquisition of highly qualified teachers (or the cultivation of greater expertise through better training and professional development) but suffer in the long-run as these teachers leave for greener pastures in school districts or Head Start programs. However, these challenges lead to broader questions concerning the logic and the equity inherent in the institutional design of the public system of early education and care in the United States— questions that are beyond the scope of this article.

> Interagency collaboration is based on the premise that value is created—both for the organizations and for the clients they serve—when disparate organizations work together.

In conclusion, this study has demonstrated that interagency collaboration has clear impacts on the management, program, and client outcomes of organizations engaged in collaborative relationships. In addition, we have shown that it is important to look deeper into these collaborative relationships, not simply classifying them by type but also modeling their intensity. The intensity of collaborative relationships has differential impacts on program outcomes. This study has produced some crucial findings, but more research is needed both within early education and care and in other policy fields on the impact of collaborative relationships. Only then can we make statements on whether the current direction of public-service

production in the "hollow state" is following the right path for better results.

Acknowledgments

Notes

1. There are as many definitions of what constitutes an interagency collaboration as there are collaborations being undertaken for the production of human services. For the purposes of this article, we believe the following definition best captures what we view as an interagency collaboration: "Any joint activity by two or more agencies that is intended to increase public value by their working together rather than separately" (Bardach 1998, 8).

2. These three institutional systems are (1) Head Start, a federal program operated through local contractors; (2) state prekindergarten programs; and (3) federal child care subsidies, which are administered in the two states in this study through local departments of social services.

3. According to a survey conducted by the National Head Start Association in 1993, only 1 percent of children received full-day, full-year care.

4. Preschool teachers in New York and Virginia must be certified in early childhood education (Schulman, Black, and Ewen 1999; Selden and Chukwu 2001). In addition, the Head Start Reauthorization Act of 1998 required that, by September 30, 2003, at least half of all Head Start teachers in center-based programs have an associate, baccalaureate, or advanced degree in early childhood education or a related field, as well as preschool teaching experience.

5. Although the number of children being served each year has increased, budget conflicts in New York have prevented full implementation of the Universal Prekindergarten law as of this writing.

6. Because our field work spanned one year, we lost many of these parents because their children left the center.

7. The instrument consisted of 43 items covering seven areas: personal care routines, language reasoning experiences, activities, staff–child interaction, program structure, parents, and staff. Each of the 43 items was rated on a scale of 1 (minimal) to 7 (excellent) by an observer (Harms, Clifford, and Cryer 1998). The instrument has been widely used in research on early care and education (Vandell and Wolfe 2002).

8. In our interviews with the 20 sites, we found much support for the fact that collaboration allows for the purchase of additional resources to improve the furnishings of the classrooms. The ECERS instrument requires the presence of activity centers that provide developmentally appropriate activities for children. In many of the sites, providers, through the influx of new resources, were able to provide the equipment needed to offer more sophisticated activities, such as costly furnishings for a dramatic play center and computers. In addition, at one site (a child care center), collaboration with Head Start permitted construction of restrooms adjoining the classrooms.

References

Adams, Gina, and Jodi Sandfort. 1994. *First Steps, Promising Futures: State Pre-Kindergarten Initiatives in the 1990s*. Washington, DC: Children's Defense Fund.

Adams, Gina, Karen Schulman, and Nancy Ebb. 1998. *Locked Doors: States Struggling to Meet the Child Care Needs of Low-Income Working*. Washington, DC: Children's Defense Fund.

Agranoff, Robert, and Alex N. Pattakos. 1979. *Dimensions of Services Integration: Service Delivery, Program Linkages, Policy Management and Organizational Structure*. Washington, DC: U.S. Department of Health, Education, and Welfare.

Attkisson, C. Clifford. 1992. Clinical Services Research. *Schizophrenia Bulletin* 18(4): 561–625.

Austin, James E. 2000. Strategic Collaboration between Nonprofits and Business. *Nonprofit and Voluntary Sector Quarterly* 29(1): 69–97.

Bardach, Eugene. 1998. *Getting Agencies to Work Together: The Practice and Theory of Managerial Craftsmanship*. Washington, DC: Brookings Institution Press.

Beatrice, Dennis F. 1990. Inter-Agency Coordination: A Practitioner's Guide to a Strategy for Effective Social Policy. *Administration in Social Work* 14(4): 45–59.

Bond, Garr. R. 1991. Variations in an Assertive Outreach Model. *New Directions for Mental Health Services* 52: 65–80.

Bowman, Barbara, M. Suzanne Donovan, and M. Susan Burns, eds. 2001. *Eager to Learn: Educating Our Preschoolers*. Washington, DC: National Academy Press.

Buescher, P., M. Roth, D. Williams, and C. M. Goforth. 1991. An Evaluation of the Impact of Maternity Care Coordination on Medicaid Birth Outcomes in North Carolina. *American Journal of Public Health* 81(12): 1625–29.

Chamberlain, Ronna, and Charles A. Rapp. 1991. A Decade of Case Management: A Methodological Review of Outcome Research. *Community Mental Health Journal* 27(3): 171–88.

Cohen, Abby J. 1996. A Brief History of Federal Financing for Child Care in the United States. *The Future of Children: Financing Child Care* 6(2): 26–39.

Cohn, Anne, and Beverly DeGraff. 1982. Assessing Case Management in the Child Abuse Field. *Journal of Social Service Research* 5: 29–43.

Education Week. 2002. Quality Counts 2002: Building Blocks for Succes*s*. January 11.

Farel, Anita M., and Kathleen A. Rounds. 1998. Perceptions about the Implementation of a Statewide Service Coordination Program for Young Children: Importance of Organized Context. *Families in Society* 79(6): 606–14.

Foster-Fisherman, Pennie, Deborah Salem, Nicole Allen, and Kyle Fahrbach. 2001. Facilitating Interorganizational Collaboration: The Contributions of Interorganizational Alliances. *American Journal of Community Psychology* 29(6): 875–906.

Gans, Sheldon, and Gerald Horton. 1975. *Integration of Human Services: The State and Municipal Levels*. New York: Praeger.

Glisson, Charles, and Larry James. 1992. The Interorganizational Coordination of Services to Children in State Custody. *Administration in Social Work* 16(3/4): 65–80.

Gray, Barbara. 1989. *Collaborating*. San Francisco: Jossey-Bass.

Gray, Barbara, and Donna Wood. 1991. Toward a Comprehensive Theory of Collaboration. *Journal of Applied Behavioral Science* 27(2): 139–62.

Hall, Richard H. 2002. *Organizations: Structures, Processes, and Outcomes*. 8th ed. Upper Saddle River, NJ: Prentice Hall.

Harms, Thelma, Richard Clifford, and D. Cryer. 1998. *Early Childhood Environmental Rating Scale*. Rev. ed. New York: Teachers College Press.

Head Start Bureau. 1999. *Funding Guidance— FY1999 Head Start Expansion*. Washington, DC: Administration on Children, Youth and Families. ACYF-PI-HS-99–02.

Henry, Gary T., Laura W. Henderson, and Kathleen C. Basile. 2000. Influence of Preschool Teaching Models on Student Outcomes. Unpublished manuscript.

Jennings, Edward T., and JoAnne Ewalt. 1998. Interorganizational Coordination, Administrative Consolidation and Policy Performance. *Public Administration Review* 58(5): 417–29.

Kagan, Sharon L. 1991. *United We Stand: Collaboration for Child Care and Early Education Services*. New York: Teachers College Press.

———. 1993. *Integrating Services for Children and Families*. New Haven, CT: Yale University Press.

———. 1999. Cracking the Readiness Mystique. *Young Children* 54: 2–3.

Kisker, Ellen E., and Christine M. Ross. 1997. Arranging Child Care. *Future of Children: Welfare to Work* 7(1): 99–109.

Kuntz, Kathyrn R. 1998. A Lost Legacy: Head Start's Origins in Community Action. In *Critical Perspectives on Project Head Start: Revisioning the Hope and the Challenge*, edited by Jeanne Ellsworth and Lynda J. Ames, 1–48. Albany: State University of New York Press.

Lamb, Michael E. 1998. Nonparental Child Care: Context, Quality, Correlates, and Consequences. In *Handbook of Child Psychology, Vol. 4: Child Psychology in Practice*, edited by W. Damon, I. E. Sigel, and K. A. Renninger, 73–134. New York: Wiley.

Lawrence, Thomas B., Cynthia. Hardy, and Nelson. Phillips. 2002. Institutional Effects of Interorganizational Collaborations: The Emergence of Proto-Institutions. *Academy of Management Journal* 45(1): 281–90.

Love, John M, J. L. Aber, and Jeanne Brooks-Gunn. 1999. *Ready or Not, Here They Come: Strategies for Achieving School Success for All Kansas City Children*. Kansas City, MO: Ewing Marion Kauffman Foundation.

Martin, Patricia, Richard Chackerian, Allen W. Imerchein, and Michael L. Frumkin. 1983. The Concept of "Integrated" Services Reconsidered. *Social Science Quarterly* 64(4): 747–63.

Mattessich, Paul, and Barbara Monsey. 1992. *Collaboration: What Makes It Work*. St. Paul, MN: Amherst Wilder Foundation.

Milward, H. Brinton. 1996. The Changing Character of the Public Sector. In *Handbook of Public Administration*, 2nd ed., edited by James L. Perry, 77–91. San Francisco: Jossey-Bass.

Milward, H. Brinton, and Keith Provan. 1995. A Preliminary Theory of Interorganizational Effectiveness: A Comparative Study of Four Community Mental Healthy Systems. *Administration Science Quarterly* 40(1): 1–33.

———. 1998. Principles for Controlling Agents: The Political Economy of Network Structure. *Journal of Public Administration Research and Theory* 8(1): 203–22.

Mitchell, Anne, Carol Ripple, and Nina Chanana. 1998. *Prekindergarten Programs Funded by the States: Essential Elements for Policy Makers*. New York: Families and Work Institute.

Mitchell, Shannon, and Stephen Shortell. 2000. The Governance and Management of Effective Community Health Partnerships: A Typology for Research, Policy and Practice. *Milbank Quarterly* 78(2): 241–89.

Mulroy, Elizabeth A., and Sharon Shay. 1998. Motivation and Reward in Nonprofit Interorganizational Collaboration in Low-Income Neighborhoods. *Administration in Social Work* 22(4): 1–17.

Oliver, Christine. 1990. Determinants of Interorganizational Relationships: Integration and Future Directions. *Academy of Management Review* 15(2): 241–65.

O'Regan, Katherine, and Sharon Oster. 2000. Nonprofit and For-Profit Partnerships: Rationale and Challenges of Cross-Sector Contracting. *Nonprofit and Voluntary Sector Quarterly* 29(1): 120–39.

O'Toole, Laurence J., Jr. 1997. Treating Networks Seriously: Practical and Research-Based Agendas in

Public Administration. *Public Administration Review* 57(1): 45–52.

Poole, Dennis L., and Mary Van Hook. 1997. Retooling for Community Health Partnerships in Primary Care and Prevention. *Health and Social Work* 22(1): 2–5.

Powell, Walter W. 1990. Neither Market nor Hierarchy: Network Forms of Organization. *Research in Organizational Behavior* 12: 295–336.

Sabatier, Paul, et al. 2001. *Six Measures of Success for Watershed Partnerships and an Analysis of the Factors Affecting Success*. Paper presented at the Conference on Evaluating Environmental Dispute Resolution, Washington, DC.

Sandfort, Jodi. 2001. The Context of Early Childhood Education: A Comparison of New York and Virginia. White paper, Investigating Partnerships in Early Childhood Education Study, Lynchburg College.

Sandfort, Jodi, and Sally C. Selden. 2001. Blurring the Boundaries: Local Collaborations Between Head Start, Preschool, and Child Care Programs. *Policy and Practice* 59: 18–23.

Schulman, Karen, Helen Blank, and Danielle Ewen. 1999. *Seeds of Success: State Prekindergarten Initiatives, 1998–1999*. Washington, DC: Children's Defense Fund.

Schumacher, Rachel, Mark Greenberg, and Janellen Duffy. 2001. *The Impact of TANF Funding on State Child Care Subsidy Programs*. Washington, DC: Center for Law and Social Policy.

Selden, Sally C., and Kingsley Chukwu. 2001. Early Childhood Education in Virginia. White paper, Investigating Partnerships in Early Childhood Education Study, Lynchburg College.

St. Pierre, Robert, and Jean Layzer. 1997. *The Effectiveness of Comprehensive Case Management Interventions: Findings from the National Evaluation of the Comprehensive Child Development Program*. Cambridge, MA: ABT Associates.

Stein, Leonard I., and Mary Ann Test. 1985. The Training in Community Living Model: A Decade of Experience. *New Directions for Mental Health Services* 26: 1–98.

Stone, Melissa M. 1996. Competing Context: The Evolution of a Nonprofit Organization's Governance System in Multiple Environments. *Administration & Society* 28(1): 61–89.

———. 2000. Exploring the Effects of Collaborations on Member Organizations: Washington County's Welfare-to-Work Partnership. *Nonprofit and Voluntary Sector Quarterly* 29(1): 98–119.

Sowa, Jessica. 2001. Why Collaborate? Motivations for Early Childhood Education Partnerships. White paper, Investigating Partnerships in Early Childhood Education Study, Lynchburg College.

U.S. Department of Heath and Human Services (DHHS). 2002. Head Start Regulations, Title 45 of the Code of Federal Regulations, Parts 1301 through 1311 (Program Performance Standards for the Operation of Head Start Programs by Grantee and Delegate Agencies). www.acf.hhs.gov/programs/hsb/pdf/1304_ALL.pdf [accessed February 2, 2006].

———. 1999. Proceedings of the New England Meeting of State Child Indicators Projects: Forum on School Readiness and Child Care Indicators. http://aspe.hhs.gov/hsp/cyp/child-ind98/ne-forum.htm [accessed February 28, 20062, 2006].

Vandell, Deborah L., and Barbara Wolfe. 2002. *Child Care Quality: Does It Matter and Does It Need to Be Improved?* Madison: University of Wisconsin, Institute for Research and Poverty.

Weiss, Janet A. 1981. Substance vs. Symbol in Administrative Reform: The Case of Human Services Coordination. *Policy Analysis* 7(1): 20–45.

Whetten, David. 1981. Interorganizational Relations: A Review of the Field. *Journal of Higher Education* 52(1): 1–28.

Whitebrook, Marcy, Carollee Howes, and Deborah Phillips. 1998. *Who Cares? Child Care Teachers and the Quality of Care in America: Final Report National Child Care Staffing Study*. Washington, DC: Center for Child Care Workforce.

Zigler, Edward F., and Sally Styfco. 1996. Head Start and Early Childhood Intervention: The Changing Course of Social Science and Social Policy. In *Children, Families and Government: Preparing for the 21st Century*, edited by Edward F. Zigler, Sharon L. Kagan, and Nancy W. Hall, 132–55. New York: Cambridge University Press.

Zuckerman, Howard S., Arnold D. Kaluzny, and Thomas C. Ricketts III. 1995. Alliances in Health Care: What We Know, What We Think We Know, and What We Should Know. *Health Care Management Review* 20(1): 54–64.

Appendix Index Construction

Satisfaction with Pay (mean = 12.75, std = 3.92, range = 6–20.50, Cronbach's alpha = 0.90)

The following five questions combined, all with scales ranging from 1 = strongly disagree to 5 = strongly agree:

- In general, I am satisfied with my salary.
- My salary is fair considering my background and skills.
- My salary is fair considering my coworker's pay.

- My salary is fair considering my job responsibilities.
- In general, I am satisfied with my pay given the amount of work I do.

Satisfaction with Benefits (mean = 11.33, std = 4.99, range = 1–21, Cronbach's alpha = 0.94)

The following five questions combined, all with scales ranging from 1 = strongly disagree to 5 = strongly agree;

- In general, I am satisfied with my health insurance benefits.
- In general, I am satisfied with my dental insurance benefits.
- In general, I am satisfied with my retirement benefits.
- In general, I am satisfied with my life insurance benefits.
- In general, I am satisfied with my child care benefits.

School Readiness (mean = 6.45, std = 1.06, range = 2.5–7, Cronbach's alpha = 0.84)

The following two questions combined, all with scales ranging from 1 = strongly disagree to 5 = strongly agree:

How satisfied are you with how well the center is . . .

- Helping my child to grow and develop
- Preparing my child to enter kindergarten

Teacher Quality (mean = 19.99, std = 3.00, range = 4–22, Cronbach's alpha = 0.89)

The following six questions combined, all with scales ranging from 1 = never to 4 = always:

- My child gets lots of individual attention.
- The teacher is warm and affectionate to my child.
- My child is treated with respect by teachers.
- My child's teacher is open to new information and learning.
- The teacher is supportive of me as a parent.
- The teacher accepts the way I raise my child.

Descriptive Statistics of Other Variables in Table 3

	Mean	Std Dev.
Intensity of collaboration	1.95	.80
Classroom quality (ECERS)	5.23	.49
Lead teacher education	3.48	1.35
Floaters in classroom	.76	.43
Voluntary turnover	20.14	15.45
Child receives services for disability	.17	.37
Program include home visits	.86	.34
Program schedules regular activities for parents	.86	.35
Individualized family plan for child	.96	.83
Parental age	31.09	8.75
Parental gross income	4.28	1.75
Parental education	3.76	1.45
Policy context: New York	.50	.50