



PII S0145-2134(98)00005-2

THE EFFECTS OF ORGANIZATIONAL CLIMATE AND INTERORGANIZATIONAL COORDINATION ON THE QUALITY AND OUTCOMES OF CHILDREN'S SERVICE SYSTEMS

CHARLES GLISSON AND ANTHONY HEMMELGARN

Children's Mental Health Services Research Center, The University of Tennessee, Knoxville, TN, USA

ABSTRACT

Objective: This study examines the effects of organizational characteristics, including organizational climate and interorganizational coordination, on the quality and outcomes of children's service systems.

Method: A quasi-experimental, longitudinal design was used to assess the effects of increasing interorganizational services coordination in public children's service agencies. The research team collected both qualitative and quantitative data over a 3-year period describing the services provided to 250 children by 32 public children's service offices in 24 counties in Tennessee.

Results: Findings show that organizational climate (including low conflict, cooperation, role clarity, and personalization) is the primary predictor of positive service outcomes (the children's improved psychosocial functioning) and a significant predictor of service quality. In contrast, interorganizational coordination had a negative effect on service quality and no effect on outcomes.

Conclusions: Efforts to improve public children's service systems should focus on creating positive organizational climates rather than on increasing interorganizational services coordination. This is important because many large-scale efforts to improve children's service systems have focused on interorganizational coordination with little success and none to date have focused on organizational climate. © 1998 Elsevier Science Ltd

Key Words—Organizational climate, Children's services, Cooperation, Interorganizational coordination.

INTRODUCTION

CHILDREN ARE ENTERING state custody in increasingly higher numbers. It is estimated that close to one million children are currently in the custody of state agencies (Barth, Courtney, Berrick, & Albert, 1994; Center for the Study of Social Policy, 1990, 1993; National Center on Child Abuse and Neglect, DHHS, 1996). The majority of these children are in custody for reasons of parental abuse or neglect, and most of the other children who are in custody are there for status offenses (such as truancy or running away) or delinquent behavior. In Tennessee, over 50,000 children are referred to juvenile and family courts each year for abuse, neglect, status offenses or delinquency, and the number of children placed in state custody each year by these courts has increased by 27% in the last four years and doubled in the past decade (Tennessee Commission on Children and Youth, 1997; Tennessee Council of Juvenile and Family Court Judges, 1995).

This research was supported by NIMH grants MH46124 and MH53623.

Received for publication July 2, 1997; final revision received November 4, 1997; accepted November 5, 1997.

Reprint requests should be addressed to Charles Glisson, Ph.D., Director, Children's Mental Health Services Research Center, 128 Henson Hall, The University of Tennessee, Knoxville, TN 37996-3332.

As a result of the increasing numbers of children in custody, decreasing resources, and doubts about the effectiveness of systems that serve children in custody, many states have experimented with organizational strategies for improving children's service systems (Behar, 1985; Rosenblatt & Attkisson, 1992). These strategies have focused on innovative changes in the organizational configurations of service systems that do not increase costs. For example, it has been argued that the multiple problems faced by children referred for custody require improvements in the inter-organizational coordination of services among child welfare, juvenile justice, education and mental health systems (Burns & Friedman, 1990; Dougherty, Saxe, Cross, & Silverman, 1987; Duchnowski & Friedman, 1990). This argument is based on the belief that the relatively low cost of improving services coordination among these systems will ensure that each child receives the most appropriate services, regardless of which system has first contact with the child. It is assumed that more appropriate services will result in better outcomes for the children.

In spite of the range of efforts in many different states to improve services to children entering state custody by changing organizational configurations, there has been relatively little research to document the outcomes of those efforts. Moreover, most of the efforts to improve these service systems have not taken advantage of the information provided in the organizational effectiveness literature in either designing the changes or in assessing their effects. Of the few studies that have been conducted to document the outcomes of efforts to improve services, most have taken program evaluation approaches with no attempt to measure specific organizational characteristics or to identify each characteristic's unique contribution to service outcomes (Hoagwood, 1997). Thus, with few exceptions, the evaluations of successes and failures have been limited to conclusions about the total effect of a collection of undifferentiated program components and contribute little to understanding the specific organizational components or processes that explain those successes and failures. To date, the results of these evaluations have been disappointing, providing little or no evidence that interorganizational services coordination or other innovative organizational configurations significantly improve service outcomes for children.

This study examines an innovative pilot program in Tennessee designed to improve children's services by reconfiguring the interorganizational mechanisms used to coordinate services. The program (labeled AIMS) created new, autonomous, case management teams to coordinate services from multiple systems to children entering state custody in 12 pilot counties in middle and eastern Tennessee. The study assesses the effects of organizational variables on service quality and outcomes in a sample of 32 public children's services offices located in the 12 pilot counties and 12 matched control counties. The children served by these organizations had been placed in state custody by juvenile and family court judges for neglect, abuse, status offenses, or delinquent behavior. Findings from this study question the effectiveness of interorganizational services coordination and related approaches to improving services. More importantly, the study is the first to provide evidence that organizational climate is a major predictor of the quality and outcomes of children's services.

This study also contributes to the more general human service organization literature concerned with the predictors of organizational effectiveness. Although the impact of *intraorganizational* and *interorganizational* variables on effectiveness has been the focus of much of the organizational research conducted in the last several decades, these efforts have most frequently included business and industrial organizations rather than human service organizations. Also, the efforts typically concentrate on only one of the two types of variables and rarely examine both *intraorganizational* and *interorganizational* characteristics simultaneously. As a result, there has been little effort to integrate both types of constructs within a single model of effectiveness or to compare their relative effects on outcomes. In this study, we develop and test a model of children's service system effectiveness that includes both *intraorganizational* and *interorganizational* variables.

Interorganizational Services Coordination

The study was funded as part of an effort by the National Institute of Mental Health (NIMH) to examine the effect of interorganizational services coordination on service system outcomes (National Institute of Mental Health, 1991; Steinwachs et al., 1992). NIMH and other funders such as the Robert Wood Johnson Foundation have supported several large projects designed to assess the extent to which interorganizational services coordination can improve the effectiveness of organizations that serve populations at risk of chronic mental health problems (Frank & Gaynor, 1994; Goldman, Morrissey, & Ridgely, 1994; Morrissey, Calloway, Bartko, Ridgely, Goldman, & Paulson, 1994). The impetus behind these efforts has come from the belief that the individuals and families most at risk require multiple types of services (Provan & Milward, 1995).

Children who are referred for state custody comprise one such group at risk. These children have been served traditionally by different primary service systems (e.g., child welfare, mental health, juvenile justice, health, education) depending on the configuration of service systems in the state and the particular problems for which the children were referred (e.g., abuse, neglect, truancy, running away, substance abuse, antisocial behavior). However, it has become increasingly evident that children referred for different reasons, as well as their families, share common problems and social histories (Glisson, 1996; Klee & Halfon, 1987; Melton & Flood, 1994). For example, it is not uncommon for a child who has run away to also have broken the law, experienced physical abuse and been diagnosed as suffering from learning problems. This suggests that these children and their families require a variety of services regardless of the presenting problem that resulted in a referral for state custody.

While interorganizational services coordination appears to be a logical and obvious way of addressing the multiple needs of those individuals most at risk, evaluations of services coordination efforts have been unsuccessful in documenting any major benefits (Hoagwood, 1997). Although the poor findings have been frustrating to those interested in developing mechanisms for improving service effectiveness, this lack of success actually supports some prior theoretical work on interorganizational relationships. While the initial theories of interorganizational relationships assumed coordination was always beneficial, especially for human services (Aiken, Dewar, DiTomaso, Hage, & Zeitz, 1975; Hall, Clark, Giordano, Johnson, & Roekel, 1977), these benefits were questioned in subsequent work. Scott (1985) specifically questioned the benefits of coordination for the mental health sector. This skepticism was based on the potentially positive features associated with both loosely-coupled systems and redundancy (Bendor, 1985; Landau, 1969; Weick, 1976). Scott (1985) suggested that an emphasis on coordination ignores the important roles played by the variety, responsiveness, and redundancy that are found in uncoordinated service systems. Bendor (1985), in particular, pointed out the benefits of having several uncoordinated but parallel systems provide services to the same population. His notion was that such parallel systems create a healthy competitiveness and provide backup systems for any systems that fail.

In spite of the conceptual critiques of services coordination and the limited empirical evidence to date supporting the value of coordination, most of the recent literature continues to argue for the benefits of interorganizational services coordination in the human service sector generally and in the mental health service sector in particular (Alter & Hage, 1993; Glisson, 1994; Goldman et al., 1992; Provan & Milward, 1995). In contrast, this study provides support for the work that questions the benefits of services coordination and suggests alternative organizational strategies for improving services to populations at risk of chronic mental health problems.

The Organizational Climate of Children's Service Organizations

The theoretical and research literature concerning the *interorganizational* coordination of services generally ignores the roles of *intraorganizational* factors in effective service delivery. This study provides evidence that this is a critical deficit by identifying one group of *intraorganizational*

variables, service provider attitudes, as a significant predictor of the quality and outcomes of children's services.

The impact of employee attitudes on the performance of work organizations has been the focus of extensive research over the last half century (see early reviews in Hellriegel & Slocum, 1974; James & Jones, 1980; Payne & Pugh, 1975; Schneider, 1975). This research suggests that attitudes shared by employees about their work environment (collectively labeled organizational climate) are important determinants of the organization's effectiveness. While most of this research has been conducted in business and industrial organizations, in recent years attention has been given to worker attitudes in other types of organizations, including government agencies and schools (Ostroff & Schmitt, 1993; Soloman, 1986). However, there has been almost no empirical research on the contribution of organizational climate to human service effectiveness, and none that examines the link between climate and the outcomes of human services that focus on improving individual psychosocial functioning. These human services are provided by mental health, child welfare, alcohol and drug recovery, family violence, and other organizations that focus on the psychological and social dimensions of the people they serve.

Recent studies have confirmed the importance of climate for the effectiveness and efficiency of other types of service organizations (Mayer & Schoorman, 1992; Ostroff & Schmitt, 1993). Although these studies have not focused on the types of human service organizations addressed here, the limited results to date indicate that climate plays as important a role in service organizations as in nonservice businesses and industrial organizations. Moreover, it is likely that climate plays a particularly important role in the performance of public children's service organizations. This assumption is based on the nature of the work required by caseworkers who address the problems experienced by children who are served by these organizations.

The nature of this work requires that caseworkers provide services to children and families who are at risk of a variety of physical and psychosocial problems. Because the effectiveness of these services depends heavily on the relationships formed between service providers and the people who receive the services, the attitudes of the service providers play an especially important role in the outcomes of services. Successful outcomes require caseworkers to be responsive to unexpected problems and individualized needs, tenacious in navigating the complex bureaucratic maze of state and federal regulations, and able to form personal relationships that win the trust and confidence of a variety of children and families. Also, caseworkers must perform their jobs in highly stressful situations that can involve, for example, angry family members or seriously emotionally disturbed children. Therefore, the levels of conflict, role clarity, job satisfaction, cooperation, personalization, and other variables that characterize the shared attitudes and climate of their work environments should be powerful determinants of how caseworkers respond to unexpected problems, the tenacity with which difficult problems are solved, and the affective tone of their work-related interactions with children and families.

Similar to the relationships formed between teachers and their students, successful relationships enable caseworkers to identify, understand, and address each child's individual profile of strengths and needs. Caseworkers must form these relationships in the face of very high caseloads, cope with the stressful nature of working solely with children who have been mistreated or who have behavioral problems, and manage to meet these children's needs in spite of the barriers presented by courts, bureaucratic service systems, and extremely limited resources. A principal reason these relationships are critical to outcomes is because for their work to be successful, caseworkers must be viewed by the children and families they serve as both available and responsive (Dozier, Cue, & Barnett, 1994). This requires that caseworkers react in a timely and supportive manner to what these children say and do, and that their interactions with the children and families be characterized by what Wahler (1994) has described as social continuity. That is, the interactions must be predictable, appropriate, and welcomed over an extended period of time to establish a pattern on which the children and families can depend and anticipate. For these reasons, effective casework

relationships are more likely to occur in organizations where caseworkers agree on their roles, are satisfied with their jobs, cooperate with each other, and personalize their work.

Because of the importance of worker attitudes to worker-client interactions, it is important that many public human service organizations are characterized by poor worker attitudes independent of salary, type of clients, and the education and experience of individual workers (Glisson & Durick, 1988). In addition, the organizations have high rates of employee turnover and low job satisfaction when compared to other types of organizations (Soloman, 1986). At the same time, there is considerable variance among public human service organizations in turnover, and worker attitudes range from very negative to modestly positive. This variance provides the opportunity for assessing the relationship between organizational climate and children's service outcomes.

The State-Sponsored Services Coordination Pilot Project

The state-sponsored AIMS pilot project examined in this study was designed to improve the outcomes of children's services through the use of interorganizational services coordination teams. The state implemented the pilot project for 3 years in two separate, six-county areas in middle and eastern Tennessee, respectively. The 12 counties included in the pilot areas ranged from the less populated (15,000) to the moderately populated (150,000). The pilot included rural counties in the poor Appalachian region of the state as well as more populated and prosperous counties, but did not include the state's major urban areas. The pilot services coordination teams could authorize services from any state-supported child welfare, juvenile justice, education, mental health, or health service organization, regardless of the state agency that was given physical custody of the child. It was expected that the teams would increase the level of coordination among the various direct service organizations so that an appropriate array of services and residential placements could be provided to children who entered custody. In addition, a state-level council of the commissioners of the relevant service systems (child welfare, juvenile justice, mental health, education, health) was formed to facilitate the coordination of services by the pilot coordination teams.

The services coordination teams were established in the multi-county pilot areas without making any other changes in the existing direct service systems. It was intended that the teams would reduce duplication of effort, facilitate access to services, and establish mechanisms for ensuring that needed services were provided. A primary goal of the pilot project was to improve authorization, accountability and monitoring procedures. It was assumed that these improvements would enhance the quality and outcomes of services provided to the children by ensuring that the multiple needs of each child and family would be met with the most appropriate services and placements.

NIMH funded this study of the state-sponsored pilot project with the objective of assessing the impact of the services coordination effort and of examining the effects of other organizational factors on the quality and outcomes of services (Glisson & James, 1992). The support from NIMH allowed the research team to follow the development and implementation of the pilot project from its beginning to its end at the state, county, and office levels. Over a 3-year period, research team members worked with state administrators, the pilot services coordination teams, the children's services organizations, and the service system network in each of the 24 counties included in the study. Research team members made weekly visits to the pilot teams, gathered data directly from parents, teachers, caseworkers, and other service providers, and conducted organizational surveys of the caseworkers in the 32 children's service offices.

The longitudinal nature of this study and the time spent in the field with coordination teams, parents, teachers, caseworkers, and other service providers enabled the research team to develop a thorough understanding of the service system issues and problems in each area. Not only did this allow individual children to be followed from the time they entered custody, it also ensured that the research team benefitted from anecdotal evidence and qualitative observations. This information

was invaluable in developing an understanding of the roles of organizational climate, caseworker attitudes, and caseworker relationships with children that are discussed here.

An important benefit of the time spent in the field with the services coordination teams, caseworkers and other service providers was the opportunity to observe the actual day to day activities of the new pilot teams and the network of organizations that served the children. This enabled the research team to observe the extent to which each service coordination team actually did what it was designed to do. This is an important issue because it was evident from the field observations that the teams did not always achieve the intended level of responsibility and authority in the custodial and service decisions that affected the children. As a result, there was a great deal of variation across the pilot counties in the extent to which service coordination actually changed as a result of the new pilot teams.

This variation was due to a number of factors. First, referrals for state custody increased statewide after the teams were implemented and the teams were understaffed to respond to the numbers of referrals. Second, juvenile and family court judges in each county varied in the amount of discretionary power they were willing to relinquish to the teams and in some cases allowed the teams very limited power. Third, the team members received minimal training in key areas of mental health and child behavior after joining the teams. This is important because most held bachelor's degrees as their highest degree and had very little formal education in mental health or child behavior. Fourth, the staff in some of the organizations that provided the residential placements and services believed that there was no reason to comply with the decisions of the new teams. This was due to the abundance of children entering custody, coupled with the limited residential placements and services that were available. Moreover, state contracts with private agencies for services were not affected by their degree of cooperation with the pilot teams and state facilities received more referrals than they could adequately serve.

As a result of these reasons and the varying histories of service coordination within each county that predated the pilot project, service coordination in both the pilot and control areas varied from county to county and even from child to child. The research team measured the actual amount of service coordination experienced by each child in the pilot and control areas so that treatment fidelity in each pilot county could be assessed and compared to that in the control counties (Teague, Drake, & Ackerson, 1995). We were thus able to document our observations that the teams increased service coordination in some counties in the pilot areas, but fell short of the original plan to increase it in all pilot counties.

Hypothesized Model

The study tests a model (Figure 1) that links county demographics, organizational characteristics, and the quality and outcomes of services (Glisson & James, 1992). The central construct in the model is interorganizational services coordination. As explained above, this construct has been the focus of efforts in several states to improve services to children entering state custody. The pilot project was implemented in the study described here for the specific purpose of increasing services coordination. Because services coordination is the manipulated variable in the study, the model depicts services coordination as directly or indirectly affecting all other variables in the model except county demographics. It was hypothesized that increasing services coordination in each pilot county would *directly* affect (1) the climate of the organizations that assumed custody of the children and provided the services that were being coordinated; (2) the quality of the services provided to the children; and (3) the interorganizational relationships among the organizations in the county that assumed custody of children and provided services to them. Two of these constructs, climate and service quality, describe attitudes (climate) and behaviors (service quality) that characterize the caseworkers in the organizations who interact directly with the children. Because the attitudes and behaviors of caseworkers are assumed to be affected by services

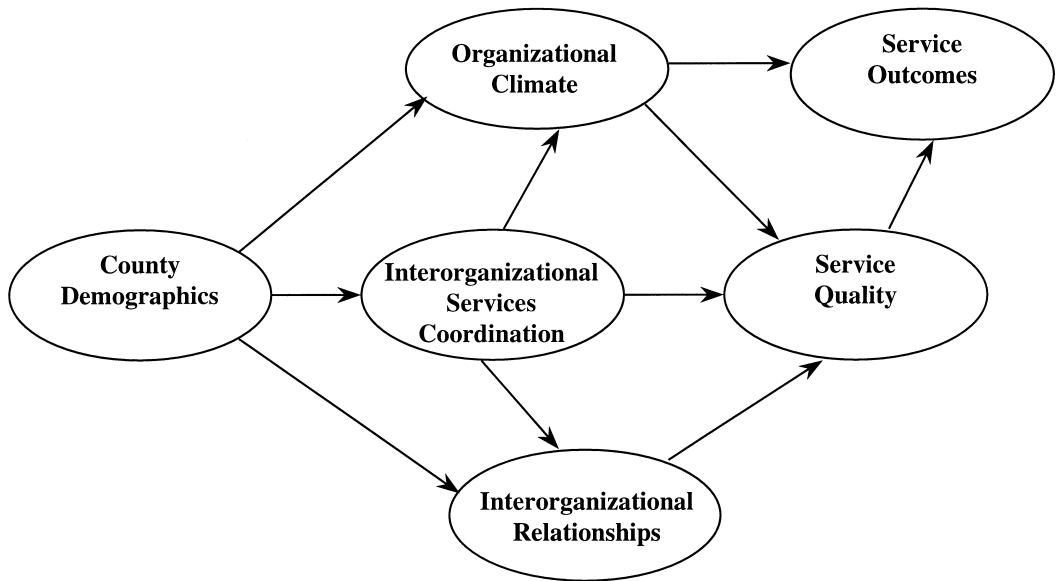


Figure 1. Hypothesized model.

coordination and are critical elements in the services they provide, these two variables were hypothesized to link services coordination with service outcomes.

The model in Figure 1 therefore describes changes in an organizational level variable, services coordination, as affecting service outcomes at the children's level by affecting the attitudes and behaviors of the caseworkers who are responsible for the children. Until now, the mechanisms have not been carefully identified by which organizational level efforts to increase service coordination affect service outcomes. It is explicit in this model that the attitudes and behaviors of those who directly interact with and serve the children must be affected positively if organizational level interventions are to improve service outcomes.

METHODOLOGY

To assess the model shown in Figure 1, two additional 6-county control areas (a total of 12 control counties) were selected to match the two pilot areas (a total of 12 pilot counties) county by county on total population, child poverty rates, unemployment, and education levels. Therefore, the study includes a total of 24 counties out of the state's 95 counties. Twelve counties (six pilot counties and six matched control counties) in the sample are located in the middle of the state, and 12 counties (six pilot counties and six matched control counties) are located in the eastern portion. As explained above, the counties selected for the pilot project ranged from the less populated to the moderately populated. Because of the disproportionate amount of resources required to include a major urban area, the 24 sampled counties excluded the four most populated of the state's 95 counties. Although many of the problems associated with children entering custody nationwide are correlated with population density, the highest custody rates, lowest per capita income, and lowest education levels are found in the rural, Appalachian counties represented in the sample. As a result, population size is related to the socioeconomic status of the counties within the sample and the more rural counties have higher rates of poverty and associated problems.

All of the Department of Human Service (DHS) and Department of Youth Development (DYD)

offices (32) serving the children in the pilot and control counties were included in the study. At the time of the study, these offices were responsible for the care of over 90% of the children placed in state custody. (Following the study, the children's services offices of DHS and DYD were merged to form the Department of Children's Services.) Whether the children were placed in foster homes, public, or private group homes, residential treatment facilities or large institutions, the children were added to the caseloads of DHS and DYD caseworkers. These caseworkers were the individuals whom government officials and judges held accountable for the well-being of the children. They were responsible for working directly with the children and their families, keeping them informed of custody and service decisions, ensuring the children's well-being, recommending changes in placements and services, and providing information about the children to judges, officials and other service providers. Moreover, these caseworkers provided the common points of contact among the children and the family members, agencies, service providers and government officials who were concerned with the children's welfare.

Subjects

Subjects sampled for this study included children entering state custody and the caseworkers in the organizations responsible for their care. The children's parents, surrogate parents, and teachers were also informants in the study. Most of the sampled children in the pilot and control areas were placed in the care of the Department of Human Services (two-thirds) and Department of Youth Development (almost one-third) agencies in their counties of origin. These proportions were equivalent to state-wide statistics for children entering custody during the study period.

A cohort of 600 children was selected from those entering state custody in the 24 counties and followed until state custody was terminated. The 250 children included in this analysis are those children from the initial cohort who remained in custody for at least 1 year. Data were obtained from parents, parent surrogates, and teachers to describe the children's psychosocial functioning when they entered custody and 1 year after entering custody. Data were collected from caseworkers and case files to describe the services the children received during their first 12 months in state custody.

The study depends on outcome measures from those children who remained in custody for at least 1 year because they are the children who are most at risk and who are most likely to be affected by the custody experience. Also, related research has indicated that significant changes in the psychosocial well-being of children who enter custody are difficult to detect in shorter periods of time (Glisson, 1994). Because the capacity to detect change in a child's psychosocial functioning after entering state custody is essential to determining the effects of that experience, observations of the psychosocial well-being of children over a 1 year period provide a critical measure of service outcomes.

In addition to the children, the subjects in the study also included the caseworkers who were responsible for the care of the children. The 32 offices participating in the study varied in size from 10 to 40 employees, with the average being about 15 employees. The smallest included six caseworkers, an office administrator, supervisor, and secretarial staff and the largest included 30 caseworkers plus administrative, supervisory, and secretarial staff.

Questionnaires measuring organizational climate and interrelationships among service systems were administered to the caseworkers in the 32 offices that assumed responsibility for the care of the children in the sample. We focused on caseworkers, rather than administrators and secretarial staff, because it is the caseworkers' attitudes and responsiveness to children that are most salient to the casework relationships and service outcomes. Because the climate questionnaires were administered on site in each of the agencies, we were able to obtain a response rate of over 90%. This provided a sample of 260 caseworkers.

Measurement

Service outcomes. Service outcomes were measured as the improvement in each child's psychosocial functioning during their first year in state custody. This is a particularly useful criterion because it can be applied to a wide variety of children who enter custody for different reasons and with different problem profiles. If services to children who enter state custody are successful, then the psychosocial functioning of a sample of these children should improve, regardless of whether they enter custody for abuse, neglect, status offenses, or delinquency, and regardless of their individual psychological and social histories.

Children manifest problems in psychosocial functioning through externalizing (McMahon, 1994) and internalizing (Ollendick & King, 1994) behavior. Externalizing behavioral problems are characterized by their disruptive effect and include aggression, rule violation, distractibility, and impulsivity. Internalizing behavioral problems are indicators of a child's personal distress that include anxiety, depression, dependency, and low self-esteem. Externalizing and internalizing behaviors are moderately correlated and are frequently combined to describe a child's overall psychosocial well-being (Achenbach, 1991). Children entering state custody are characterized by high levels of internalizing and externalizing problems regardless of the reason for custody, the particular state agency that assumes responsibility for the child, or the type of residential placement (Glisson, 1996).

Broadband scales from Achenbach's (1991) Child Behavioral Checklist (CBCL) and Teacher Report Form (TRF) provided four of the five indicators used to assess the children's psychosocial functioning. These are the most widely used and extensively validated instruments for measuring children's psychosocial functioning. Broadband scales for measuring both internalizing (e.g., anxious, withdrawn, or inhibited) behavior and externalizing (e.g., aggression, destructive, or antisocial) behavior were included from each of the two instruments. A parent or guardian completed the CBCL and a teacher completed the TRF, providing two measures of both internalizing and externalizing behavior. The raw scale scores for each child were converted to *T*-scores based on general population norms for age and gender. In addition, the Teacher's Checklist of Children's Peer Relations provided a fifth indicator of psychosocial functioning that describes the child's social skill and social acceptance (Dodge & Somberg, 1987).

All instruments were completed first when the child entered custody and again after the child had been in state custody for 1 year. For the baseline measure taken during the week the child entered custody, a parent or guardian and a teacher used the CBCL and TRF, respectively, to describe the child's behavior prior to custody. One year later, the CBCL was completed by the child's surrogate parent (e.g., foster parent, group home supervisor) and the TRF was completed by the child's teacher to describe the child's behavior after 1 year in custody.

The amount of change in psychosocial functioning was assessed by regressing the 12 month outcome measures on the same measures taken at the time the child entered custody. The residuals from this procedure were then used to indicate changes in the children's functioning over the first year of custody. Negative residuals represent a decrease in psychosocial problem behaviors during the 12 month period and therefore indicate positive service outcomes.

Service quality. There are very few studies of the quality of children's services (National Research Council, Panel on Research on Child Abuse and Neglect, 1993; Thompson & Wilcox, 1995). However, Behar (1985) describes several characteristics of a high quality service system that is responsive to the needs of multiproblem children. These characteristics include comprehensiveness and continuity.

Comprehensiveness is the extent to which a range of services are provided to a child. A list of 30 different services available to children in state custody in Tennessee was compiled by the research team. A critical responsibility of the caseworker is to ensure that children receive needed

services. Comprehensiveness was measured as the number of those services received by each child during his or her first year in custody.

Continuity is the extent to which there are linkages among services received by a child so that the efforts of service providers complement the needs of the child and the efforts of others who are involved in the child's care. A primary task of the child's caseworker is to maintain this continuity through contacts with other service providers. Continuity was measured as the average number of contacts per month that the child's caseworker had with other professionals who provided services to the child.

Additional measures of service quality derive from the alliance that caseworkers form with the children and families they serve. High quality casework services require that the caseworker provides a secure base for the child (and family) by being available and responsive (Dozier, Cue, & Barnett, 1994). *Availability* was measured as the average number of personal contacts (not by telephone or letter) per month that the caseworker had with the child. A second measure of availability was the average number of contacts with the family.

Responsiveness is critical to solving problems that arise with children after they have entered custody. One of the most frequent problems is children being unhappy with or having problems with their residential placements. Although it is not desirable for children to experience multiple residential placements, it is also the case that problems occur within placements that can be resolved only by relocating the child. In previous research, changes in residential placements were associated with a better fit between the child and placement, and interpreted as an indicator of the caseworker's responsiveness to solving problems with placements (Glisson, 1994). Therefore, responsiveness was measured as the changes in residential placements that were made to improve the fit between the residential placement and the child.

Services coordination. There has been limited organizational research on the interorganizational coordination of services and few acceptable instruments developed to measure the construct (Alter, 1990; Alter & Hage, 1993; Price & Mueller, 1986; Provan & Milward, 1995). The indicators of services coordination used here are based on Mulford and Rogers' (1982) definition of coordination and the elements of service coordination specified by Aiken and colleagues (1975). The coordination of services to children is intended to reduce duplication of effort, facilitate access to information, placements, and services, and establish mechanisms for ensuring accountability. Because children entering custody require a variety of different types of child welfare, mental health, health, and educational services, coordination requires that organizations within a county agree to a common services authorization procedure so that duplicate authorizations are not required for a service or placement to be provided. It also requires that a minimum number of individuals be responsible for ensuring that services are properly delivered. Finally, coordination requires that conflicts of interest be avoided by designating individuals to monitor service delivery other than those who actually provide the services.

The indicators of coordination used in the study are authorization, responsibility, and monitoring. *Authorization* was measured as the number of separate authorizations required for a child to receive services from multiple systems. The fewer required, the greater the coordination. *Responsibility* was measured as the number of individuals responsible for ensuring that needed services were delivered to a child. The lower the number, the greater the coordination. *Monitoring* was measured as the proportion of those monitoring services for each child who also provided service to the child. Because coordination requires a separation of these responsibilities, lower proportions represent greater coordination. Each of the three indicators was reverse scored so that larger numbers indicate increased coordination. The research team collected these data directly from caseworkers at regular intervals for each child in the sample.

Organizational climate. The Psychological Climate Questionnaire assembled by James and Sells (1981) includes versions of 10 scales used by numerous researchers over the last three decades (Hackman & Oldman, 1975; Porter, Steers, Mowday, & Boulian, 1974; Rizzo, House, & Lirtzman, 1970). Together the scales provide an appraisal of the degree to which employees view their work environment as beneficial versus detrimental to their own well-being and the success of their work (James & James, 1989). Employees' views were assessed with scales measuring fairness, role clarity, role overload, role conflict, cooperation, growth and advancement, job satisfaction, emotional exhaustion, personal accomplishment, and depersonalization. Caseworkers completed these scales anonymously and returned them directly to the research team. Caseworker responses to these scales were aggregated by agency to establish the climate profile of each sampled agency.

Interorganizational relationships. Seven items were specifically designed for this project to assess the relationships established by each agency with other service organizations (child welfare, juvenile justice, mental health, education, health agencies) that provided services to children in the same county. These items were included within the same questionnaire that measured climate as described above. The seven items included questions about problems in worker cooperation between organizations (*noncooperation*), other organizations attempting to "dump" problem children on the respondent's office (*dumping*), red tape encountered in trying to work with other organizations (*red tape*), placing responsibility on other organizations for problems encountered in their work (*blaming*), unreasonable demands made by other organizations (*unreasonable*), other organizations withholding needed information (*withhold information*), and disputes with other organizations (*disputes*). Responses to each of these items were averaged across workers by agency to describe each agency's interrelationships with the organizations providing services to the children in their care.

County demographics. Demographic data were available for each county included in the study. Eight demographic variables were chosen: (1) total population of a county; (2) percentage of children living in poverty; (3) percentage of persons 25 years or older who have graduated high school; (4) per capita income; (5) average annual unemployment rate; (6) average annual youth unemployment rate; (7) percentage of children receiving AFDC; and (8) percentage of children suspended from public schools.

RESULTS

Linear structural equation analysis with LISREL VIII was used to examine the hypothesized model shown in Figure 1 that describes relationships among multiple latent constructs (Joreskog & Sorbom, 1993). As described above, several manifest or observed indicators are specified as measures for each latent variable. The set of equations that links these manifest indicators to the latent variables is typically referred to as the *measurement model*. A second set of linear equations describes the hypothesized relationships among the latent variables as shown in Figure 1. This is referred to as the *structural model*. Together, these two sets of equations provide the basis for a test of the *a priori* hypothesized model against the observed data. Each set of equations was solved separately as described by Anderson and Gerbing (1988), Medsker, Williams, and Holahan (1994) and others. First, the measurement model was assessed to determine if the observed indicators were in fact related to their hypothesized latent constructs. In the second phase, the relationships among the latent variables described in the structural model (shown in Figure 1) were tested. Given the distributions of several of the observed variables, estimates for the model were generated by an unweighted least squares (ULS) solution. This solution provides stable estimations without stringent distributional assumptions (Bollen, 1989). Following Browne (1982, 1984), adjustments were

Table 1. Fit Indices for Measurement Models

Model	Chi-Square	Goodness of Fit (GFI)	Adjusted Goodness of Fit (AGFI)	Comparative Fit Index (CFI)
Six-Variable Model A	$\chi^2 = 2038.44$ with 579 <i>df</i> 's	GFI = .85	AGFI = .83	CFI = .83
Five-Variable Model B	$\chi^2 = 920.59$ with 367 <i>df</i> 's	GFI = .91	AGFI = .89	CFI = .91

made to calculate tests of significance for estimates resulting from the ULS solutions (Bollen, 1989; Joreskog & Sorbom, 1993).

Measurement Model

In the first phase of the analysis, the measurement model was assessed with confirmatory factor analysis. Each indicator was constrained to load on its respective factor (i.e., latent construct) as described in the measurement section above, and all factors were allowed to intercorrelate. Goodness of fit indices were then used to assess model fit.

Goodness of fit indicators suggested a less than desirable fit in the initial measurement model, $\chi^2(650, N = 250) = 2216.22$, GFI = .84, AGFI = .82, CFI = .82 (see Bentler, 1990; Medsker, Williams, & Holahan, 1994; Mulaik, James, Van Alstine, Bennett, Lind, & Stillwell, 1989). Standardized residuals from this solution provided evidence of specification errors related to the indicators defining service outcomes. To investigate these problems, a separate LISREL analysis was conducted on each construct within our measurement model. Goodness of fit indices confirmed a relatively poor fit for the indicators of service outcome (GFI = .90; AGFI = .71, CFI = .78). This appeared to result from the use of measures from both a parent (or surrogate parent) and a teacher to assess each child's psychosocial functioning, replicating earlier research reporting low correlations between teachers' and parents' behavioral ratings (Achenbach, 1991; Achenbach, McConaughy, & Howell, 1987).

Based on the above information, a decision was made to retain teacher ratings and omit parental ratings from the outcome measures. Teacher ratings were retained for three reasons. First, previous research has shown that teacher ratings have higher reliability than parent ratings (Achenbach, 1991a; 1991b). Second, three indicators were available from teachers versus only two indicators from parents. Third, children were observed in a similar context by teachers at both the pretest and posttest while this was not true of the parental ratings. The elimination of the parental ratings from the indicators of service outcomes substantially improved the fit of the individual construct. With this improvement, all individual constructs had acceptable fit indices (.90 or above). However, as shown in Table 1 for Model A, the fit of the overall measurement model remained poor (GFI = .85, AGFI = .83, CFI = .83).

Further examination of the measurement model showed that the two constructs in the model that were measured with a common method (self-report survey) had highly correlated residuals. The self-report survey was administered to caseworkers in each office to measure both organizational climate and interorganizational relationships. One of the two constructs, climate, was measured with several widely-used scales which have been shown in previous research to be linked by a common evaluative factor representing employees' responses to their jobs and organization. The second construct, interorganizational relationships, was measured with seven Likert style items that were created specifically for this project to determine the nature of the working relationships among the agencies that provided services to the children.

Although the residuals of the two constructs were correlated, the measurement model deteriorated further when the indicators from the two constructs were assessed as a single dimension. However, by eliminating interorganizational relationships from the model altogether to create

Table 2. Measurement Model Factor Loadings for Manifest Indicators

Variables	Six-Variable Model A	Five-Variable Model B
County Demographics		
Total population	.53	.54
% Children in poverty	-.92	-.91
% Adult H. S. graduates	.80	.79
Per capita income	.75	.75
Unemployment rate	-.85	-.86
Youth unemployment rate	-.74	-.75
% of children AFDC	-.61	-.60
% of school suspensions	.48	.47
Interorganizational Relationships		
Noncooperation	.24	—
Dumping	.66	—
Red tape	.89	—
Blaming	.58	—
Unreasonable demands	.55	—
Withhold information	.53	—
Disputes	.71	—
Service Quality		
Availability (child)	.72	.72
Availability (family)	.67	.67
Continuity	.60	.60
Comprehensiveness	.22	.23
Responsiveness	.16	.15
Services Coordination		
Authorization	.48	.48
Responsibility	.94	.94
Monitoring	.83	.83
Organizational Climate		
Fairness	.64	.73
Role clarity	.45	.34
Role overload	-.62	-.74
Role conflict	-.89	-.88
Cooperation	.45	.45
Growth and advancement	.52	.65
Job satisfaction	.87	.89
Emotional exhaustion	-.84	-.91
Personal accomplishment	.63	.49
Depersonalization	-.84	-.72
Service Outcomes		
Internalizing problems (teacher rating)	.70	.68
Externalizing problems (teacher rating)	.85	.87
Peer relations problems (teacher rating)	.78	.77

Model B, the overall fit of the measurement model reached an acceptable level (GFI = .91, AGFI = .89, CFI = .91). Both the original six variable measurement model (A) and the reduced five variable measurement model (B) were then used in subsequent analyses of the structural model as described below. The factor loadings for both the original and reduced measurement models are shown in Table 2.

The overall fit of the measurement model as well as the fit indices of the individual constructs provide evidence that supports the validity of the measurement model. All relationships between the constructs and their indicators are significant although as shown in Table 2, the individual indicators vary in their loadings. The value of the measurement model is that these loadings specify how each indicator will be weighted in the structural estimation procedures. These weights insure that the relative strengths of the relationships between each construct and its indicators determine the relative contribution of each indicator to the estimation of structural parameters. In the current analysis, *alpha* coefficients were calculated to describe the intercorrelations among the indicators

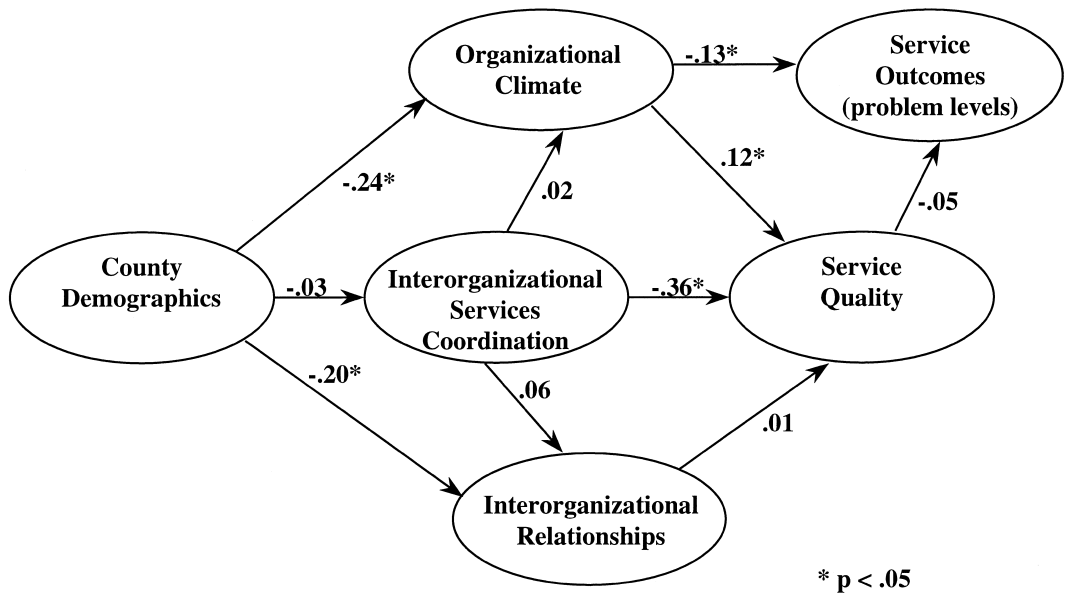


Figure 2. Parameter estimates for hypothesized six-variable Model A.

for each construct. They are high for five of the six constructs (between .78 and .89). For service quality, the *alpha* coefficient is .57, reflecting the relative differences among the contributions of the indicators of service quality to the estimation procedures.

Structural Model

As suggested by several researchers (see Anderson & Gerbing, 1988; Medsker, Williams, & Holahan, 1994; Mulaik, James, Van Alstine, Bennett, Lind, & Stilwell, 1989), a two-step approach was taken in which the structural model was evaluated separately from the measurement model. Figure 2 shows the estimated parameters of the hypothesized structural model obtained from the six variable measurement model. An important characteristic of this model is the inclusion of both organizational and individual level constructs. The statistical rationale for relating organizational or situational characteristics to individual level constructs has been well established for some time (James, Demaree, & Hater, 1980). In fact, it is the effects of the organizational characteristics on the individual child's service quality and outcome that are of particular interest.

In addition to relating organizational and individual variables, the model also estimates relationships among the organizational level variables. These relationships were included in the model to provide estimates of the total effects (both direct and indirect effects) of each organizational level variable on the individual level variables of service quality and service outcomes. The estimates of these effects are assumed to be reliable, but the significance tests of the parameters that describe the relationships that link the organizational characteristics to each other have inflated Type I error rates. This inflated Type I error rate applies to two parameters in the six variable model, the effects of county demographics on organizational climate and on interorganizational relationships. In the five variable model it applies only to one estimate, the relationship between demographics and climate. The Type I errors are not inflated for the significance tests of the parameters describing relationships between the organizational characteristics and the quality and outcomes of services.

As shown in Figure 2, several of the parameters describing the effect of the organization on service quality and outcomes are statistically significant. These are the effect of service coordina-

Table 3. Fit Indices for Structural Models

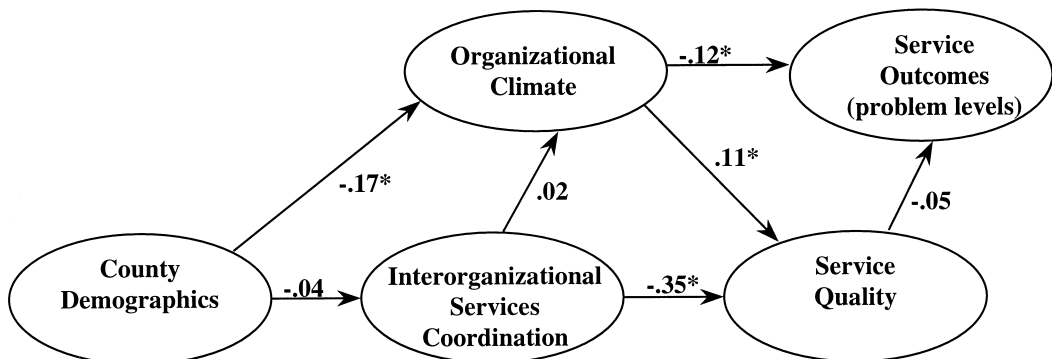
Model	Chi-Square	Goodness of Fit (GFI)	Adjusted Goodness of Fit (AGFI)	Comparative Fit Index (CFI)
Six-Variable Model A	$\chi^2 = 2851.73$ with 584 <i>df</i> 's	GFI = .79	AGFI = .76	CFI = .74
Five-Variable Model B	$\chi^2 = 945.79$ with 370 <i>df</i> 's	GFI = .91	AGFI = .89	CFI = .91

tion on service quality, and the effects of organizational climate on both service quality and service outcomes. As shown in Table 3, in spite of these significant parameters, the fit indices for the six-variable structural model (A) are limited by the poor fit of the six variable measurement model (GFI = .79, AGFI = .76, CFI = .74). In contrast, the five variable structural model (B) shown in Figure 3 with interorganizational relationships omitted, has stronger fit indices (GFI = .91, AGFI = .89, CFI = .91). An added benefit of Model B is that only one path has an inflated Type I error rate and all other paths in the model remain essentially unchanged.

To summarize the LISREL analysis, the measurement and structural models were improved by eliminating parental ratings as indicators of service outcomes and by removing interorganizational relationships as a latent variable. While the size of the parameters describing the hypothesized paths in the five variable structural model (B) are modest, most are statistically significant. Although the Type I error rate for the significance test of one parameter, the effect of county demographics on climate is inflated, none of the parameters or fit indices are inflated from common method error variance, a frequent criticism of LISREL analyses that report high fit indices and significant paths. Of particular importance are the relative roles played by one *interorganizational* variable in the model, service coordination, and the *intraorganizational* variable, climate. Although service coordination has the largest effect on service quality, increased service coordination is related to reduced service quality, quality has no effect on service outcomes, and positive organizational climates are associated with both higher service quality and better service outcomes.

DISCUSSION

This study's most important finding is that improvements in psychosocial functioning are significantly greater for children served by offices with more positive climates. The relationship found between organizational climate and the outcomes of children's services is particularly

**Figure 3. Parameter estimates for trimmed five-variable Model B.**

significant because the measures of these two constructs relied on independent methods. Organizational climate was measured with self-report scales administered to caseworkers in each office, while changes in psychosocial functioning were measured by independent descriptions of children's behaviors provided by their teachers. Therefore, the common method error variance that plagues much of the research using structural modeling and related techniques does not account for any portion of the covariance between the two constructs.

The success that caseworkers have in improving children's psychosocial functioning depends heavily on their consideration of each child's unique needs, the caseworkers' responses to unexpected problems, and their tenacity in navigating bureaucratic and judicial hurdles to achieve the best placement and the most needed services for each child. This requires nonroutinized and individualized casework, personal relationships between the caseworker and child, and a results rather than process oriented approach (Glisson, 1992). These findings suggest that agencies with higher levels of job satisfaction, fairness, role clarity, cooperation, and personalization, and lower levels of role overload, conflict, and emotional exhaustion are more likely to support caseworkers' efforts to accomplish these objectives. In short, positive climates reflect work environments that complement and encourage the type of service provider activities that lead to success.

A second important finding is that improved service quality does not translate into significantly more positive outcomes. This suggests that caseworkers can meet service quality objectives without contributing to improvements in the psychosocial well-being of the children who are served. Although perplexing, a close examination of this finding explains why the process-related requirements for quality service are not necessarily related to outcome criteria. As shown in recent examples from government agencies, process-oriented job requirements are not sufficient for desired service outcomes (Osborne & Gaebler, 1992). This occurs because process-oriented approaches emphasize preprogrammed activities that limit employee discretion and responsiveness to unexpected problems and opportunities. In comparison, results-oriented approaches focus employee attention on the desired outcomes and require employee flexibility and discretion in the development of individualized approaches to reaching those outcomes.

At the same time, most researchers would agree that high quality children's service systems are characterized by the process-oriented indicators used here (i.e., availability, responsiveness, comprehensiveness, and continuity). But consensus about the desirability of these service system characteristics must be distinguished from the conclusion that related process-oriented activities can ensure positive service results. That is to say that these characteristics of quality service are not sufficient for positive service outcomes. This is because effective children's services require nonroutinized, individualized, service decisions that are tailored to each child (Glisson, 1992, 1996). Therefore, decisions that are in the best interests of a particular child may not fit predetermined criteria for service system quality.

The research team identified examples of casework activities in the field that demonstrated how service quality can be unrelated to service outcomes for an individual child. These examples included caseworkers sacrificing service comprehensiveness to ensure that a specific child received maximum use of a single service that was especially important for that child. They also included caseworkers electing to contact only one previous service provider (thus violating the continuity criterion) so that more effort could be placed on gathering information from and working with the specific provider who the caseworker believed was most important to the well-being of a particular child. And many caseworkers recognized that whether a specific child would benefit from being moved to a new residential placement after encountering difficulties in an initial placement (as required by the responsiveness criterion), depended entirely on the characteristics of the child and on the characteristics of the available placements. These workers understood that removing a child from a residential placement in which a child has experienced problems does not in and of itself ensure that the child will experience fewer problems in the next placement. These examples from our field observations show that specific process-oriented service requirements that are in the best

interest of one child may not be in the best interest of another. Therefore, process-oriented criteria that define service system quality may not in fact maximize service outcomes for a specific child, depending on the unique circumstances of the case. So although these criteria describe desirable characteristics of service systems generally, they characterize processes that are unrelated to the individualized casework activities that are necessary for positive outcomes.

Although service quality and outcomes are not related in this sample, a very important third finding is that organizational climate was found to positively affect both. Not only were children who were served by agencies with more positive climates more likely to experience improved psychosocial functioning, they also received more comprehensive services, there was more continuity in the services they received, and their caseworkers were more responsive and available. So although the process-oriented service quality variables did not directly affect the results-oriented outcome variables for reasons discussed above, organizational climate had a positive effect on *both* process *and* results. And as in the relationship with outcomes, the measures of climate and service quality ensure that common method error variance does not explain the observed relationship between the two constructs. The positive relationships between climate and both service quality and service outcomes highlight the very important role played by organizational climate in the job performance of caseworkers who engage in highly stressful and demanding job tasks.

A fourth important finding is that although both intra- (climate) and inter- (services coordination) organizational characteristics affect service quality, increased service coordination *decreases* quality. Given the meager results to date of efforts nationwide to improve children's services through interorganizational services coordination and other innovative service configurations, it is significant that services coordination was associated with decreased service quality. Although this finding supports the work of Scott (1985), Bendor (1985) and others who describe the detrimental effects of coordination, and possibly explains numerous failed attempts to improve services with increased coordination, it contradicts several writers who continue to argue for its benefits. Alter and Hage (1993), Provan and Milward (1995) and others have begun more recently to examine the meaning of coordination in relation to multiple interorganizational phenomena, but to date there is little empirical evidence to document these phenomena or to support the value of coordination to service system effectiveness.

These data and our experience in the field suggest that increases in service coordination deflected caseworkers' behaviors from those activities associated with the quality criteria for the children in their caseloads. In areas where coordination increased, caseworkers relinquished responsibility across the board for those activities, based on the incorrect but expedient assumption that they would be assumed by the service coordination teams. In other words, the more pronounced and visible the role of a services coordination team in a given area, the less responsibility caseworkers in the area assumed for the activities associated with the indicators of service quality, regardless of the individual needs of specific children. This did not result in caseworkers in those areas electing to forego quality related processes for only some children, which would have created a null relationship between coordination and quality similar to that described between quality and outcomes. Rather, they were deemphasized for all children in their caseloads, creating a significant negative relationship.

The objective of services coordination is to eliminate parallel, redundant, competing service systems by centralizing service decisions. This centralization ironically can diffuse rather than focus responsibility for casework activities. This happens when those who work directly with a child have less discretion to make key service decisions for the child. By transferring key decisions to those who do not work directly with a child, personal responsibility for the child is reduced for those who do. The important point is that this reduction in personal responsibility is not complemented by a comparable assumption of responsibility by service coordinating teams. Much in the way that the decisions of centralized, managed care gatekeepers frustrate the efforts of health care providers who work directly with patients, services coordination teams that do not work directly

with a child are not compelled to assume the same degree of responsibility for the well-being of a child as those who establish a personal relationship with the child. While this may be effective in controlling services and costs as intended in managed care, it cannot be expected to improve service quality or outcomes.

Another salient finding from the study concerns the indicators of service outcomes. Teachers' descriptions of children's psychosocial functioning were found to be better indicators of outcomes than were parents' (or guardians') descriptions. This is consistent with earlier findings about the use of parents and teachers to assess children in custody (Glisson, 1994, 1996). Also, while both teachers and parents have been found to provide valid observations about children's behavior, Achenbach (1991a; 1991b) has reported higher reliability estimates for teachers. It is possible that parents minimize or maximize their accounts of their children's problems, depending on a number of issues related to the circumstances of a case and the unique relationships that exist between the parents and children. For example, parental responses in the current sample could have been influenced by whether a child was entering custody for abuse or neglect (one-third of the sample) where a parent could be implicated, or for status offenses (one-third of the sample) or delinquent behavior (one-third of the sample) where a parent could be the petitioner or could support the petition for state custody.

The finding concerning teachers' assessments is significant because the psychosocial well-being of the children is the most important service outcome that can be assessed for children who are placed in state custody. Aside from the physical safety of the child, family, or community, improvements in the children's psychosocial functioning are minimal goals regardless of the reason for custody or the characteristics of the child. Placing a child in custody addresses the physical safety issue. But if a child's psychosocial functioning does not improve or deteriorates after entering custody, there is no justification other than physical safety for having placed the child in custody. And following the 1976 Wyatt versus Stickney "right to treatment" decision, a dozen federal court decisions have maintained that individuals held in the custody of state human service systems must receive services that are designed to improve their psychosocial functioning.

In summary, findings presented here suggest that service effectiveness is related more to organizational climate, the service provider attitudes that characterize a given service system, than to service system configurations. Although a variety of individual, environmental and organizational characteristics affect service provider attitudes, almost no research has focused on how such attitudes can be improved in children's service systems. While extensive research on improving climate has been conducted in business and industrial organizations, the successful techniques have not been transported into public agencies that serve children (Mayer & Schoorman, 1992; Ostroff & Schmitt, 1993). There are also unexplored questions about the roles played by related variables such as organizational culture (employee norms and values) which have been found to affect climate in other types of organizations (O'Reilly, Chatman, & Caldwell, 1991; Sheridan, 1992).

Several methodological issues emerge from these findings. First, subsequent research on children's service organizations would benefit from using techniques developed with other types of organizations to experimentally manipulate climate. Not only would this control additional threats to internal validity, it is likely to increase effect sizes. Second, generalization of the current findings beyond the sampled counties requires replication in both urban and rural areas. A final caveat concerns the accuracy of case files that provided data for some of the indicators. Although research assistants worked directly with caseworkers in the field to obtain and verify information from case files, missing and inaccurate data are possible sources of error that could have decreased the effect sizes.

The significant link found between climate and outcomes is important because previous attempts to identify the predictors of children's service system performance have met with very little success. The results of this study provide evidence that these attempts could have failed because they focused on service system configurations rather than on the dimensions of the service system

represented by organizational climate and related service provider attitudes. Because many employees of public children's service systems experience high levels of stress, low job satisfaction, high conflict, depersonalization, and burnout, the findings suggest that future research should focus on these types of problems rather than on service configurations as the cause of poor service outcomes.

REFERENCES

- Achenbach, T. M. (1991). *Integrative guide for the 1991 CBCL/4-18, YSR, and TRF profiles*. Burlington, VT: University of Vermont Department of Psychiatry.
- Achenbach, T. M. (1991a). *Manual for the child behavior checklist/4-18 and 1991 profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- Achenbach, T. M. (1991b). *Manual for the teacher's report form and 1991 profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavior and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin*, **101**, 213-232.
- Aiken, A., Dewar, R., DiTomaso, N., Hage, J., & Zeitz, G. (1975). *Coordinating human services*. San Francisco, CA: Josey-Bass, Inc., Publishers.
- Alter, C. (1990). An exploratory study of conflict and coordination in interorganizational service delivery systems. *Academy of Management Journal*, **33**, 478-502.
- Alter, C., & Hage, J. (1993). *Organizations working together*. Newbury Park, CA: Sage.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, **103**, 411-423.
- Barth, R. P., Courtney, M., Berrick, J. D., & Albert, V. (1994). *From child abuse to permanency planning*. New York: Aldine de Gruyter.
- Behar, L. (1985). Changing patterns of state responsibility: A case study of North Carolina. *Journal of Clinical Child Psychology*, **14**, 188-195.
- Bendor, J. B. (1985). *Parallel systems: Redundancy in government*. Berkeley, CA: University of California Press.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, **107**, 238-246.
- Bollen, K. A. (1989). *Structural equations with latent variables*. New York: Wiley.
- Browne, M. W. (1984). Asymptotic distribution free methods in analysis of covariance structures. *British Journal of Mathematical and Statistical Psychology*, **37**, 62-83.
- Browne, M. W. (1982). Covariance structures. In D. W. Hawkins (Ed.), *Topics in multivariate analysis* (pp. 72-141). Cambridge, MA: Cambridge University Press.
- Burns, B. J., & Friedman, R. M. (1990). Examining the research base for child mental health services and policy. *The Journal of Mental Health Administration*, **17**, 87-98.
- Center for the Study of Social Policy (1990). *The crisis in foster care: Directions for the 1990s*. Washington, DC: Center for the Study of Social Policy.
- Center for the Study of Social Policy (1993). *Kids count data book*. Washington, DC: Center for the Study of Social Policy.
- Dodge, K. A., & Somberg, D. (1987). Hostile attributional biases among aggressive boys are exacerbated under conditions of threat to the self. *Child Development*, **58**, 213-224.
- Dougherty, D. M., Saxe, L. M., Cross, T., & Silverman, N. (1987). *Children's mental health: Problems and services*. Durham, NC: Duke University Press.
- Dozier, M., Cue, K. L., & Barnett, L. (1994). Clinicians as caregivers: Role of attachment organization in treatment. *Journal of Consulting and Clinical Psychology*, **62**, 793-800.
- Duchnowski, A. J., & Friedman, R. M. (1990). Children's mental health: Challenges for the nineties. *The Journal of Mental Health Administration*, **17**, 3-12.
- Frank, R. G., & Gaynor, M. (1994). Fiscal decentralization of public mental health care and the Robert Wood Johnson Foundation Program on Chronic Mental Illness. *The Milbank Quarterly*, **72**, 81-104.
- Glisson, C. (1992). Technology and structure in human service organizations. In Hasenfeld (Eds.), *Human services as complex organizations* (pp. 184-202). Beverly Hills, CA: Sage.
- Glisson, C. (1994). The effect of services coordination teams on outcomes for children in state custody. *Administration in Social Work*, **18**, 1-23.
- Glisson, C. (1996). Judicial and service decisions for children entering state custody: The limited role of mental health. *Social Service Review*, **70**, 257-281.
- Glisson, C., & Durick, M. (1988). Predictors of job satisfaction and organizational commitment in human services organizations. *Administrative Science Quarterly*, **33**.
- Glisson, C., & James, L. (1992). The interorganizational coordination of services to children in state custody. *Administration in Social Work*, **16**, 65-80.
- Goldman, H., Morrissey, J., Ridgely, S., Frank, R., Newman, S., & Kennedy, C. (1992). Lessons from the program on chronic mental illness. *Health Affairs*, **11**, 51-68.
- Goldman, H., Morrissey, J., & Ridgely, S. (1994). Evaluating the Robert Wood Johnson Foundation program on chronic mental illness. *Milbank Quarterly*, **72**, 37-48.

- Hackman, J., & Oldham, R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, **60**, 159–170.
- Hall, R., Clark, J., Giordano, P., Johnson, P., & Roekel, M. (1977). Patterns of interorganizational relationships. *Administrative Science Quarterly*, **22**, 457–474.
- Hellriegel, D., & Slocum, J., Jr. (1974). Organizational climate: Measures, research, and contingencies. *Academy of Management Journal*, **17**, 255–280.
- Hoagwood, K. (1997). Interpreting nullity: The Fort Bragg experiment—a comparative success or failure? *American Psychologist*, **52**, 546–550.
- James, L. A., Demaree, R. G., & Hater, J. J. (1980). A statistical rationale for relating situation variables and individual differences. *Organizational Behavior and Human Performance*, **25**, 354–364.
- James, L. A., & James, L. R. (1989). Integrating work environment perceptions: Explorations into the measurement of meaning. *Journal of Applied Psychology*, **74**, 739–751.
- James, L. R., & Jones, A. P. (1980). Perceived job characteristics and job satisfaction: An examination of reciprocal causation. *Personnel Psychology*, **33**, 97–135.
- James, L. R., & Sells, S. B. (1981). Psychological climate: Theoretical perspectives and empirical research. In D. Magnusson (Ed.), *Toward a psychology of situations: An interactional perspective* (pp. 275–295). Hillsdale, NJ: Erlbaum.
- Joreskog, K. G., & Sorbom, D. (1993). *LISREL 8 user's reference guide*. Chicago, IL: Scientific Software International, Inc.
- Klee, L., & Halfon, N. (1987). Mental health care for foster children in California. *Child Abuse & Neglect*, **11**, 63–74.
- Landau, M. (1969). Redundancy, rationality, and the problem of duplication and overlap. *Public Administration Review*, **29**, 346–358.
- Mayer, R. C., & Schoorman, F. D. (1992). Predicting participation and production outcomes through a two-dimensional model of organizational commitment. *Academy of Management Journal*, **35**, 671–684.
- McMahon, R. J. (1994). Diagnosis, assessment, and treatment of externalizing problems in children: The role of longitudinal data. *Journal of Consulting and Clinical Psychology*, **62**, 901–917.
- Medsker, G. J., Williams, L. J., & Holahan, P. J. (1994). A review of current practices for evaluating causal models in organizational behavior and human resources management research. *Journal of Management*, **20**, 439–464.
- Melton, G. B., & Flood, M. F. (1994). Research policy and child maltreatment: Developing the scientific foundation for effective protection of children. *Child Abuse & Neglect*, **18**, 1–28.
- Morrissey, J. P., Calloway, M., Bartko, W. T., Ridgely, M. S., Goldman, H. H., & Paulson, R. I. (1994). Fiscal decentralization of public mental health care and the Robert Wood Johnson Foundation Program on Chronic Mental Illness. *The Milbank Quarterly*, **72**, 49–80.
- Mulaik, S. A., James, L. R., Van Alstine, J., Bennett, N., Lind, S., & Stilwell, C. D. (1989). Evaluation of goodness-of-fit indices for structural equation models. *Psychological Bulletin*, **105**, 430–435.
- Mulford, C., & Rogers, D. (1982). Definitions and models. In D. Rogers & D. Whetten (Eds.), *Interorganizational coordination: Theory, research, and implementation* (pp. 9–31). Ames, IA: Iowa State University Press.
- National Center on Child Abuse and Neglect, DHHS (1996). *Child maltreatment 1994: Reports from the states*. Washington, DC: US Government Printing Office.
- National Institute of Mental Health (1991). *Caring for people with severe mental disorders: A national plan of research to improve services*. Washington, DC: DHHS (Pub. No. ADM 91–1762).
- National Research Council, Panel on Research on Child Abuse and Neglect (1993). *Understanding child abuse and neglect*. Washington, DC: National Academy Press.
- O'Reilly, C. A., Chatman, J., & Caldwell, D. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, **34**, 487–516.
- Ollendek, T. H., & King, N. J. (1994). Diagnosis, assessment, and treatment of internalizing problems in children: The role of longitudinal data. *Journal of Consulting and Clinical Psychology*, **62**, 918–927.
- Osborne & Gaebler (1992). *Reinventing government*. Reading, MA: Addison-Wesley.
- Ostroff, C., & Schmitt, N. (1993). Configurations of organizational effectiveness and efficiency. *Academy of Management Journal*, **36**, 1345–1361.
- Payne, R., & Pugh, D. (1975). Organization structure and organization climate. In M. D. Dunnette (Ed.), *Handbook of industrial-organizational psychology* (pp. 1125–1174). Chicago, IL: Rand McNally.
- Porter, L., Steers, R., Mowday, R., & Boulian, P. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, **59**, 603–609.
- Price, J. L., & Mueller, C. W. (1986). *Handbook of organizational measurement*. Marshfield, MA: Pitman Publishing, Inc.
- Provan, K., & Milward, H. (1995). A preliminary theory of interorganizational network effectiveness: A comparative study of four community mental health systems. *Administrative Science Quarterly*, **40**, 1–33.
- Rizzo, J., House, R., & Lirtzman, S. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, **15**, 150–163.
- Rosenblatt, A., & Attkisson, C. C. (1992). Integrating systems of care in California for youth with severe emotional disturbance. *Journal of Child and Family Studies*, **1**, 93–113.
- Schneider, B. (1975). Organizational climates: An essay. *Personnel Psychology, Inc.*, **28**, 447–479.
- Scott, W. R. (1985). Systems within systems. *American Behavioral Scientist*, **28**, 601–618.
- Sheridan, J. E. (1992). Organization culture and employee retention. *Academy of Management Journal*, **35**, 1036–1056.
- Soloman, E. E. (1986). Private and public sector managers: An empirical investigation of job characteristics and organizational climate. *Journal of Applied Psychology*, **71**, 247–259.

- Steinwachs, D., Cumnum, H., Dorwart, R., Flynn, L., Frank, R., Friedman, M., Herz, M., Mulvey, E., Snowden, L., Test, M., Tremaine, L., & Windle, C. (1992). Service systems research. *Schizophrenia Bulletin*, **18**, 627–668.
- Teague, G. B., Drake, R. E., & Ackerson, T. H. (1995). Evaluating use of continuous treatment teams for persons with mental illness and substance abuse. *Psychiatric Services*, **46**, 689–695.
- Tennessee Commission on Children and Youth (1997). *Tennessee kids count: The state of the child in Tennessee, 1996*. Nashville, TN: Tennessee Commission on Children and Youth.
- Tennessee Council of Juvenile and Family Court Judges (1995). *1993 and 1994 Tennessee annual juvenile court statistical reports*. Nashville, TN: Tennessee Council of Juvenile and Family Court Judges.
- Thompson, R. A., & Wilcox, B. L. (1995). Child maltreatment research: Federal support and policy issues. *American Psychologist*, **9**, 789–793.
- Wahler, R. G. (1994). Child conduct problems: Disorders in conduct or social continuity? *Journal of Child and Family Studies*, **3**, 143–156.
- Weick, K. (1976). Educational organizations as loosely coupled systems. *Administrative Science Quarterly*, **21**, 1–19.

RÉSUMÉ

Objectif: Cette étude examine les effets du climat créé par l'organisation d'un service et par l'organisation de la coordination avec d'autres services, sur la qualité et les résultats des systèmes d'aide à l'enfance.

Méthode: Un modèle quasi-expérimental et longitudinal a été utilisé pour évaluer les effets d'une organisation accrue de la coordination entre les services dans les centres publics d'aide à l'enfance. L'équipe de recherche a collecté les données qualitatives et quantitatives au cours d'une période de 3 ans, décrivant les services offerts à 250 enfants par 32 bureaux publics d'aide à l'enfance dans 24 comtés du Tennessee.

Résultats: L'étude démontre que le climat créé par l'organisation du service (peu de conflits, collaboration, satisfaction au travail et personnalisation) est le prédicteur le plus important des résultats positifs (les enfants présentaient un meilleur fonctionnement psychosocial) et un prédicteur significatif de la qualité des services offerts. Par contre l'organisation de la coordination inter-services avait un effet négatif sur la qualité des services et aucun effet sur les résultats.

Conclusions: Les efforts pour améliorer les services publics d'aide à l'enfance devraient se centrer sur l'organisation interne aux équipes et à la création d'un climat positif plutôt que sur l'organisation de la coordination entre les divers services. Ceci est important parce que l'accent des politiques à large échelle visent à améliorer la coordination inter-services et non pas l'organisation interne favorable au travail.

RESUMEN

Objetivo: Este estudio examina los efectos de las características organizacionales, incluyendo el clima organizacional y la coordinación interorganizacional, sobre la calidad y los resultados del sistema de servicios a los niños.

Metodología: Se utilizó un diseño longitudinal cuasi-experimental para evaluar los efectos de aumentar la coordinación interorganizacional de los servicios en las agencias públicas de servicio a los niños. El equipo de investigación recogió datos tanto cualitativos como cuantitativos en un período de tres años describiendo los servicios ofrecidos a 250 niños por 32 oficinas públicas de servicios a los niños en 24 condados en Tennessee.

Resultados: Los hallazgos demuestran que el clima organizacional (incluyendo bajo conflicto, cooperación, satisfacción laboral y personalización) es un predictor primario de resultados positivos en los servicios (la mejoría en el funcionamiento psicosocial) y un predictor importante de la calidad del servicio. Por el contrario, la coordinación interorganizacional tuvo un efecto negativo en la calidad del servicio y no tuvo influencia en los resultados.

Conclusiones: Los esfuerzos por mejorar la calidad de los servicios públicos a los niños debe enfocar la creación de un clima organizacional positivo en lugar de aumentar los servicios de coordinación interorganizacionales. Esto es importante porque la mayoría de los esfuerzos en gran escala, por mejorar los sistemas de servicios a los niños, se han centrado en la coordinación interorganizacional y ninguno, hasta la fecha, en el clima organizacional.