

## Facilitating Interorganizational Collaboration: The Contributions of Interorganizational Alliances<sup>1</sup>

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*In an attempt to promote service delivery integration and improve interorganizational collaboration, many recent human service delivery initiatives have included the development of interorganizational alliances such as coalitions and coordinating councils. Despite their popularity, little is known about how these alliances influence interorganizational collaboration, specifically the extent to which they alter the interactions among human service delivery organizations. The present study examined the interorganizational interactions, specifically the exchange relationships, within one county that was implementing two interorganizational alliances—a countywide coordinating council and interagency service delivery teams. Membership on both alliances was associated with broader interorganizational exchange networks. Organizations involved in a coordinating council were more likely to be included in client, information, and resource exchanges, and participate in joint ventures with a broader range of organizations. Providers involved in interagency teams also exchanged clients and information with a broader sector of service delivery organizations than nonparticipating providers. Observational data suggested*

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*that both alliances created structures and processes intended to facilitate interorganizational exchanges. Together, these results suggest that the development of opportunities for and encouragement of staff and leader involvement in these types of alliances may be an important part of our attempt to create a more integrated social service delivery system. The implications of these findings for researchers and practitioners are discussed.*

**KEY WORDS:** interorganizational relationships; service coordination; interorganizational collaboration; coordinating councils; interagency teams; alliances; network analysis.

## INTRODUCTION

Despite numerous legislative and policy mandates to promote interorganizational collaboration among human service delivery organizations, such collaboration remains elusive and difficult to achieve (Alter & Hage, 1993; Glisson & James, 1992). Service delivery organizations typically do not work in a coordinated manner and often have minimal contact with the broad array of agencies within their communities (e.g., Hoge & Howenstine, 1997; Knitzer, 1982). Rigid organizational boundaries, poor interorganizational communication, a lack of mutual awareness and understanding, and interorganizational competition are often blamed for this lack of collaboration (Glisson & James, 1992; Knitzer, 1982; Wehlage & White, 1995). Lack of collaboration is particularly problematic for individuals whose multiple service needs cannot be met by a single provider (Penner, 1995; Tuma, 1989), making it more likely they will fall through service delivery cracks (Burchard & Schaefer, 1992).

In an attempt to promote interorganizational collaboration and reduce service delivery fragmentation, many recent service delivery innovations have focused on creating integrated community-wide "systems of care" (Elliot, 1994). In such systems, connections between organizations are strengthened, organizational boundaries are minimized, and clients flow more easily among agencies (Stroul & Friedman, 1986). One strategy for promoting this type of collaboration is to develop interorganizational alliances (IAs; e.g., coordinating councils, coalitions) where organizational leaders or service delivery staff or both meet and work together to pursue common goals. Although these alliances vary with regard to both their goals and the system players involved (e.g., leaders, direct care providers), most strive to improve interorganizational collaboration by enhancing interorganizational exchange relationships (e.g., exchange of clients and information, sharing of resources). IAs have become a popular vehicle for promoting interorganizational exchange relationships in a variety of service areas, including initiatives that serve young children and their families (Kagan, Rivera, & Parker, 1991), incest victims (Peck, Sheinberg, & Akamatsu, 1995), mental

health consumers (Morrissey, Tausig, & Lindsey, 1985), children with special needs (Wischnowski & McCollum, 1995), individuals at risk for HIV (e.g., Penner, 1995), and individuals with substance abuse problems (Gottlieb, Brink, & Gingiss, 1993). Although IAs are growing in popularity, there has been little examination of how organizations involved in them interact with one another. The purpose of this study is to examine interorganizational exchanges in one county that has developed two types of IAs.

### **Interorganizational Alliances in Creek County**

The county targeted in this study—Creek County—implemented two types of IAs designed to enhance interorganizational collaboration. These were developed in response to the County's recognition that the traditional approach to service delivery was failing to meet constituents' needs. Despite numerous service providing organizations, increased service delivery dollars, and a commitment to improving the efficiency and outcomes of its service delivery system, the County's child and family well-being indicators (e.g., immunization rates, teen pregnancy rates) were continuing to decline. County leaders blamed this decline on the County's poor interorganizational relationships. Human service agencies rarely interacted with each other and consumers and providers faced rigid organizational boundaries and were often unaware of available service options. County leaders were hopeful that through the creation of IAs that facilitated collaboration, interorganizational exchange relationships would be strengthened and a more integrated service system would develop.

Two types of IAs were developed in Creek County—interagency teams and a coordinating council. Interagency teams are composed of direct line staff from multiple agencies who meet regularly to plan services for specific clients, exchange information, and problem solve. Participation on interagency teams can facilitate interorganizational exchanges by increasing provider awareness of other agencies and the services they provide, by providing some level of personal acquaintance with the staff of other agencies (Penner, 1995), and by facilitating the development of positive attitudes towards a more collaborative approach to service delivery (Foster-Fishman, Salem, Allen, & Fahrback, 1999). Although these teams have become an important component of many service delivery initiatives, no empirical investigation of interorganizational exchange relationships among their members has been conducted.

A coordinating council, consisting of the representatives of public service agencies, the private sector and local funders, meets monthly in Creek County to plan, create, and coordinate services. This coordinating council is

similar to others that have been developed within each county in our state to address the general health and well-being of the residents within their communities. These councils attend to the breadth of social issues (e.g., substance abuse, domestic violence) affecting residents. They are charged with developing a countywide vision, garnering the resources for local reforms, and directing their community's efforts to achieve outcomes designated by the state. Their aim is to enhance interorganizational collaboration and facilitate the exchanges of clients, information, and resources across agencies by reducing organizational barriers and creating mutual goals (Elliot, 1994). Although many discuss the potential value of participation in coordinating councils (e.g., Skaff, 1988; Wischnowski & McCollum, 1995) and numerous service delivery initiatives require such councils (e.g., Morrissey, Johnsen, & Calloway, 1997; Wehlage & White, 1995), there has been little empirical investigation of the interorganizational exchange relationships of council members.

An important unanswered question regarding these councils concerns which aspects of council membership are related to interorganizational exchanges. Within any one council, members often vary with regard to how long they have been members, how often they attend, and who they bring to meetings. Some organizations serve as virtual members only, receiving announcements and meeting minutes, but attending few meetings. Other organizations have leaders who are active members of the council. Still others are represented at council meetings by a broad sample of employees, sometimes as proxies for leaders, sometimes in addition to leaders. Given the difficulty IAs often experience in recruiting and maintaining an active membership base (Winer & Ray, 1994), it seems important to consider which aspects of council membership are related to how organizations interact. This study will explore three components of membership status—length, participation rates, and breadth of inclusion.

### **Assessing Interorganizational Collaboration**

One powerful vehicle for assessing interorganizational collaboration is to examine the pattern of exchanges across agencies within a service delivery system (e.g., Morrissey, 1992; Provan & Milward, 1995). The basic premise behind this approach is that service systems can be conceptualized as networks of interacting organizations and the characteristics of the network can be inferred from exchange patterns (Morrissey et al., 1997). The degree and type of interorganizational collaboration within a community is reflected in both the number and pattern of interorganizational exchanges (e.g., Provan & Milward, 1995).

Human service delivery exchange patterns have been traditionally characterized by few linkages and these linkages have been mostly intradomain (e.g., mental health agencies interact with other mental health agencies; Knitzer, 1982). The pursuit of improved interorganizational collaboration requires human service organizations to engage in exchange relationships with a larger *and* broader sector of organizations (Glisson & James, 1992). Both IAs targeted in this study aimed to promote service delivery integration by increasing the number of interorganizational exchanges, particularly cross-domain linkages (e.g., mental health agencies interacting with judicial and educational organizations), in their community.

It is generally recognized that interorganizational collaboration includes the exchange of a variety of resources across organizations, including clients, information, funding, and innovations (e.g., Reid, 1965; Van de Ven & Ferry, 1980). Recent research suggests that these different exchange types are characterized by different network patterns, indicating that interorganizational relationships vary, dependent upon the function of the exchange (Bolland & Wilson, 1994). In this study we examined two interorganizational exchanges that are recognized as important elements in service delivery networks (Bolland & Wilson, 1994) and are central to the purpose of the IAs we targeted. We assessed service delivery exchanges (i.e., exchange of clients and information) and administrative exchanges (i.e., sharing of resources and participation in joint ventures).

### Current Study

The purpose of this study is to examine if membership on two IAs is related to interorganizational exchanges in Creek County. With regard to service delivery exchanges, we would expect membership on both coordinating councils and interagency service delivery teams to be related to service delivery exchanges. Since information and client exchanges occur at the provider level, interagency teams would be expected to be efficacious at promoting this behavior (Rogers, 1995). Coordinating councils have also been found to increase service delivery exchanges (Morrissy et al., 1997). Participating leaders may become more aware of community resources available to their clients. This awareness may translate into formal plans and procedures designed to facilitate service delivery exchanges. We explored the following questions concerning service delivery exchanges.

1. Is membership on an interagency alliance (IA) related to service delivery exchanges?

*Hypothesis a.* Coordinating council members will have more integrated (larger and broader [spanning more domains]) service delivery exchange networks than organizations that are not members.

*Hypothesis b.* Providers involved in interagency teams will have more integrated (larger and broader) service delivery exchange networks than nonmember providers.

2. Which aspects of membership status (i.e., length, participation rates, and breadth of inclusion) on a coordinating council are related to service delivery exchanges?

With regard to administrative functions, we would expect coordinating council membership to be related to administrative exchanges. Councils are well equipped to facilitate this type of exchange since organizational leaders typically have responsibility for developing joint ventures and promoting resource sharing across agencies (Bolland & Wilson, 1994). We explore the following questions regarding administrative exchanges.

1. Is membership on a coordinating council related to administrative exchanges?

*Hypothesis a.* Coordinating council members will have more integrated (larger and broader) administrative exchange networks than organizations that are not members.

2. Which aspects of membership status (e.g., length, participation rates, and breadth of inclusion) on a coordinating council are related to administrative exchanges?

## METHOD

### The Setting

Creek County is a mid-size, partly rural county in Michigan. In 1989, in an effort to enhance interorganizational collaboration around prevention efforts, six leading public service agencies (e.g., public health, mental health, social services) established an interagency coordinating council (ICC). During the first few years of operation, the ICC invited only three other large, key service agencies to join this group. In 1992, recognizing that its efforts could not be achieved without the active involvement of other service agencies in the county, the ICC invited any service providing organization in the county to join. By the end of 1992, membership had expanded to 14 organizations. A clear mission was also defined in that year: to “achieve optimum health, safety and well being of all people through collaborative leadership and prevention and wellness outcomes.” During

these early years, the ICC succeeded in implementing several service innovations, including receiving state level funds for demonstration projects that promoted interorganizational collaboration through interagency team efforts. The ICC became the state's official coordinating body for the county in 1995. By 1996, ICC had expanded its membership to 32 organizations, had created an infrastructure to promote collaboration across member organizations, and had implemented several collaborative service delivery initiatives.

In response to specific state-level initiatives that were designed to promote interorganizational collaboration and integrated service delivery, Creek County also had developed several interagency service delivery teams. These teams, which met weekly, included service delivery providers from different organizations. Team membership was often rotated within organizations, with most members assigned by their leaders. Teams were relatively large in size, with one team including 20 providers at weekly meetings. Team members would meet to discuss services offered by their organizations, brainstorm resolutions for difficult cases, and plan services for specific clients they shared in common. At the time of this study, one interagency team had been meeting for over 2 years, the other team for approximately 1 year.

Overall, the leadership role played by the ICC, the countywide goal of creating an integrated service delivery system, the variable involvement of county organizations in the ICC, and the development of several interagency teams and variable provider involvement in them helped to make Creek County an excellent context for pursuing our research questions.

## **Procedures**

This study employed a joint insider–outsider methodology (Bartunek & Louis, 1996) to increase the local relevance of the questions asked and methods employed. A committee of eight ICC and interagency team members worked collaboratively with the research team on survey development, data collection, and data interpretation. To assess the exchange relationships within the county, network analyses were conducted. Qualitative methods were used to help us interpret the network analyses and to better understand the relationship between ICC and interagency team membership and interorganizational exchanges.

### *Network Analysis*

Social network analysis is a technique used to assess interactions between members within a particular bounded network (i.e., a network with

a clearly defined set of members). In the network analytic tool we used, *Kliquefinder* (Frank, 1996), network integration is assessed by whether and what type of subgroups emerge in the network exchange patterns. Subgroups emerge when actors (e.g., organizations, providers) are more likely to interact with a particular subsample of other actors than with any other actors in the network (e.g., Burt, 1984; Collins, 1988). Examining the presence and nature of subgroups is particularly important for this study, given that human service delivery organizations have a long history of interacting only with organizations that share a similar purpose or provide similar services. If subgroups exist within our network, and these subgroups include organizations from the same service delivery domain (intradomain linkages), then service delivery integration is likely to be low. On the other hand, if no subgroups exist, or if subgroups are cross-domain in purpose (i.e., include organizations from diverse service domains), then service integration is likely to be high. Overall, network analysis is a powerful tool for assessing interorganizational exchange relationships. However, as a tool, it imposes several important methodological design issues which are discussed below.

*Network Bounding.* An essential issue to consider in a study of interorganizational exchanges is which organizations to include in the targeted network (Laumann, Mardsen, & Prensky, 1983). Given the purpose of this study, we first created a list of the service delivery organizations currently involved in the ICC ( $n = 32$ ). We then asked several informants to identify other key service delivery agencies in the County, particularly those involved in interagency teams, but not the ICC. In total, 44 organizations (32 ICC, 12 non-ICC) were identified.

*Utilizing Leaders and Multiple Staff Informants.* Another issue in a network study is determining who will provide exchange information. Although the single key informant approach is commonly used in network studies (e.g., Morrissey et al., 1985), it is dependent on the assumption that a single individual is aware of the entire range of interorganizational exchanges. This premise seemed appropriate for the examination of administrative exchanges. Given their administrative and planning roles, the top administrator (e.g., Executive Director) from each organization was surveyed about the organization's joint ventures and exchange of resources.

We were also interested in the exchange activities of frontline staff, specifically the exchange of clients and information. It is unlikely that any single key informant would be aware of all the interorganizational links service providers make. In fact, Hall, Clark, Giordano, Johnson, and Van Roekel (1977) found that individuals in administrative positions were often unaware of their subordinates' service delivery exchanges. For that reason, multiple service providers from each organization were surveyed to examine service delivery exchange behavior.

*Using Confirmed and Unconfirmed Ties.* Another decision point concerns the use of confirmed or unconfirmed ties in creating social network matrices. A confirmed linkage is one in which both parties report the exchange (e.g., Head Start reports referring clients to the Public Health Department and Public Health reports receiving clients from Head Start). Many researchers report confirmed linkages, with the premise that this strategy increases the reliability of network data and provides a more conservative estimate of interorganizational relationships (e.g., Calloway, Morrissey, & Paulson, 1993; Morrissey et al., 1994). Yet, a relatively high number of unconfirmed linkages are often reported (Bolland & Wilson, 1994), suggesting that an over reliance on confirmed linkages may under represent service linkages.

We based our decision as to whether to use unconfirmed or confirmed ties on the particular sample and issues involved in this study. We decided to use confirmed ties when the linkage type represented a form of exchange that occurs at the organizational level (e.g., resource exchanges, joint ventures), is not dependent upon the variable behavior of employees, and implies reciprocity. For example, once a resource exchange has been negotiated between two organizations (e.g., sharing a van) this exchange represents a steady interorganizational state. Individual level variables, such as provider preferences or awareness, have little, if any impact on this exchange. Since we would expect organizational leaders to be aware of their organizations' planning and administrative activities, and because these exchanges represent organizational level functions, confirmed ties were used to assess administrative exchanges.

On the other hand, service coordination functions are more accurately represented by unconfirmed ties. Client and information exchanges are provider dependent and represent provider behavior. When using a sample of providers who are reporting their own service coordination behavior, these links cannot necessarily be confirmed because the provider they communicated with in the other organization may not have been sampled. Since the entire population of providers in every organization was not surveyed, utilizing unconfirmed ties was necessary.

### *Sample*

*Organizational Sample.* Of the 44 organizations originally identified, 11 were deemed inappropriate for this study (e.g., they did not provide direct services to clients), Thirty-two of the 33 remaining organizations agreed to participate, including 20 coordinating council members and 12 nonmember organizations. Sixteen of these organizations (14 ICC members,

2 nonmembers) had staff who were members of an interagency team. These organizations represented a broad range of agencies (e.g., domestic violence shelters, substance abuse programs, Public Health) and service domains (e.g., mental health, education, legal). They included not-for-profit and profit organizations, government and community-based agencies, providing a representative picture of County services.

*Provider Sample.* For a larger study, surveys were distributed to a randomly selected sample of 530 providers across the 32 targeted organizations. Three hundred twenty-eight surveys were returned, yielding a response rate of 62%. Because of the nature of the larger study, two survey versions were randomly distributed to the targeted providers. A total of 182 surveys included the data needed to address the proposed research questions and were included in this study. This subsample included providers from all 32 organizations. One hundred fifty-six of these providers worked in ICC member organizations; 45 were interagency team members and all but two of these team members worked in ICC member organizations.

*Leader Sample.* Surveys were distributed to the top organizational leader in 31 of the organizations involved in this study. One organization was excluded because it was small and did not have a leader. Twenty-six leaders completed the survey (87% response rate).

### *Procedures*

Depending upon the size and structure of the organization, and the arrangements made with the leader, either the population or a random sample of service delivery staff were surveyed. A standardized protocol was presented to targeted staff in either written or oral form. Surveys were either distributed to staff during a group presentation, left in staff mail boxes, or mailed. Staff either completed and returned the survey immediately after the presentation, returned it in a sealed drop box, or returned it by mail. After staff data collection was completed, surveys were mailed to organizational leaders. Leader surveys were returned via mail.

*Staff Survey.* This instrument assessed direct service providers' service delivery exchanges in the last 90 days. Providers rated their frequency of (1) receiving clients from, (2) referring clients to, and (3) exchanging information with each of the 31 other organizations in our sample utilizing a 5-point scale (1 = *exchange less than once a month*, 5 = *daily exchange*). To develop a single measure of interorganizational service delivery exchanges, providers' responses across these three dimensions were averaged.

In the end, each provider had 31 service delivery exchange scores, one for each organization (other than their own) in the targeted network. These

individual scores were then averaged across providers within each organization, producing a set of 31 exchange scores for each organization. These scores reflected the extent to which providers within each organization exchanged clients and information with providers in each of the other organizations in the network. Two additional sets of organizational average scores were computed, one including only providers who were team members, the other including providers who were not team members.

*Leader Survey.* Leaders were asked to indicate whether or not their organization (a) engaged in the sharing of resources (i.e., in-kind resources, personnel, facilities, supplies, transportation, funds, etc.) or (b) participated in joint ventures (i.e., agencies working together to plan service delivery or develop new programs) with each organization listed in the survey. Both of these items were dichotomously scored (1 = *an exchange did occur*, 0 = *no exchange occurred*). These two items were averaged for each leader, resulting in 31 scores (each ranging from zero to one) which represented the organization's administrative interaction with every other organization in the network.

*Social Network Matrices.* To conduct network analyses, four social network matrices were created, one from each of the four sets of organizational level scores described above.<sup>3</sup> Each matrix was a square agency by agency matrix where the *ij* cells reflected the presence and strength of the exchange relationship. To assess service delivery exchanges in the county, three separate matrices were constructed. One included data from all providers, one included only interagency team members, and one included only nonteam members. To assess administrative exchanges, one matrix containing data collected from leaders was constructed. Overall, the reliability of this network data was increased by (1) averaging multiple indicators for each exchange type; (2) providing respondents with the complete list of organizations, rather than relying on their memory; (3) including multiple informants in service delivery exchanges scores; and (4) using confirmed ties in the administrative exchanges scores (Johnsen, Morrissey, & Calloway, 1996).

*Membership Status Data.* Attendance records from ICC meeting minutes were collected for every meeting held from the ICC's inception to one month following data collection. The date each organization joined the ICC was collected from ICC archives. The following variables were then created: (a) length of ICC membership (total possible number of meetings an organization could have attended); (b) leader attendance (percent of possible

<sup>3</sup>Given the symmetric nature of service delivery exchanges (the providers were asked about both referrals to their organization and referrals from their organization, and both responses went into the service delivery exchange score), symmetry was imposed upon the social network matrix. Because we used confirmed ties for the administrative exchange analysis, the social network matrix for resource exchange was automatically symmetric.

meetings attended by the organizational leader); (c) overall organizational attendance (percent of possible meetings attended by at least one organizational member); and (d) breadth of attendance (total number of different organizational members who attended at least one meeting).

*Qualitative Methods.* From March 1995 to June 1998 we attended and observed the monthly ICC meetings (observing 29 meetings) and the meetings of one interagency team (observing 12 team meetings). Both descriptive and interpretive field notes were taken (Bogdan & Biklin, 1992; Patton, 1990) and meeting agendas and minutes collected. Descriptive notes included detailed descriptions of meeting activities (e.g., decisions-made, discussion content), meeting structure (e.g., organization of meeting agenda), interactions among council or team members, and verbatim comments regarding interorganizational collaboration made by members. Interpretive notes included our subjective interpretation of the meeting events and their significance for interorganizational collaboration. Both note types were content analyzed by the primary observer, substantive themes identified (Strauss & Corbin, 1990), case summaries written, and these summaries and their supporting evidence then reviewed and discussed with a third party. To enhance the trustworthiness and authenticity (Guba & Lincoln, 1989) of our findings, we maintained a prolonged engagement in the community, persistently observed ICC and team meetings (Lincoln & Guba, 1985), and engaged in numerous setting member checks by discussing and corroborating our findings with our evaluation subcommittee, numerous key informants, and in our multiple feedback sessions with consumers, service providers, and leaders.

## RESULTS

### Network Analysis

We conducted network analyses on our linkages data using *Kliquefinder* (Frank, 1996). Frank's method assesses the patterns of interaction within the social matrix by using a hill-climbing algorithm. This algorithm, which is similar to cluster analysis and the technique used by Bolland and Woods (1987), creates subgroups by clustering actors who are interacting more with each other than with other actors within the matrix. Frank's method (Frank, 1996) was ideal for this study because it does not require the number of subgroups to be predetermined and because it determines group membership based on the extent to which actors (e.g., organizations) interact *directly* with each other. Other network analytic methods (e.g., Concorr) rely on structural

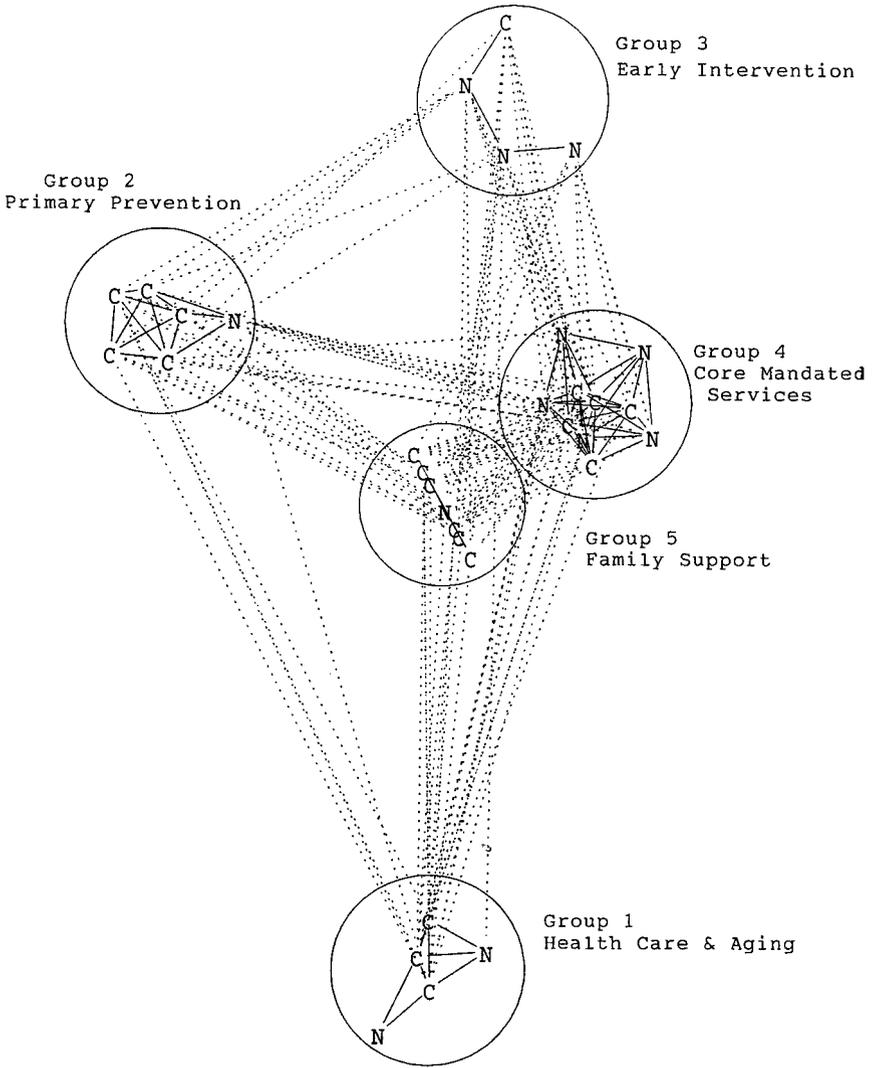
equivalence, a process that aggregates actors into groups based on similar patterns of interaction, regardless of whether or not they interact with each other.

Another benefit of *Kliquefinder* is that it generates a graphic representation of the network. These graphs are an excellent venue for visually assessing the character of the targeted network (Frank, 1996), and also provide a means for comparing and contrasting different network structures (e.g., team vs. nonteam members) and the positions of different network members (e.g., ICC and non-ICC members). *Kliquefinder* produces these graphs by conducting multiple multidimensional scalings; one within each subgroup of actors, and then one placing the groups in relation to one another. In the pictures that follow, dotted lines represent between-group interactions (cross-domain), solid lines represent within-group interactions (intradomain), and nodes represent organizations. Ideally, the distances between actors within groups are in the same metric as the distances between groups. However, if this leads to a picture that is uninterpretable because subgroups overlap, the ratio of between-group distances to within-group distances is changed. In the following pictures, the ratio of between-group distances to within-group distances is set to 1.6:1. Although this allows us to interpret the distances between groups, or between actors within a group, it does not allow comparison of between-group to within-group distances.

As with any statistical tool, network analysis has some limitations. For example, one cannot say with certainty that all actors have been assigned to their “correct” subgroups. Thus, inferences based on the presence of specific actors in specific groups must be made with caution. Fortunately, in this study, we were less interested in the specific subgroups in which organizations were assigned and more interested in whether or not subgroups existed in the data.

### *Service Delivery Exchanges in Creek County*

*Coordinating Council Membership and Service Delivery Exchanges.* To examine the relationship between ICC membership and service delivery exchanges in Creek County, a network analysis of the social network matrix including data from all providers within ICC and non-ICC organizations was computed. Figure 1 portrays the service delivery exchange network found in this county. According to this network solution, five cohesive subgroups exist (each bounded by a circle). Each subgroup contains organizations that were more likely to exchange clients and information with one another than



**Fig. 1.** This figure portrays the service delivery exchange network including all providers sampled in this study. The five cohesive subgroups (bounded by a circle) represent organizations that were more likely to exchange clients and information with one another than with other organizations in the county. Solid lines portray connections within a subgroup (intradomain linkages) and dotted lines indicate connections across subgroups (cross-domain linkages). ICC member organizations are indicated by a "C," nonmember organizations with an "N."

they were with other organizations in the county. ICC member organizations are indicated by a “C” and nonmember organizations with an “N.”

To rule out the possibility that this network solution was simply a statistical artifact, we tested the null hypothesis that no subgroups existed (Frank, 1996). With a  $p$ -value less than .001, we can reject the null hypothesis and assume that groups did in fact exist. If the service delivery system was particularly integrated within Creek County, then we would have expected organizations to exchange relationships with a broad array of other organizations and no specific subgroups to have emerged. Or, alternatively, to have found subgroups containing organizations from multiple service domains.

To better understand the character of the county’s service delivery network, we asked the leaders and providers on our evaluation subcommittee to describe these subgroups, determine if they reflected cohesive, meaningful subgroups within their County, and describe the organizations within each subgroup and their interorganizational relationships. They confirmed these subgroups reflected an existing pattern of interorganizational exchanges within Creek County. We also learned that this network map reflected a somewhat traditional service delivery exchange network. Each subgroup of organizations (bound by a circle) shared a common consumer population or purpose. For example, organizations in subgroup 1 provided health care and aging services, organizations in subgroup 2 worked in primary prevention, and organizations in subgroup 4 offered core mandated services mostly around child welfare issues, including counseling, child protection services, and parenting education. Certainly, organizations did engage in exchanges outside of their traditional service domain, as illustrated by the dotted lines between the subgroups. Overall, however, the domain specificity of the bounded subgroups indicated that Creek County’s service delivery network remained somewhat fragmented.

To explore whether coordinating council membership was associated with organizations being involved in a more integrated service delivery exchange network, the quantity and breadth of member and nonmember service delivery exchanges were assessed. To compare the quantity of service delivery exchanges, a one-way ANOVA was conducted. Of the 31 possible linkages in this network, member organizations ( $M = 13.8$ ) had more interorganizational service delivery linkages than nonmembers ( $M = 10.2$ ,  $F = 5.24$ ,  $df = 31$ ;  $p < .05$ ). A visual examination of the network in Fig. 1 illustrates these findings. Many of the organizations on the periphery of the network, indicating they were less integrated and connected, were non-ICC members (as indicated by an “N”). Most of the organizations in the center of the network, suggesting they were the most integrated, were ICC member organizations (as indicated by a “C”).

Another aspect of network integration is the extent to which an organization interacts with a broad array of agencies within its community. In this study, we operationalized breadth of exchanges by the number of cross-domain linkages that an organization engaged in. Cross-domain linkages refer to those exchanges with organizations outside of the target agency's subgroup (bounded circle), as identified in Fig. 1. Because the number of available cross-domain connections varied across subgroups, we computed the percentage of possible linkages that were actually made. It appeared that ICC membership was somewhat related to the number of cross-domain connections ( $F = 3.819$ ,  $df = 31$ ;  $p < .10$ ), with ICC members ( $M = 34\%$ ) connected to a somewhat larger percentage of their potential cross-domain partners than non-ICC members ( $M = 24\%$ ). Together, these analyses provide support for our hypothesis that organizations involved in the coordinating council would have larger and to some extent broader (i.e., spanning more domains) service delivery exchange networks than nonmembers.

*Aspects of ICC Membership.* To explore which aspects of ICC membership were related to the quantity of an organization's service delivery exchanges, we examined the relationship between three dimensions of membership—length of membership, attendance, and breadth of organizational involvement—and number of service delivery exchanges. Neither length of ICC membership ( $r = .30$ , *ns*) nor attendance at ICC meetings, as measured by percent of meetings attended by the leader ( $r = -.230$ , *ns*) and percent of meetings attended by any organizational member ( $r = .06$ , *ns*), were related to number of service delivery exchanges. However, breadth of organizational involvement, as measured by the number of different people from any one organization who attended an ICC meeting, was significantly related to the number of service delivery exchanges ( $r = .47$ ,  $p < .05$ ). Because this finding could be potentially confounded by organizational size, with larger organizations having more employees available to include in these meetings, we ran this correlation again, controlling for organizational size (i.e., the number of employees, as reported by the organizational leader). Even after controlling for organizational size, breadth of organizational involvement was still related to the number of service delivery connections ( $r = .46$ ,  $p < .05$ ).

*Interagency Team Membership and Service Delivery Exchanges.* Because we expected team members and nonteam members within the same organization to have different interorganizational exchange networks, separate network analyses were conducted for team and nonteam members' social matrices. These two matrices reflected exchanges across the same organizations, only differing on who, within each organization, was reporting exchanges.

Figures 2 and 3<sup>4</sup> illustrate these two service delivery exchange networks. Overall, it appears that team members and nonmembers have different patterns of service delivery exchanges. The important distinction between the two network maps is that identifiable subgroups were only present in the nonmember network. The nonteam members network (Fig. 2) included 3 subgroups ( $p < .001$ ), each representing a specific service domain. This suggests that nonmember providers were more likely to interact with organizations that had a similar organizational purpose or clientele. In contrast, the team members' network (Fig. 3) was more congruent with an integrated service delivery exchange network. No cohesive subgroups were found; instead team members interacted with a broad sector of organizations within the county. The density of interaction for team members (.123) was also higher than the network density of nonteam members (.088), indicating that team members connected with a larger percentage of the network members than nonteam members. Overall, these findings provide strong support for our hypothesis that interagency team membership would be associated with a larger and broader service delivery exchange network.

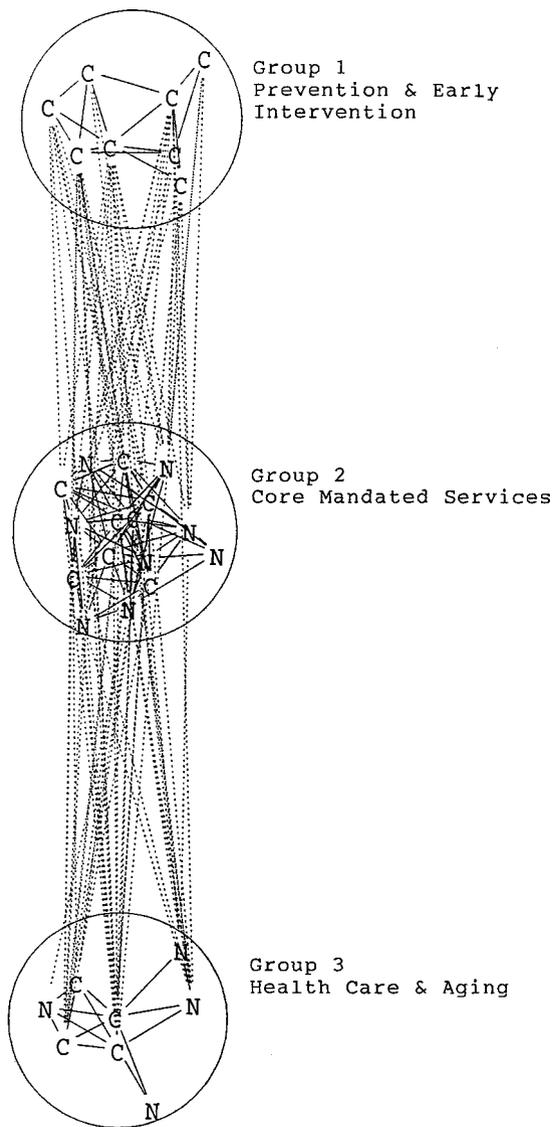
#### *Administrative Exchanges in Creek County*

To assess administrative exchanges (i.e., resource exchanges and joint ventures), a network analysis of the leader social network matrix was conducted.<sup>5</sup> As Fig. 4 illustrates, organizations within Creek County appeared to share resources and engage in joint ventures with a diverse spectrum of organizations. The dense pattern of exchange relationships, with no cohesive subgroups found, suggests that the exchange of resources and participation in joint ventures were not restricted to other organizations within the same service domain.

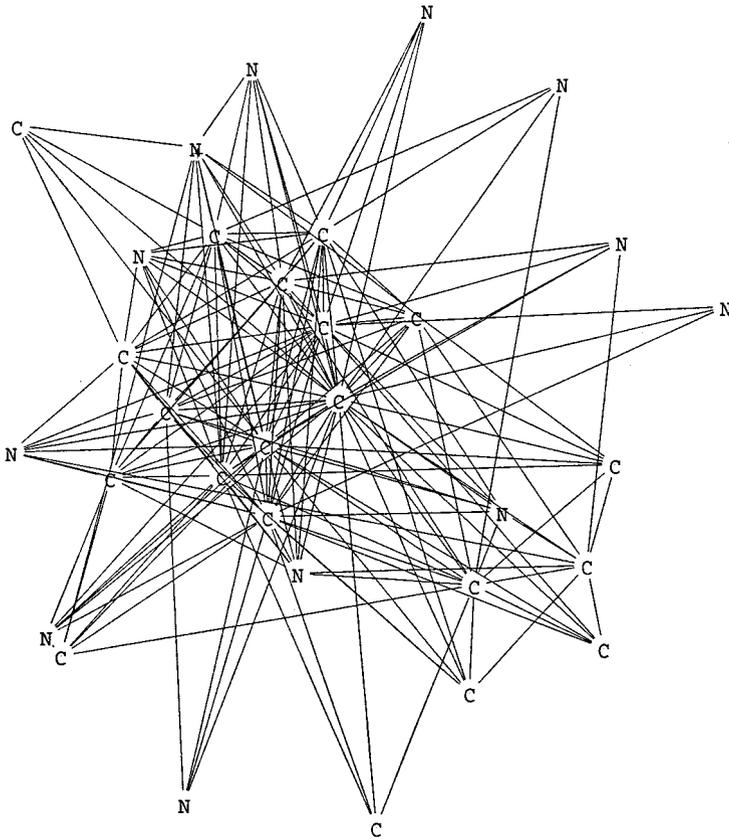
*Coordinating Council Membership and Administrative Exchanges.* To assess the relationship between coordinating council membership and administrative exchanges we compared the number of linkages for council members and nonmembers. We found that ICC members were more tightly integrated into this administrative network, sharing resources and engaging in joint ventures with a larger sample of organizations ( $M = 6.98$ ) than nonmembers ( $M = 2.50$ ,  $F = 8.32$ ,  $df = 25$ ;  $p < .01$ ). This difference is well illustrated in Fig. 4, with the majority of nonmember organizations

<sup>4</sup>Only 16 of the 32 organizations had at least one team member. However, because all 32 organizations interacted with at least one organization that had a team member, all 32 organizations are represented in Fig. 3.

<sup>5</sup>Because confirmed ties were used to create this social matrix, it only included data for the 26 organizations (18 ICC members and 8 nonmembers) that had leader data available.



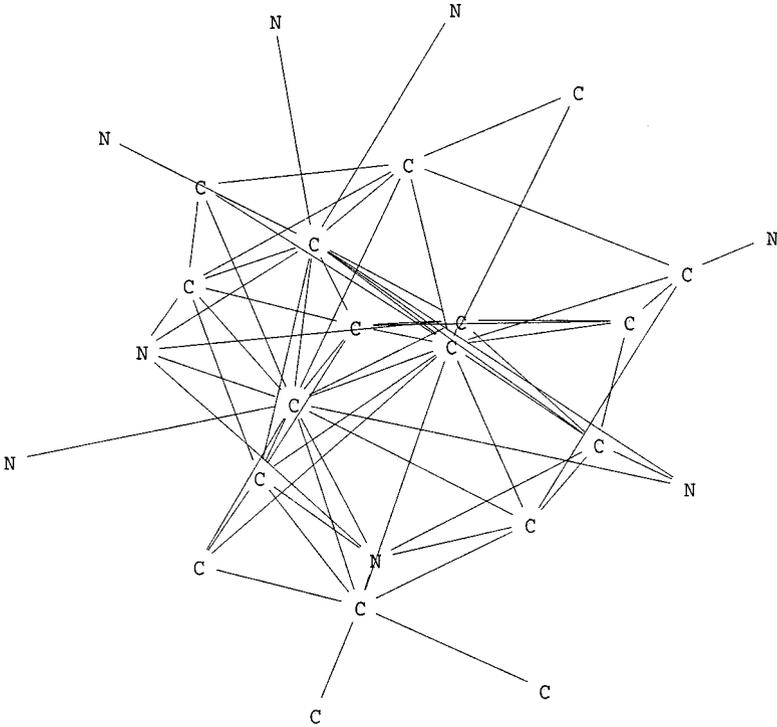
**Fig. 2.** This figure portrays the service delivery exchange network including only providers not involved in interagency teams. The three cohesive subgroups (bounded by a circle) represent organizations that were more likely to exchange clients and information with one another than with other organizations in the county. Solid lines portray connections within a subgroup (intradomain linkages) and dotted lines indicate connections across subgroups (cross-domain linkages). ICC member organizations are indicated by a “C,” nonmember organizations with an “N.”



**Fig. 3.** This figure portrays the service delivery exchange network (i.e., exchange of clients and information) of providers involved in interagency teams. There were no identifiable subgroups in this network. Solid lines portray all connections. ICC member organizations are indicated by a “C,” nonmember organizations with an “N.”

(indicated with an “N”) falling on the periphery of the network. Most of the organizations in the center of the network, suggesting they were the most integrated, were ICC member organizations (as indicated by a “C”). Together these findings support our hypothesis that organizations involved in the ICC would have larger and broader administrative exchange networks than nonmember organizations.

*Aspects of ICC Membership.* To assess which aspects of ICC membership were related to administrative exchanges, we examined the relationship between three dimensions of membership—length of membership,



**Fig. 4.** This figure portrays the administrative exchange network (i.e., exchange or resources and sponsorship of joint ventures) of all organizations sampled in this study. There were no identifiable subgroups in this network. Solid lines portray all connections. ICC member organizations are indicated by a “C,” nonmember organizations with an “N.”

attendance, and breadth of organizational involvement—and quantity of administrative exchanges. Both length of ICC membership ( $r = .70, p < .001$ ) and breadth of organizational involvement ( $r = .68, p < .01$ ) were significantly related to the extent to which an organization was integrated into the administrative exchange network. The longer an organization was a member and the more people an organization involved in the ICC, the more the organization engaged in resource exchanges and joint ventures. After controlling for organizational size, breadth of organizational involvement was still related to number of administrative exchanges ( $r = .69, p < .01$ ). Attendance, measured by percent of meetings attended by leaders ( $r = -.20, ns$ ) and percent of meetings attended by any organizational member ( $r = -.04$ ), was not related to number of administrative exchanges.

## Qualitative Findings

Because our network data was cross-sectional and potentially influenced by a self-selection bias, we felt it was important to document that these alliances actually created contexts that had the capacity to facilitate interorganizational exchanges. We used qualitative observations of the ICC's and one interagency team's meetings to examine whether or not these alliances implemented structures and processes specifically intended to facilitate interorganizational exchanges. Overall, our observations of ICC and interagency team meetings suggested that both alliance types promoted such a context.

### *Coordinating Council*

The discussions, planning sessions, and programming efforts we witnessed during our observations of ICC meetings suggested that organizations involved in the ICC were engaging in interorganizational collaboration and exchanges in new and expanded ways. In particular, the structure of ICC meetings and ICC's internal operational processes appeared to be designed to promote interorganizational collaboration. These are described below.

*A Monthly Agenda Organized Around Interorganizational Exchanges.* ICC's commitment to promoting interorganizational collaboration was well evidenced by the fact that monthly meetings were organized around the discussion of current and future service delivery and administrative exchanges.

**"NEED TO KNOW" SESSIONS:** The beginning of each ICC meeting was dedicated to information exchange and was aptly called "Need to Know." During this time community and organizational representatives and ICC members provided information on service delivery opportunities (e.g., new or altered services), organizational changes (e.g., changes in agency policy or practices), or upcoming events (e.g., county commissioners voting on important policy) relevant to ICC members. Often members discussed the potential impact of these events on Creek County or how ICC members could ensure consumer access to new services, or both. Fliers announcing these events or opportunities were distributed and ICC members were asked to share them with their employees. Service delivery exchanges were also encouraged when new members joined the ICC. At their first meeting, new members provided detailed information about their organization's purpose and available services. Meeting minutes summarizing this information were distributed to members and other interested organizations in the community.

ICC's commitment to improving interorganizational collaboration via information exchange was further evidenced by the ongoing discussion about the impact of "Need to Know" sessions. For example, at subsequent meetings ICC members would ask organizational representatives to describe client demand for their new services, and community representatives to describe the turnout and outcome of the commissioners' meeting. A discussion regarding the impact of "Need to Know" sessions on these outcomes would ensue. Overall, the "Need to Know" sessions demonstrated ICC's commitment to promoting information exchange and enhancing service integration in Creek County.

**"SHARED WORK" SESSION:** The second half of the ICC monthly meetings was dedicated to what this council termed its "Shared Work." This included a discussion of all current and future collaborative ventures pursued by the ICC and its members. During the course of our observations, ICC members proposed, planned for and sponsored numerous collaborative initiatives. At the time of our study, over 11 interorganizational collaborative service delivery initiatives were occurring in the County, most of which were sponsored or supported by the ICC. Many of these initiatives required joint funding or resource exchanges across organizations.

Other "Shared Work" discussed at monthly meetings included the seven ICC collaborative workgroups. These groups were interorganizational task forces organized around particular topics (e.g., teen pregnancy, substance abuse) and were charged with the goal of developing collaborative workplans to improve community-level indicators in their targeted areas.

*Promoting a Culture for Collaboration.* In addition to creating a meeting structure that focused on promoting collaboration, the ICC also attempted to create an internal and community culture that valued and supported collaboration. Specifically, the ICC engaged in several processes to promote organizational and community accountability around collaboration.

**SHARED OUTCOMES:** During the course of our study, the ICC engaged in a lengthy strategic planning process to identify shared outcomes that would direct future ICC activities and be used to assess the ICC's impact. This process created somewhat of an identity crisis for ICC members, as they explored the question of whether or not their collaboration actually produced outcomes for their community. As one ICC member noted, "We need outcomes dependent upon us coming together. Why else are we here?" After a year long planning process, the ICC identified several shared outcomes and identified their interorganizational collaboration as the key ingredient to accomplishing those goals.

**PROMOTING ICC MEMBER ACCOUNTABILITY:** Central to ICC's success was the cooperation and support of organizational leaders to implement joint programs and new policies intended to foster collaboration. To foster

this cooperation, the ICC detailed its expectations of member organizations and would publicly discuss members' support, or lack of support, of ICC initiatives. For example, to foster the exchange of clients and information across organizations, the ICC drafted a communitywide client confidentiality clause and asked all ICC member organizations to adopt it. Two years later, less than 50% of member organizations had adopted this clause. To promote member accountability around this issue, the ICC leader verbally listed all participating and nonparticipating organizations during an ICC meeting. Although some members found this coercive, most agreed that a public discussion about the level of cooperation was necessary in order for real change to begin to happen within the community.

**SHARED FUNDING POOL:** The ICC's commitment to fostering collaboration and member commitment to such efforts was further evidenced by the shared funding pool supported by ICC members. All ICC members were required to contribute to this pooled funding base. Funds covered ICC meeting costs and supported some joint ventures.

**BARRIER BUSTERS:** ICC members were aware of the numerous barriers to human service agencies working together. For that reason, they created a "Barrier Busters" system designed to identify and eliminate barriers to interorganizational collaboration in their community. Any community member or human service employee could complete a barrier busters' form and forward it, anonymously, to the ICC. This form requested information about the barrier, why it impeded collaboration, which organization(s) were creating it, and previous efforts to try to eliminate it. Barriers were discussed openly at ICC meetings and, when possible, plans made to resolve them. Barriers involving state-level policies were forwarded to state administrators.

Barriers to collaboration were also discussed more informally at ICC meetings. Members frustrated with ICC processes or outcomes would sometimes air their complaints at monthly meetings. For example, one issue that emerged during our study was the concern over timely information dissemination. During our observations, at least four incidents were observed where a subsample of members felt that important information about service delivery opportunities, funding deadlines, or legislative action was not disseminated in a timely manner. These discussions often ended with council members revisiting their goal to improve interorganizational collaboration, highlighting the importance of timely communication, and designing vehicles to promote interorganizational communication between meetings.

*Data Authentication.* To confirm the above conclusions, we presented and discussed these findings with numerous Creek County leaders and providers in feedback sessions, subcommittee meetings, and key informant interviews. These informants strongly supported our conclusion that the ICC

was creating a context that promoted and expanded exchange relationships across organizations. Many of our informants shared personal accounts of how, because of their involvement with the ICC, their organization was now working with another organization for the first time.

### *Interagency Teams*

Our observations of interagency teams also identified several processes that were designed to facilitate interorganizational collaboration.

*Promoting Provider Awareness of Community Organizations.* Like the ICC, interagency team meetings were structured to facilitate service delivery exchanges by promoting awareness of the range of service delivery organizations within Creek County. Meetings included informal and formal information sharing sessions about community resources. For example, the beginning of each team meeting was devoted to detailing the services of a particular organization (i.e., what services the organization provided and how to access them). Team members would ask questions and seek information about how to avoid potential service delivery barriers. These sessions were designed to enhance provider awareness of service options within their community. On several instances we witnessed providers learning about services that had existed within their community for years.

*Collaborating to Fill Service Delivery Gaps.* Interorganizational exchanges were also facilitated when team members worked together on specific consumer cases. During every meeting, members either worked with one family or presented their own cases and sought advice and information from other members. In both situations, team members actively problem solved regarding the availability and accessibility of needed services. For example, at one meeting of approximately 20 providers representing about 15 organizations, a provider mentioned having difficulty finding a parent education class for one of her families. A provider from another agency responded that her agency has been offering such a class for the past few years, that enrollment was always low, and that a new class session would be starting shortly. Many providers in the room responded with surprise and some frustration about their lack of awareness of this unused community resource and stated they would link their consumers to this class. Such exchanges were common during team meetings as providers identified service gaps for their clients and team members shared their knowledge about existing community resources.

*Data Authentication.* The above findings were presented to and authenticated by several team members and by the members of our evaluation subcommittee. Several team members also independently and publicly offered

evidence that supported the above conclusions. During our public feedback sessions, several team members personally testified that the information exchanges that occurred during team meetings significantly enhanced their interest in and ability to identify and develop service linkages. They noted that they also became familiar with the language, rules, and access issues of other organizations and used this information to ease client flow across agencies. Perhaps what is most powerful about these personal testimonies is the fact that these individuals acknowledged that they initially had no interest in being a team member and did not immediately share the team's goals or philosophy. However, through their involvement with a team, these providers became convinced of the value of interorganizational collaboration.

## DISCUSSION

The findings of this study suggest that interorganizational alliances may have the capacity to facilitate interorganizational collaboration within a community. In Creek County, membership on the coordinating council and on interagency teams was related to both the quantity *and* breadth of interorganizational exchanges organizations or providers engaged in. Organizations involved in the ICC were included in more service delivery and administrative exchanges than nonmember organizations and, for ICC members, these exchange types were more likely to be cross-domain in nature. Similarly, providers who were members of an interagency service delivery team exchanged clients and information with a larger and broader network of agencies than providers who were not team members. Simply put, those organizations and providers participating in the ICC or an interagency team were connected to a larger, broader service delivery network in their community. These findings support those of other researchers who found IA members to be more integrated within a service system network (Morrissey et al., in press), and more interdependent, coordinated, and aware of each other (Penner, 1995). Together, these results suggest that staff and leader involvement in IAs may play an important role in the promotion of interorganizational collaboration and integrated service delivery.

Although IA membership was clearly related to interorganizational exchanges in our sample, given the cross-sectional nature of our data and the diversity that exists within local human service delivery systems, we must be cautious in our interpretation of these findings. First, it is possible that organizations and individuals who join IAs are simply more prone to interact with other providers and organizations. This is quite likely true for the ICC, because ICC membership was self-determined for the last 8 years. Given what we know about the context of reform and alliance membership

in Creek County, however, self-selection membership bias does not appear to, in and of itself, explain our findings. This was a county that was actively engaged in improving its service delivery system and evaluating its efforts. The many initiatives and reforms that were underway were the result of a consensus that services were fragmented and that the system lacked integration. Our qualitative findings suggest that the ICC created a context in which organizations could work to facilitate the interactions that they desired. The ICC worked diligently over a period of years to define shared goals, create joint opportunities, disseminate information, create a culture of collaboration, and remove barriers to interorganizational exchange. Although it may be the case that organizations interested in collaboration took advantage of this opportunity, the ICC would not have been necessary if interorganizational collaboration could have been achieved simply because some of the organizations in the county were desirous of such exchange.

For the service delivery teams, the role of self-selection as the primary explanation for our findings seems even less likely. Providers, for the most part, were assigned by their organizational leaders to participate on the teams. Many were initially resistant and some reported having their attitudes transformed by participation on the team. It seems quite reasonable to conclude that at least some of the reason team and nonteam members had very different exchange networks was due to information and exchange opportunities available through team participation.

Although it appears that within this county participation in interagency alliances may have helped to facilitate interorganizational exchanges, we must be careful about generalizing these results. The IAs targeted in this study were embedded within a context that was, to some extent, committed to change. Within such a context, the participation of voluntary or selected parties in alliances may have a positive impact on interorganizational collaboration. This does not mean, however, that alliances are a panacea for the interorganizational collaboration problems faced by human service delivery systems. The creation of IAs within an environmental context that does not value collaboration will not necessarily have a positive impact on interorganizational relationships (e.g., Hoge & Howestine, 1997). In fact, it may be the case that such contact within an environment unsupportive of collaboration can lead to increased organizational competition and territoriality.

Finally, although our data suggest that organizations may have been interacting in more integrated ways, we cannot conclude, based on this data, that these expanded interactions actually led to improved service delivery experiences and outcomes for consumers. Previous researchers who have examined the impact of interorganizational collaboration on client outcomes have found conflicting findings, with some studies finding positive client outcomes (e.g., Clark, Lee, Prange, & McDonald, 1996; Rosenblatt & Attkisson,

1993) and others finding no relationship (e.g., Glisson & Hemmelgarn, 1998). An increased focus on interagency collaboration may produce negative outcomes for consumers, by reducing the time providers have for direct service provision or reducing consumer control over resources. Future longitudinal, multi level research is needed to determine under what conditions integrated service delivery actually produces positive client outcomes.

### **The Challenge of Creating Effective Interorganizational Alliances**

Overall, our findings have important implications for those interested in understanding and creating IAs. Previous researchers have found that development of such alliances can be difficult (e.g., Wischnowski & McCollum, 1995). Interorganizational alliances often have difficulty recruiting critical stakeholders, maintaining active member involvement, promoting a collaborative work culture, and achieving collaborative outcomes (e.g., Winer & Ray, 1994). Although the ICC was certainly more successful than many of its counterparts across the state, it also struggled with these same tensions.

Our qualitative data provides some insight into what processes might facilitate the successful development of an IA. The findings suggest that when alliances like the ICC create a structure that promotes information exchange, encourages and formalizes joint service delivery initiatives, and develops an internal culture that values collaboration and keeps member organizations accountable, then interorganizational collaboration may be more likely to happen. These findings support those of other researchers who have found that collaboration is more likely to occur when interorganizational awareness is promoted (Penner, 1995; Van de Ven & Ferry, 1980; Whetten, 1981), mutual goals are developed (Winer & Ray, 1994), positive attitudes towards collaboration are facilitated (Foster-Fishman et al., 1999; Penner, 1995), organizational turf issues are minimized (e.g., Van de Ven & Ferry, 1980), and interorganizational exchange relationships are formalized (Hall et al., 1977) through interagency agreements and joint ventures.

Our data also provide some insight into which aspects of IA membership matter. Our findings suggest that inclusion of a broad spectrum of employees in coordinating councils is an important part of a community's efforts to increase interorganizational collaboration. Organizations represented at ICC meetings by a broad sample of employees were involved in more service delivery and administrative exchanges. Having a broad spectrum of employees attend ICC meetings may increase an organization's boundary spanning opportunities (Kelly, Ryan, Altman, & Stelzner, 2000) or increase the number and types of employees aware of exchange opportunities (Rogers,

1995). Although this awareness may be facilitated indirectly through the diffusion of information in the home organization, it is more likely to occur when a higher percentage of agency staff are involved in these alliances (Preston, Foster-Fishman, & Salem, 1998). Given the complexity of altering interorganizational relationships (Glisson & James, 1992), and the difficulty leaders experience in communicating changes to their employees (Wehlage & White, 1995), having more employees aware of these opportunities may be an essential step towards effective exchange efforts (Rogers, 1995). Employee involvement in ICC meetings may be an important factor in translating coordinating council goals into actual changes in employee behavior (e.g., Wehlage & White, 1995).

Our data also suggest that community leaders should encourage organizations to join alliances like the ICC early in their formation. Length of membership on the ICC was strongly related to an organization's integration into the administrative exchange network. Perhaps the longer an organization is a member of a coordinating council, the more opportunities it has to become involved in exchanges that are initiated or reported at the meetings. Additionally, there is more opportunity for the development of personal relationships that can facilitate exchange (Penner, 1995). Certainly, this finding could be confounded by the fact that different types of organizations joined at different times. For example, large public agencies were the first to join the ICC. The very nature of these organizations (i.e., they have a large employee base and budget, are central to their community's service delivery system, and have a standing relationship with key funders and policymakers) may make them more likely to be invited to participate in joint ventures or resource exchanges.

Finally, the findings from this study highlight the importance of attending to the complexity of interorganizational exchanges when attempting to use alliances to help facilitate the development of an integrated system of care. In Creek County, interorganizational network structure varied depending upon the type of exchange examined. When comparing service delivery and administrative exchanges within the county, service delivery exchanges reflected a more traditional, more fragmented service system, with organizations more likely to exchange clients and information with other agencies that had a common organizational mission or target population. On the other hand, administrative exchanges appeared more integrated, with agencies exchanging resources and participating in joint ventures with a broad spectrum of organizations. Given that other researchers have also found different network patterns for different exchange types (Bolland & Wilson, 1994; Van de Ven & Ferry, 1980), these findings suggest that researchers and practitioners interested in facilitating interorganizational exchanges must recognize that improvements in one exchange type may not generalize to other

exchanges, and that alliance types may vary in their ability to improve the different components of interorganizational collaboration.

The comparison of team and nonteam member exchange behavior also highlights the importance of viewing exchange patterns as complex and variant, with this data suggesting that exchange patterns can even differ across employees within the same organization. This suggests that viewing exchange behavior emerging from any one organization as uniform (e.g., Morrissey et al., 1997; Provan & Milward, 1995) may obscure the complexity of interorganizational relationships and miss identifying potential points for intervention. Future research should further explore this variance across employees and identify factors that may influence these differences, such as organizational tenure or employee attitudes.

### Conclusion

In conclusion, the findings from this study suggest that the creation of interorganizational alliances in multiple contexts (e.g., coordinating councils and interagency teams) and at multiple levels (e.g., leader and direct care provider levels) may be a promising venue for facilitating interorganizational exchanges. Certainly, the fact that our study was cross-sectional and occurred within a community context relatively supportive of collaboration suggests that these findings should be generalized to other communities with caution. However, the fact that other researchers (e.g., Morrissey et al., 1985, 1997) have found fragmented, domain-specific networks in other communities underscores the importance of further understanding the impact of innovative organizational forms on service delivery system exchange networks. Future, longitudinal research that examines how and under what circumstances interagency alliances positively influence interorganizational exchanges seems a useful step in the pursuit of an integrated service delivery system.

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