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## **Collaboration, Competition, and Co-opetition: Interorganizational Dynamics Between Private Child Welfare Agencies and Child Serving Sectors**

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### **Abstract**

Human service agencies are encouraged to collaborate with other public and private agencies in providing services to children and families. However, they also often compete with these same partners for funding, qualified staff, and clientele. Although little is known about complex interagency dynamics of competition and collaboration in the child-serving sector, evidence suggests that competition can undermine collaboration unless managed strategically. This study explores the interrelationship between competition and collaboration, sometimes referred to as “co-opetition.” Using a national dataset of private child and family serving agencies, we examine their relationships with other child serving sectors (N=4460 pair-wise relationships), and explore how variations in patterns of collaboration and competition are associated with several organizational, environmental and relational factors. Results suggest that most relationships between private child welfare agencies and other child serving agencies are characterized by both competition and collaboration (i.e. “co-opetition”), and is most frequently reported with other local private child welfare agencies. Logistic regression analyses indicate that co-opetition is likely to occur when private child welfare agencies have a good perceived relationship or a sub-

contract with their partner. Findings have implications for how agency leaders manage partner relationships, and how public child welfare administrators structure contracts.

## Keywords

Collaboration; competition; co-opetition; child welfare agency; interorganizational relations

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## 1. Introduction

Private child welfare agencies play a pivotal role in responding to the needs of children at risk for maltreatment as greater responsibility for delivering frontline child welfare case management services (e.g. developing case plans, assessing progress towards goals) is shifted to the private sector (Collins-Camargo, Ensign, & Flaherty, 2007; McCullough & Schmitt, 2000). To meet the complex needs of families involved in the child welfare system and enhance system accountability, private child welfare agencies must collaborate with other child-serving agencies (Waldfogel, 1998). Collaboration may entail case planning with clinicians from multiple agencies, co-locating services, developing a joint program, or pooling human resource functions.

However, selecting a partner, negotiating the relationship, and maintaining collaborative partnerships may be challenging, since private child welfare agencies also often compete with these same partners for resources. Competition between agency partners may undermine collaboration: a private child welfare agency's success in winning a new contract or grant, hiring qualified personnel, or recruiting new clients could be at their partners' expense, contributing to relationship strain, failure, or dissolution (Baker, Faulkner, & Fisher, 1998). Based on this traditional, zero-sum view of competition and collaboration, agencies may avoid collaborating with a competitor, which could be detrimental to the families they serve given the importance of partnering with other child-serving agencies to deliver comprehensive and coordinated care.

In practice, however, there are many examples of how organizational leaders have moved beyond the traditional "Clobber or Collaborate" view (Zuckerman, 2006), suggesting the need for re-conceptualizing collaboration and competition as interrelated or interdependent concepts (Chen, 2008). Organizations may manage "co-opetition" with a partner by collaborating in one domain while simultaneously competing in another (Bengtsson & Kock, 2000). In fact, in their seminal book, Brandenburger and Nalebuff (1996) advance co-opetition as a business strategy where combining efforts and resources with a competitor may create value by improving efficiency and quality. Co-opetition is also evident within human service delivery systems. Emerging evidence from children's service delivery systems suggests that the more agencies compete with one another, the more likely they are to collaborate (Bunger, 2013; Valente, Coronges, Stevens, & Cousineau, 2008).

Among agencies that serve children and families involved with child welfare systems, privatization of core child welfare services may create greater need for collaboration locally among independent agencies competing for similar resources. Pooling resources and efforts among competing child-serving agencies may create efficiencies in the administration and

delivery of services, while expanding the availability and accessibility of comprehensive services for youth and their families. Therefore, co-opetition among child serving agencies has potential to benefit both organizations and the families they serve. However, before the field tests the impact of these dynamics on organizational and system performance, a better understanding of the ways child-serving agencies collaborate and compete with specific types of partners is needed. Specifically, what remains unexplored is the extent to which these complex, co-opetitive relationship dynamics occur, with which types of partners, around what types of activities, and under what conditions.

This study profiles the overlapping collaborative and competitive dynamics between private child welfare agencies and other child-serving agencies by examining the prevalence and predictors of co-opetition. To capture variations, features, and relevant drivers of co-opetition that are unique to each other sector, we focus on relationships. We next briefly review the extant literature on collaboration, competition, and co-opetition to examine the question of why and under what conditions private child welfare agencies may collaborate with a competitor.

### 1.1. Collaboration

Collaboration is a type of interorganizational relationship where partners work toward a common goal (Gray, 1989). Collaboration involves significant investment, adjustments in the way partners operate in response to one another, and the risk of lost autonomy (Bailey & Koney, 2000). Agencies collaborate around both service delivery and administrative functions (Bolland & Wilson, 1994). Through service delivery collaboration, agencies align their programmatic offerings via a variety of activities including client referrals, joint service programming, and/or sharing data across organizations to ensure that both partners have complete and updated information about their shared clients. Partners also align their operational infrastructure and administrative functions by sharing responsibility or resources for financial allocation and budgeting, human resource functions, billing, staff training, or other support functions (Shortell, Gillies, Anderson, Erickson, & Mitchell, 2000). For example, some agencies may develop formal coalitions or umbrella organizations that provide administrative functions for members, such as staff training, proposal writing and quality assurance activities (Cefola, Brotsky, & Hanson, 2010).

Within the human services, agencies generally collaborate with partners that serve similar client populations (Bolland & Wilson, 1994; Rivard & Morrissey, 2003) for a variety of reasons including access to needed resources like funding, client referrals, or complementary services (Pfeffer & Salancik, 2003). Agencies may also collaborate by pooling their administrative resources including staff or space to create efficiencies of scale (Guo & Acar, 2005). Strong pressure from funders, accrediting bodies, policymakers, and other key external stakeholders may also cause agencies to develop collaborative relationships and share resources as a way of gaining legitimacy (Reitan, 1998).

### 1.2. Competition

Competition emerges when there is demand for limited resources by multiple organizations (Barman, 2002; Hunt, 1997). For instance, a grant, contract, key staff person, or group of

clients won by an agency may reduce the resources available for other organizations, all else being equal (Bengtsson & Kock, 2000). Competition among agencies is influenced by both the supply of needed resources and the number of agencies demanding those resources. Private child welfare agencies may encounter competition with other child serving agencies that rely on the same or similar financial and human resources, and can lead to conflict, hardship, or going out of business. For example, when the number of children in out-of-home care was drastically reduced in Illinois, some provider agencies were forced to close their doors (McEwen, 2006).

### 1.3. Co-Opetition: Collaborating with a Competitor

Collaboration and competition have been traditionally viewed as opposing types of interorganizational relationships (Chen, 2008) where competing agencies are unlikely to collaborate (Park & Russo, 1996). When competitors collaborate, the risks of partnership are particularly high: as agencies share resources, influence over those resources becomes shared, with the result of potential loss of agency autonomy and independence. Therefore, there is a risk that a partner will exploit another by gaining administrative control, exposing vulnerabilities, and/or stealing innovations and reducing agency competitive advantage (Pfeffer & Salancik, 2003). Thus, one risk is that a partner will behave opportunistically in pursuit of its own success. Additional risk stems from potential economic or service delivery failure by a partner, which may jeopardize the other agency in the partnership because of increased reliance on one another. Despite the risks, evidence of collaboration among competitors (co-opetition) in for-profit industries (Bengtsson & Kock, 1999), the arts (Mariani, 2007), health care systems (Judge & Ryman, 2001; Zuckerman, 2006), and nonprofit child service systems (Bunger, 2013; Valente, Coronges, Stevens, & Cousineau, 2008) suggests that collaboration and competition should be reconsidered as potentially related interorganizational processes between any given pair of organizations (Chen, 2008).

Conceptualizing collaboration and competition as interrelated relational processes between organizations opens the door to new questions about the prevalence, drivers, and impact of co-opetition. As noted, organizations collaborate to access resources, create efficiencies, and gain legitimacy. These benefits may be amplified by collaborating with a competitor, and may in fact produce a distinct competitive advantage for co-opeting partners (Brandenburger & Nalebuff, 1996). When pooling resources, competing agencies may create efficiencies and economies of scale (Snaveley & Tracy, 2002), enabling them to develop and implement new programs or products quickly (Gnyawali & Park, 2009; 2011), weather turbulent or scarce funding environments, work through shortages of qualified staff in the community, or manage other risks. For example, competing agencies may pool resources to purchase a new data management system, or contribute proprietary knowledge to design a new program. As a result, agencies may improve service delivery and performance, and may find greater success in winning resources and legitimacy as collaborators than as individual competitors. However, some have also argued that competing agencies collaborate deliberately to reduce the negative impact of competition in the environment (Fligstein, 1996). Examples range from joint contract bids or grant proposals to extreme forms of collusion and price fixing (Hunt, 2007).

#### 1.4. Variation in the Nature of Co-Opetitive Relationship Among Child-Serving Agencies

Given the risks and benefits of collaborating with a competitor, co-opetition may vary depending on whether agencies are aligning their service delivery or administrative functions. In particular, private child welfare agencies may be more likely to collaborate with competitors around service delivery than administrative functions. Generally, service delivery relationships tend to be more common than administrative relationships (Bolland & Wilson, 1994; Johnsen & Morrissey, 1996), potentially because administrative partnerships (shared funding, staff, etc.) involve a deeper and more prolonged commitment to a partnership and heightened engagement in shared funding and governance functions. Therefore, private child welfare agencies may hesitate to collaborate with their competitors around administrative functions, or may only do so with a limited number of carefully vetted partners.

The complexity of inter-agency dynamics may also vary based on the type of partner and the degree to which their services are functionally distinct. For example, in other industries such as health care (Peng & Bourne, 2009) and technology (Gnyawali & Park, 2011), organizations collaborate with competitors that have complementary (as opposed to common or shared) resources, capabilities, and strengths that are considered valuable and essential to producing outcomes. By that logic, private child welfare agencies may be less likely to collaborate with a direct competitor from within the child welfare sector than a competitor in another child-serving sector that delivers different, or complementary services such as mental health, substance abuse or juvenile justice. Therefore, there may be little benefit to collaborating with a competitor within the same child welfare sector (including public and other private child welfare agencies).

Although evidence suggests that agencies may be more likely to collaborate with competitors across rather than within the same sector, these patterns may not hold true in child welfare systems. Private child welfare agencies may be especially likely to collaborate with competing organizations from the same sector because of strong institutional pressures from public policymakers and agencies that value collaboration (Jang & Feiock, 2007). Private agencies are expected to collaboratively promote child safety, permanency and wellbeing (USGAO, 2003), and are held accountable for their partnerships with other child welfare agencies regardless of whether they are competitors. As a result, this institutional pressure to collaborate may lead private agencies to partner with their competitors out of compliance, creating complex co-relational dynamics within child welfare sectors that have not yet been explored.

#### 1.5. Drivers of Co-Opetition

Although evidence suggests that private child welfare and other human service organizations collaborate with their competition, the conditions that give rise to these relationships are largely unknown. Drawing from limited research on co-opetition in other industries, and the broader knowledge about interorganizational relationships, co-opetition may be driven by a variety of organizational, geographic and relational features.

First, specific organizational features may lead some agencies to collaborate with a competitor. For example, organizational age and size may be related to co-opetition, where older and larger agencies are more likely to be involved in a variety of complex relationships (Foster & Meinhard, 2002; Guo & Acar, 2005; Gnyawali & Park, 2011), particularly if they are familiar with the organizational ecology of local service provision. Over time, agencies become more familiar, connect, and learn how to form and manage relationships with other organizations in a historically-shared marketplace. In addition, larger agencies with more resources to share may be especially attractive partners compared to small organizations because they can offer a variety of capacities and services to complement a partner, and therefore typically have extensive relationships with other organizations (Foster & Meinhard, 2002; Wholey & Huonker, 1993). As a result, co-opetition may be more common among older and larger agencies that have well-established networks and past experience managing complex inter-agency dynamics.

Also, agencies' tax-exempt status may influence whether they engage in co-opetition with other child-serving agencies. For-profit agencies operating in human service sectors may experience competition more acutely than nonprofits (which tend to be favored by public funders, and which may be less reliant on fee-for-service funding) (Tuckman, 1998). In addition, for-profit agencies may avoid risky and costly collaborative arrangements since profits and returns are a chief consideration in strategic decisions. Therefore, co-opetition may be less common among for-profit than nonprofit private child welfare agencies.

Second, the broader organizational environment may influence co-opetition patterns. First, geographic context may influence co-opetition especially in urban metropolitan areas. Subcontracts tend to be more plentiful and available for private child welfare agencies in urban compared to non-urban areas (USDHHS, 2001), inviting more agencies to work and collaborate within the child welfare system. However, metropolitan regions also tend to have a high density of providers competing for the same pool of resources. Therefore, agencies located in metropolitan markets may experience greater competition than those in suburban and rural regions, which often have fewer agencies vying for the same resources (Girth, Hefetz, Johnston, & Warner, 2012); as a result, co-opetition may be most common in metropolitan areas. In addition, the administrative structure of child welfare services may also influence interagency dynamics in general. In most states, administrative responsibility for child welfare services (which includes activities related to contracting with private child welfare agencies) is centralized through the state. However in nine states (California, Colorado, Minnesota, New York, North Carolina, North Dakota, Ohio, Pennsylvania, and Virginia), child welfare administration is decentralized through county-based agencies, and in three states (Maryland, Nevada and Wisconsin) services are administered using a hybrid approach (Child Welfare Information Gateway, 2012). This structural arrangement may affect the number of public entities actively contracting with and availability of resources for private child welfare agencies within a region, thus shaping competition among agencies. However, whether and how administrative structures for child welfare services influence interactions among agencies in general, and co-opetition specifically, remain unexplored.

Finally, specific relational features between partners may open the door to co-opetition by reducing the risks associated with collaborating with a competitor. As noted, by

collaborating with a competitor, an agency risks exposure to opportunistic behavior by a partner. These risks may be lower in the context of relationships where there are formal or informal safeguards in place. Human service agencies often work with one another in the context of a formal contract outlining partners' roles, responsibilities, and accountability mechanisms (Smith & Lipsky, 1993). These formal structures may help reduce perceived risks of co-opetition. However, some relationship safeguards are informal, as in the case of high quality, trust-based relationships. In trust-based relationships, social norms that emphasize respect, reciprocity, and mutual accountability may also act as a buffer against the risks of co-opetition (Romzek, LeRoux, Johnston, Kempf & Piatek, 2013). As a result, relationships safeguarded by formal agreements, or high-quality, trust-based partnerships may be more likely to be co-opetitive.

## 1.6. Study Purpose

Currently, little is known about the extent to which co-opetition occurs among child-serving agencies, the types of partners most likely to experience co-opetition, and the conditions that give rise to co-opetitive dynamics. The scope, variation, and drivers of these complex dynamics between private child welfare agencies and other child serving agencies are likely to be unique to each pair of partners. Previous studies of co-opetition have drawn from anecdotal reports and case studies (e.g. Bengtsson & Kock, 2000; Peng & Bourne, 2009), and cross-sectional studies demonstrating evidence of a positive association between collaboration and competition (e.g. Bunger, 2013; Valente et al, 2008; Mascia & Di Vincenzo, 2013), which do not account for the unique combinations or relational features of pair-wise partnerships. Nor have studies to date measured the overlap of collaboration and competition explicitly within the context of organizational dyads—the organizational unit of analysis that is most appropriately suited for examination of interorganizational dynamics involving partnership among competitors.

The purpose of this study is to explore the interrelationship between collaboration and competition between private child welfare agencies and other child-serving sectors. We focus on these pair-wise (dyadic) relationships among partners to account for the unique features and conditions of each dyad to examine (1) the prevalence of collaborative, competitive, and co-opetitive relationships between different child and family serving agencies, and (2) the drivers of co-opetition. Understanding the prevalence of co-opetition and the conditions under which it occurs can inform how agency leaders select partners and structure strategic alliances.

## 2. Methods

### 2.1. Data Source and Sample

The National Survey of Private Child and Family Serving Agencies (NSPCFSA) is the first national survey of private agencies involved with the formal child welfare system. The survey was developed in 2011 by the National Quality Improvement Center on the Privatization of Child Welfare Services in partnership with the Child Welfare League of America (CWLA) and the Alliance for Children and Families to provide detailed information in the following seven domains: director characteristics, organizational



demographics, agency funding, service array, inter-organizational relationships, internal and external pressures on organizational maintenance, and performance measurement and management. Survey content was developed based on review of the empirical literature as well as prior research conducted by study investigators.

The NSPCFSA sampling frame included all private agencies registered on the membership listservs of CWLA, the Alliance for Children and Families, and state associations for children and families involved in the National Organization of State Associations for Children (NOSAC). Invitations to participate in the survey were sent directly by CWLA, the Alliance for Children and Families, and NOSAC. The email invitation for the survey detailed the study's purpose, information necessary for informed consent, and a hyperlink to the survey. A limit of one response per agency was requested. Data were collected from 446 private agency directors in 38 states between May and June 2011. Given the anonymous recruitment of participating agencies through listservs, an exact response rate could not be calculated. The response rate would be 45% if there were no overlap in association membership. However, about 40% of agencies reported membership in more than one association, therefore we estimate that the response rate may be as high as 74%. Additional details on NSPCFSA sampling plan, procedures, and sample characteristics are available elsewhere (McBeath, Collins-Camargo, & Chuang, 2012).

In the current study, given our interest in relationships between private child welfare agencies and other service sectors, the dyad (a pairwise relationship between an individual private child welfare agency and one other sector) was the unit of analysis. Each relationship could serve a distinct purpose, and therefore could be negotiated and structured differently to account for the unique combination of the agency and its partner. A dyadic approach allowed for exploration of relationship types, and testing associations with other relationship characteristics while accounting for the heterogeneity by sector (Valente, 2010). Data were reshaped from the agency to the dyadic unit of analysis where each observation in the data file represented a unique pairwise relationship between an individual private child welfare agency and one other sector. Procedures for transforming the original agency data file into a dyadic file were similar to those for reshaping longitudinal data from "wide" to "long" format (as described in Valente, 2010, p. 50–59). Since each agency ( $n=446$ ) reported on their relationships with 10 other sectors, there were 4460 possible dyadic observations ( $446 \times 10$ ). Observations with missing data were not included in analysis.

## 2.2. Measures

**2.2.1. Relationship Patterns (Dependent Variables)**—Agencies reported on collaboration and competition with 10 other child-serving sectors. First, agencies reported on the frequency of competition with ten other sectors for public and private funds, staff, and clientele. If agencies reported competition for at least one resource, they were considered competitors. Next, agencies reported on the frequency of collaboration around four organizational functions: data sharing, joint service delivery, joint budgeting, and staff cross-training.

In the present study, responses to the competition and collaboration items were used to create nominal variables to describe relationship types around the four collaborative

activities. To address our first research question about the prevalence of relationship types, a nominal variable was created for each of the four organizational functions (data sharing, joint service delivery, joint budgeting, and staff cross-training). Consistent with Bengtsson and Kock (2000), categories for each of these nominal variables represented four possible combinations regarding the presence or absence of collaboration and competition: neither competitors nor collaborators; competitors but not collaborators; collaborators but not competitors; and competitors and collaborators (co-opetition). For example, with respect to the variable created for data sharing relationships: relationships where agencies were not competitors and did not share data were categorized as “no relationship” since there was no interaction. Second, relationships where agencies were competitors and did not share data were categorized as “competition, no collaboration.” Third, relationships where agencies were not competitors and shared data were categorized as “collaboration, no competition.” Finally, relationships in which agencies were competitors and shared data were identified as “co-opetition.” To address the second research question regarding agency, relational, and geographic characteristics affecting co-opetition, these four relationship pattern variables were combined into a single dichotomous variable (co-opetition versus the other three relationship types).

**2.2.2. Partner Types**—Agency directors answered questions about their relationships with ten different partner sectors (public child welfare agencies, local private child welfare agencies, non-local private child welfare agencies, courts, mental health, substance abuse treatment, police, juvenile justice, schools, and public welfare). When data were reshaped at the dyadic level, partner type was included as a nominal variable, where local private child welfare agencies served as the referent in multivariate analyses.

### 2.2.3. Drivers of Co-Opetition

**Organizational Characteristics:** Three variables (agency age, size, and tax-exempt status) captured organizational characteristics that potentially drive co-opetition (Foster & Meinhard, 2002). Agency age was measured as the number of years since the agency was established. Agency size was operationalized as the director’s report of staff size and measured as a 9-point categorical variable, ranging from 1 = < 10 full-time employees to 9 = > 1,000 full-time employees. A binary variable reflected whether an agency held nonprofit or for-profit status.

**Environmental Features:** Two variables captured environmental features. The agency’s geographic location was measured as three binary variables representing metropolitan, urban, and suburban regions) since agencies may operate in more than geographic location. In addition, one binary variable captured whether the agency operated in a county-administered system (=1).

**Relational Features:** Two variables measured the agency relationship features (formal and informal safeguards) as reported by the director. The first variable captured whether the relationship between the private child welfare agency and its partner involved a formal subcontract with a binary measure (=1). The second variable measured the perceived relationship quality with each partner. Respondents were asked to rate their agency’s

relationship with other service agencies using a 5-point Likert scale where “1” = “It is very poor”, “2” = “It is poor”, “3” = “It is neither poor nor good”, “4” = “It is good”, and “5” = “It is very good”. Low scores indicate poor relationships and higher scores indicate high quality trust-based relationships.

## 2.4. Analysis

Prevalence and patterns of relationships by partner type were explored using univariate and bivariate analyses (cross-tabulations). Logistic regression was used to further examine partner types and identify organizational, environmental and relational features associated with co-opetition. Four separate multivariate models examined factors associated with co-opetition around each organizational function: data sharing, joint service delivery, joint budgeting, and staff cross-training, respectively. The unit of analysis was the pair-wise relationship between each agency and ten child-serving sectors, therefore each agency was represented up to ten times in the data. To accommodate the non-independence of these data, standard errors were estimated using jackknife procedures clustered by agency (Snijders & Borgatti, 1999). Partner type was entered as a factor variable in the models. For all models, Hosmer-Lemeshow tests demonstrated adequate fit (NS). All data management and analyses were conducted using Stata 12.0 (StataCorp, 2011).

## 3. Results

### 3.1. Agency and Relationship Characteristics

Descriptive information about sample private child welfare agencies and their relationships with other sectors is presented in Tables 1 and 2 (respectively). Most responding agencies were medium sized in terms of staff (mean = 4.5; 50–100 staff), nonprofit (92%), and ranged in age from two to 212 years. More respondents had offices or affiliates located in suburban (60%) or metropolitan (65%) regions than rural areas (39%). Fewer than half (46%) operated in county-administered child welfare systems. At the dyadic level, private child welfare agency directors perceived that the quality of their relationships with other child-serving sectors was good (mean=3.96, SD=0.77), and about a third of the relationships included a contract.

### 3.2. Prevalence of Collaboration, Competition, and Co-Opetition

Collaboration around at least one organizational function was reported in a great proportion (87%) of reported relationships between private child welfare agencies and other child-serving sectors. Data sharing (81%) and joint service delivery (76%) were most common, while joint budgeting (35%) and staff cross training (56%) were less frequent. Competition was also common, and reported in nearly three-quarters (74%) of all relationships between child welfare agencies and the other child-serving sectors.

Given the high prevalence of collaboration and competition, it is not surprising that most relationships with other child-serving sectors were characterized by co-opetition (Figure 1). The exception was joint budgeting and resource allocation, in which agencies did not collaborate frequently. Agencies were more likely to share data and deliver joint services (organizational functions central to direct family care) in the absence of competition. On the

other hand agencies were less likely to cross-train staff or budget jointly (central to administrative operations) and these relationships were more likely to be categorized as “competition, no collaboration.”

### 3.3. Variation of Relationship Patterns by Partner (Bivariate)

Cross-tabulations of relationships around organizational functions for each partner type are displayed in Tables 3 and 4. Private child welfare agencies’ relationships with all partner types were characterized by a high prevalence of co-opetition. The exceptions were private child welfare agencies’ ties with police and public welfare, which were frequently categorized as neither collaborative nor competitive. Also, nearly all reported data sharing relationships with public child welfare agencies were among non-competitors (88%) suggesting less competition than with other partner types.

As noted previously, joint budgeting relationships were rare, and most relationships were among competitors who did not collaborate in this area. However, budgeting partnerships were more likely to be co-opetitive within the child welfare sector (specifically with public and local private child welfare agencies), and with schools than with other partners. Overall, results suggest the high prevalence of co-opetition, with some variation depending on the type of collaboration and partner.

### 3.4. Partner Type and Other Drivers of Co-Opetition (Multivariate Analyses)

The specific influence of partner type and other drivers on the likelihood of reported co-opetition was tested using multivariate logistic regressions (Table 5). Since the prevalence of co-opetition with other local private child welfare agencies was among the highest across all four organizational functions, this partner type was used as the referent. Therefore, results illustrate higher or lower odds of co-opetition with a particular partner relative to other local private child welfare agencies.

Models classified 72–76% of all relationships correctly. Results confirm the high prevalence of co-opetition between private child welfare agencies and their local counterparts within the same sector. Relationships between private child welfare agencies and most other partner types across sector were significantly less likely to be characterized by co-opetition.

Several organizational and relational features were also significantly associated with co-opetition. Among the agency characteristics tested, staff size was positively associated with co-opetition across all four organizational functions, whereas relationships between larger private agencies with more staff and their child-serving partners were more likely to be characterized by co-opetition. In addition, for-profit status was negatively associated with co-opetition but only for staff cross-training ( $OR=.43$ ,  $SE=.13$ ,  $p<.01$ ). Both contracts and relationship quality were positively associated with co-opetition for all four organizational functions. Relationships between private child welfare agencies and their partners characterized by the presence of a sub-contract and perceived relationship quality were positive predictors of most reported relationships. For example having a subcontract ( $OR=2.36$ ,  $SE=.31$ ,  $p<.001$ ) and relationship quality ( $OR=1.85$ ,  $SE=.16$ ,  $p<.001$ ) was positively associated with co-opetition in data sharing. Of note, both contracting and relationship quality had the strongest positive relationship with co-opetition. However, co-

opetition was not significantly associated with agency age, geographic location, or county-administered system.

#### 4. Discussion

This study examined competitive and collaborative relationships between private child and family serving agencies and their partners. Findings demonstrate that private child welfare agencies manage collaboration and competition simultaneously in most of their interorganizational relationships with other child-serving sectors but are most likely to experience co-opetition within their own sector (i.e., with other local private child welfare agencies). Co-opetition was more likely among larger private child welfare agencies, with subcontracted partners, and in the context of high quality working relationships.

Our findings contribute to emerging evidence of how children's service organizations often manage complex interorganizational relationships (Bunger, 2013; Valente et al., 2008); however, this complexity may be most likely to occur within the context of service delivery. Relationships involving data sharing and joint service delivery in particular were likely to be characterized by co-opetition, suggesting that private child welfare agencies may be able to maintain complex relationships with their partners in order to deliver services to clients. On the other hand and in keeping with findings from prior studies of human service partnerships, administrative collaboration was less common than service delivery collaboration (Johnsen & Morrissey, 1996; Provan & Milward, 1995). Collaboration around administrative operations may be particularly risky for organizations and therefore less frequent in general, and much less likely to occur with a direct competitor.

This study finds evidence that these relationship dynamics vary by partner type. Private child welfare agencies were most likely to experience co-opetition with other local private child welfare agencies within the sector. Prior evidence in other industries (e.g., Gnyawali & Park, 2011) suggests that complementary and distinct services and capacities bring competing agencies together. Although private child welfare agencies may compete with other private agencies in the same market for resources given that they often provide overlapping services, findings from the current study suggest that they nevertheless do collaborate with one another, indicating that these agencies may have identified more specific complementary resources and capacities besides an obvious distinction in services.

The current study also identified relational features as a key driver of co-opetition. The quality and subcontract status of the relationship were both positively associated with private agencies' ability to collaborate with a competitor. Higher quality relationships result from a working history among partners, which may result in greater trust and mitigate risks related to competition (Romzek et al., 2013). Having a formal contract that outlines roles and responsibilities for each partner may also offer protection from the risk of working with a competitor.

Finally, findings suggest that the larger the private child welfare agencies, the more likely their relationships will be characterized by co-opetition. Larger agencies tend to be generalists that provide a variety of services to a broad geographic market, and are capable of maintaining more partnerships than smaller, niche agencies (Wholey & Huonker, 1993).

As a result, large organizations might be in direct competition with many other child-serving sectors for funds, clients, and personnel, and thus be more likely to encounter co-opetition.

#### 4.1. Implications for Management and Administration

These findings have implications for directors and managers of private and public child welfare agencies. Private agencies may consider developing a mixed “portfolio” of relationships that represent a diversity of collaborative, competitive, and co-opetitive partnerships (Bengtsson & Kock, 1999) that specifically build agency capacity and strategic advantage (Hunt, 1997). Building co-opetitive relationships within this portfolio might be particularly important for leaders of small agencies, which may be less likely to collaborate with competitors than their larger counterparts (as evidenced in this study), may have limited capacity for more sophisticated administrative functions and infrastructure, and may experience a disadvantage when competing for contracts. In some jurisdictions, local agencies providing similar services (thus competing) form coalitions in which an umbrella agency provides administrative functions for its members, enabling agencies to redirect resources toward other services or initiatives (Armstrong, Swank, Strozier, Yampolskaya, & Sharrock, 2013).

Given the frequency of co-opetition, leaders must also safeguard their agencies from the risk of partnering with a competitor. Although the overall quality of relationships in the current study was perceived as good, only 33.5% of agency relationships had a contract. The protection of a formal contract, or careful selection of trustworthy partners with a history of collaboration, can mitigate the risks of co-opetition (Bunger, 2013; Snavelly & Tracy, 2002), and may be especially important in the context of public-private partnerships in child welfare (Crystal Collins-Camargo, Armstrong, McBeath, & Chuang, 2013).

The current study provides some insight for public child welfare administrators and system planners who often struggle to provide leadership or navigate competition within a market-driven provider pool while promoting collaboration to ensure an effective and responsive service array (Collins-Camargo, McBeath, & Ensign, 2011). These findings imply that administrators promoting reform do not need to encourage children’s agencies to work together since they already do, and in fairly complex ways. Instead, administrators might structure resource infusions in ways that build on rather than undermine these ties. Through procurement processes, administrators may influence the balance of competition and collaboration among private child welfare agencies. For example, openness to joint proposals or bids, or adjusting the length of contract periods, may alter relational dynamics (Kettner & Martin, 1989). It should be noted that increasing co-opetition may further reduce direct competition for contracts and grants among social service agencies (Smith & Smyth, 1996) by creating a monopoly among a small group of large, well-supported collaborating agencies. Generally, little research has investigated the impact of these contracting strategies on relational dynamics among private child-serving agencies or how they may be used to strike the optimal balance of collaboration and competition within a market. However, these results have the potential to inform meaningful contract improvement interventions consistent with the Children’s Bureau’s vision of developing collective impact strategies that

harness investment and move toward collaborative reform in child welfare systems (Mitchell et al., 2012).

#### 4.2. Limitations and Future Research Directions

This study's findings should be interpreted in light of limitations. First, the external validity of the NSPCFSA sample may be limited. Private child welfare agencies were recruited through listservs of national and state associations representing private child and family service agencies. Thus, it is likely that agencies in the sample over-represent members of these associations and states where associations are located. Also, smaller niche agencies may be under-represented in this sample, perhaps because these agencies may have fewer resources to support the fees required for membership in large professional associations and advocacy coalitions (Mosley, 2011). As a result, the prevalence of co-opetition may have been inflated in this study since small agencies might have been under-represented. In addition, listwise deletion implemented in the predictors could have potentially introduced item-response bias in the sample.

Second, measurement validity may be limited due to reliance on self-reported data. It is plausible that recall bias was present for some of the items influencing the accuracy of relationship categorization and prevalence of co-opetition. In addition, only a single measure of the perceived quality of the partner relationship was included in the NSPCFSA survey. This measure reflects a general perceived view of the director on the agency's relationship quality across partner types. It does not take into account any potential variation across the four organizational functions of co-opetition included in this study. Also, it does not include the perspectives of frontline workers and local partners, which may differ from those of managers.

Also, agency directors were asked about their agency's degree of competition for several resources (e.g., funding, staffing) and these responses were used to identify the presence of competition within each relationship. It is possible that the treatment of competition responses masked additional variation in relationship patterns by the basis of competition. Third, the cross-sectional design limits our understanding of how and why relationship dynamics emerge and are maintained. Over time, relationships may evolve or dissolve in response to competition, pressure to collaborate, or other forces. We were not able to capture these time-based trends.

Finally, there is a possibility for potential residual confounding from unmeasured factors. Measures of relevant factors that may have an impact on co-opetition were not included in the NSPCFSA survey and thus not available for analysis. These factors include gaps in expertise and/or service technology (Quintana-Garcia & Benavides-Velasco, 2004) and state-level regulations related to organizational functions such as data-sharing. The inclusion of these measures in the regression models might have provided a more precise examination of the associations between partner types and co-opetition patterns. Nevertheless, while this study cannot establish causality, it does elucidate potential associations that deserve attention and further research.

Despite its limitations, the dataset used in this study is the only national survey on private child welfare agencies to date and is the best available source of information about the relationship patterns among private child welfare agencies. Moreover, by examining pairwise relationships, the features of agencies and their partners, environment, and relationship conditions unique to each partnership could be considered simultaneously.

Study findings highlight new questions about how and why complex interactions emerge among child-serving agencies, the use of trust-based or contractual structures for managing and maintaining productive and positive partnerships, and how organizations adjust their operations and services in response. For example, specific features of the system-level environment that drive co-opetition among child serving agencies are still unknown. None of the environmental features measured in this study were associated with co-opetition, suggesting that an alternative set of external conditions may be worthy of further investigation. Also, findings demonstrate the frequency of formal and informal safeguards (whether through a contract or a high quality relationship) for engaging in co-opetition. Future research on the effectiveness of these safeguards for protecting agency interests while allowing partners the flexibility to adapt and adjust relative to one another would inform how agency directors negotiate and structure their relationships with one another. Especially given the potential instability of co-opetitive relationships, a longitudinal approach for examining relationships among agency partners might illuminate the dynamic interplay between competition and collaboration among agencies, and how relationships evolve and dissolve in relation to internal features of agencies, qualities of the interorganizational relationship, and broader characteristics of the agency environment.

Understanding the impact of inter-agency dynamics on organizational and client outcomes is also necessary for informing effective policy, contracting, and agency management decisions. Although co-opetition has been associated with product and service innovations and efficiencies in other industries (Gnyawali & Park, 2009; 2011), the impact, advantages, and consequences of co-opetition within human services is unknown. This study suggests that child-serving agencies engage in co-opetition across sectors especially around joint service delivery; future research could investigate whether these partnerships generate innovations in programming and frontline service delivery. In addition, co-opetition around budgeting and staff training is particularly high within-sector among private child welfare agencies and their other private counterparts. These complex relationships could potentially be leveraged to support implementation of evidence-based practices; pooling resources with competitors may enable private child welfare agencies to purchase new practice models and training supports. Investigating the use and effectiveness of co-opetitive relationships as an implementation strategy could generate new ideas and insights for agency and system leaders given the growing emphasis on evidence-based practices in child welfare.

Finally, the knowledge base has long suffered from mixed evidence of the effectiveness of collaboration, and various system structures for improving child outcomes. As Wells (2006) noted, this inconsistency may be due in part to unmeasured factors also influencing the effectiveness of collaborative relationships. Because competition may prevent agencies from collaborating intensively and achieving benefits for clients they serve, future studies examining the influence of system structure on client level outcomes should also include



measures of competition and co-opetition. Understanding the complexities of interactions among service providers within and across systems may help unravel long-standing questions about optimal service delivery configurations for children, youth, and families.

## 5. Conclusion

This study characterizes the complex strategic environment in which private child welfare agencies operate by examining the intersection of collaboration and competition. Private child welfare agencies manage a complex portfolio of collaborative, competitive, and co-opetitive relationships with agencies across diverse child-serving sectors. As agency leaders manage dual collaborative and competitive pressures and demands, examining whether co-opetition produces substantial benefits for organizations and families will be key for private agency leaders, public child welfare administrators, and other stakeholders interested in system reform.

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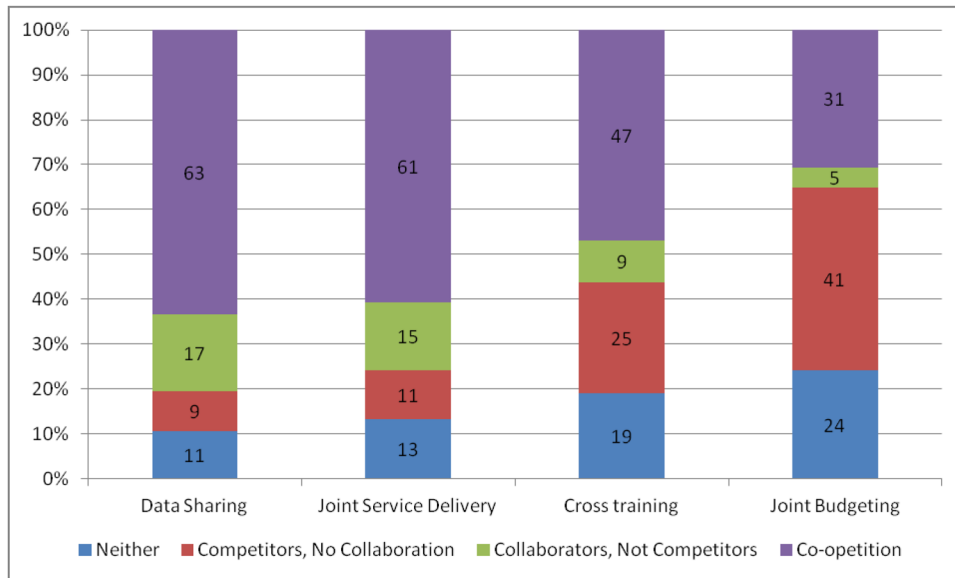
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### Highlights

- Private child welfare agencies commonly manage competition, collaboration, and co-opetition.
- Co-opetition is most common around service delivery functions, with other local private child welfare agencies.
- Having a sub-contract or high-quality relationship is related to co-opetition.



**Figure 1.**  
Distribution of Relationship Types by Organizational Function

**Table 1**

## Summary Statistics for Agencies

Variable	N	Mean (SD)/Percent	Range
<i>Organizational Characteristics</i>			
Age (years)	445	62.63 (49.34)	2–212
For-profit	436	8.4%	0–1
Staff size	445	4.46 (1.81)	1–9 <sup>a</sup>
<i>Environmental Features</i>			
Rural	444	38.7%	0–1
Suburban	444	59.7%	0–1
Metropolitan	444	65.1%	0–1
County-Administered	446	46.4%	0–1

<sup>a</sup>Response categories are as follows: 1= “Fewer than 10 FTEs”, 2= “Between 10–24 FTEs”, 3= “Between 25–49 FTEs”, 4= “Between 50–99 FTEs”, 5= “Between 100–249 FTEs”, 6= “Between 250–499 FTEs”, 7= “Between 500–749”, 8= “Between 750–999 FTEs”, and 9= “1,000 or more FTEs”.

**Table 2**

## Summary Statistics for Dyads

<b>Variable</b>	<b>N</b>	<b>Mean (SD)/Percent</b>	<b>Range</b>
<i>Collaboration</i>			
Overall	4151	87.3%	
Data Sharing	4075	80.6%	0–1
Joint Service Delivery	4015	75.8%	0–1
Joint Budgeting	3906	35.2%	0–1
Staff Cross Training	3906	56.2%	0–1
<i>Competition</i>	4460	73.7%	0–1
<i>Relational Features</i>			
Contract	4460	33.5%	0–1
Relationship Quality	4278	3.96 (.77)	1–5



**Table 3**  
 Patterns in Service Relationships by Partner Sector (Most prevalent relationship type in bold)

Sector	Data Sharing (n=4075)				Joint Service Delivery (n=4015)			
	Competition		Collaboration		Collaboration		Competition	
	Neither	Only	Only	Co-opetition	Neither	Only	Only	Co-opetition
Within-Sector								
Public CWA	6%	7%	<b>88%</b>	2%	2%	6%	6%	<b>86%</b>
Local Private CWA	0%	8%	2%	<b>90%</b>	1%	13%	1%	<b>85%</b>
Non-Local Private CWA	3%	15%	4%	<b>78%</b>	4%	24%	3%	<b>69%</b>
Across-Sector								
Courts	12%	8%	22%	<b>58%</b>	14%	7%	20%	<b>59%</b>
Mental Health	3%	7%	12%	<b>78%</b>	4%	9%	12%	<b>75%</b>
Substance Abuse	11%	14%	17%	<b>57%</b>	14%	16%	15%	<b>56%</b>
Police	17%	6%	<b>45%</b>	31%	26%	8%	<b>38%</b>	28%
Juvenile Justice	13%	9%	18%	<b>60%</b>	15%	9%	16%	<b>60%</b>
Schools	5%	4%	22%	<b>70%</b>	7%	5%	21%	<b>67%</b>
Public Welfare	<b>41%</b>	12%	23%	24%	<b>46%</b>	13%	19%	22%
<b>Total</b>	11%	9%	17%	<b>63%</b>	13%	11%	15%	<b>61%</b>

**Table 4**

Patterns in Administrative Relationships by Partner Sector

Sector	Joint Budgeting (n=3906)				Staff Cross Training (n=3906)			
	Competition		Collaboration		Competition		Collaboration	
	Neither	Only	Co-opetition	Only	Neither	Only	Co-opetition	Only
<b>Within-Sector</b>								
Public CWA	6%	37%	2%	55%	4%	26%	4%	66%
Local Private CWA	2%	51%	1%	46%	2%	22%	1%	75%
Non-Local Private CWA	6%	59%	1%	33%	4%	34%	3%	60%
<b>Across-Sector</b>								
Courts	29%	41%	5%	25%	23%	29%	12%	36%
Mental Health	13%	46%	3%	38%	9%	21%	7%	63%
Substance Abuse	25%	48%	5%	23%	20%	29%	9%	42%
Police	56%	25%	10%	10%	40%	16%	24%	20%
Juvenile Justice	26%	38%	5%	31%	21%	26%	9%	44%
Schools	20%	36%	8%	36%	14%	23%	13%	50%
Public Welfare	60%	26%	6%	8%	54%	22%	11%	13%
<b>Total</b>	24%	41%	5%	31%	19%	25%	9%	47%

**Table 5**

Logistic regressions of co-opetition in each organizational domain

	<u>Data Sharing (n=3923)</u>		<u>Joint Svc Del. (n=3861)</u>		<u>Budgeting (n=3755)</u>		<u>Cross Training (n=3767)</u>	
	OR	(SE)	OR	(SE)	OR	(SE)	OR	(SE)
<i>Partner Sector</i>								
<i>Within-Sector</i>								
Public CWA	.40**	.09	.56*	.11	.83	.13	.37**	.06
Local Prv. CWA (ref)	--	--	--	--	--	--	--	--
Non-Local Prv. CWA	.49**	.08	.47**	.06	.75*	.08	.58**	.07
<i>Across-Sector</i>								
Courts	.34**	.07	.24**	.04	.35**	.05	.15**	.02
Mental Health	.81	.15	.44**	.07	.57**	.08	.45**	.06
Substance Abuse	.44**	.08	.27**	.04	.43**	.06	.28**	.04
Police	.13**	.03	.07**	.01	.15**	.03	.08**	.01
Juvenile Justice	.38**	.07	.24**	.04	.48**	.07	.22**	.03
Schools	.48**	.09	.26**	.05	.48**	.07	.23**	.03
Public Welfare	.15**	.03	.07**	.01	.18**	.04	.07**	.1
<i>Organizational Characteristics</i>								
Age (years)	1.0	.00	1.00	.00	1.0	.00	1.0	.00
For-profit	.75	.24	.93	.31	.55	.19	.43*	.13
Staff size	1.25**	.06	1.20**	.06	1.18*	.06	1.17*	.06
<i>Environmental Features</i>								
Rural	1.39	.24	1.15	.19	1.00	.18	1.16	.21
Suburban	.72	.12	.79	.13	.84	.15	.84	.15
Metropolitan	.82	.15	1.05	.19	1.16	.22	.83	.16
County-Administered	1.00	.16	.93	.14	1.03	.18	1.07	.17
<i>Relational Features</i>								
Contractual	2.36**	.31	2.67**	.33	2.59**	.32	2.16**	.27
Quality	1.85**	.16	1.83**	.15	2.06**	.17	2.03**	.16

\*\*\* p<.001;  
\* p<.01;  
+ p<.05

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