## **UC Berkeley**

### **UC Berkeley Previously Published Works**

#### **Title**

An empirical typology of private child and family serving agencies

#### **Permalink**

https://escholarship.org/uc/item/6t88x47h

#### **Authors**

Chuang, Emmeline Collins-Camargo, Crystal McBeath, Bowen et al.

#### **Publication Date**

2014-03-01

#### DOI

10.1016/j.childyouth.2014.01.016

Peer reviewed



Child Youth Serv Rev. Author manuscript; available in PMC 2015 March 01.

Published in final edited form as:

Child Youth Serv Rev. 2014 March 1; 38: 101–112. doi:10.1016/j.childyouth.2014.01.016.

# An empirical typology of private child and family serving agencies

Emmeline Chuang, PhDa, Crystal Collins-Camargo, MSW, PhDb, Bowen McBeath, MSW, PhDc, Rebecca Wells, PhD, MHSAd, and Alicia Bunger, MSW, PhDe

Emmeline Chuang: emchuang@ucla.edu

<sup>a</sup>Department of Health Policy and Management, University of California Los Angeles, 650 Charles E Young Drive South, Los Angeles, CA 90095-1772, USA, Telephone: 310-825-8908

bKent School of Social Work, University of Louisville, Louisville, KY 40292, USA

 $^{\rm c}$  School of Social Work and Hatfield School of Government, Portland State University, 1800 SW  $6^{\rm th}$  Ave., Portland, OR 97201, USA

<sup>d</sup>Department of Health Policy and Management, Texas A&M Health Science Center, 1266 TAMU, College Station, TX 77843, USA

eCollege of Social Work, The Ohio State University, Columbus, OH 43210, USA

#### **Abstract**

Differences in how services are organized and delivered can contribute significantly to variation in outcomes experienced by children and families. However, few comparative studies identify the strengths and limitations of alternative delivery system configurations. The current study provides the first empirical typology of private agencies involved with the formal child welfare system. Data collected in 2011 from a national sample of private agencies were used to classify agencies into five distinct groups based on internal management capacity, service diversification, integration, and policy advocacy. Findings reveal considerable heterogeneity in the population of private child and family serving agencies. Cross-group comparisons suggest that differences in agencies' strategic and structural characteristics correlated with agency directors' perceptions of different pressures in their external environment. Future research can use this typology to better understand local service systems and the extent to which different agency strategies affect performance and other outcomes. Such information has implications for public agency contracting decisions and could inform system-level assessment and planning of services for children and families.

Keι	/wo	rds
-----	-----	-----

child welfare; management; strategy; private agencies	

Correspondence to: Emmeline Chuang, emchuang@ucla.edu.

**Publisher's Disclaimer:** This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

The authors report no competing interests.

<sup>© 2014</sup> Elsevier Ltd. All rights reserved.

#### 1. INTRODUCTION

The context in which child welfare services are delivered in the U.S. has changed dramatically over the last two decades. The role of Medicaid and other federal programs in funding services such as child welfare, mental health, and residential foster care has expanded (Geen, Sommers, & Cohen, 2005; Mark, Levit, Buck, Coffey, & Vandivort-Warren, 2007; Smith, 2012), resulting in increased fiscal centralization even as the movement towards New Public Management means that responsibility for service decisions are increasingly devolved to the state and local level (Conlan, 1998; Scarcella, Bess, Zielewski, & Geen, 2006; Terry, 1998). State and local agencies have, in turn, responded to changing institutional demands by experimenting with new, privatized service arrangements (Auger, 1999; Dilger, Moffett, & Struyk, 1997; McCullough & Schmitt, 2000).

Federal, state, and local governments have long subcontracted with private agencies to deliver services to families (Flaherty, Collins-Camargo, & Lee, 2008; Salamon, 1995). However, the amount and scope of contracting occurring at all levels of government is a relatively new development (Gronbjerg, 2009). In child welfare, particularly notable is the extent to which core, mandated services once maintained exclusively within the public agency domain have now been privatized (Collins-Camargo, Ensign, & Flaherty, 2008). One example of this is the shifting of frontline case management functions (e.g., working with families to set case goals, decide how and when services will be accessed and delivered, monitoring progress towards case goals, etc.) to the private sector; as of 2008, public child welfare administrators in over a fifth of states (23%) reported having some privatized case management, although only 13% reported doing so on a large-scale basis (Collins-Camargo, McBeath, & Ensign, 2011).

The inclusion of more market-based and outcome-oriented control mechanisms within these contracts is also a relatively recent phenomenon with significant implications for how child and family services are delivered (Smith, 2009). Currently, public child welfare administrators in at least 27 states report use of performance-based contracts that specify levels of performance expected of subcontractors and link at least a portion of contract reimbursement and/or prospects for future contracts to achievement of performance milestones (Collins-Camargo et al., 2011). These changes affect the administrative infrastructure and competencies required of agencies, e.g., to successfully complete required reporting activities (Austin, 2003; Gooden, 1998) and have also made the contracting process significantly more competitive, particularly given reduced overall funding availability due to the Great Recession of 2008 (McCullough, 2004; McCullough, Pindus, & Lee, 2008; Smith, 2012).

Changing client needs and increased emphasis on evidence-based practice have also affected the types, cost, and quality of services being contracted. For example, in many states, efforts to promote safety and permanency through early intervention have resulted in the development of alternative response or differential response systems that allow for the provision of voluntary case management and other, community-based services to low- and moderate-risk families (Children's Bureau, 2005; Conley & Berrick, 2010). Increases in prevention and other early intervention services (e.g., family support and home visiting programs) have been offset by reduced placement of children in congregate care (Kids Count, 2011); however, need for physical health, behavioral health, and associated wraparound services has grown (Blome & Steib, 2004; Oberg, 2011; Scarcella, Bess, Zielewski, Warner, & Geen, 2004). Many public and private funding sources also either encourage or mandate service coordination (Alter, 2000; Sowa, 2009), placing pressure on agencies to either offer a comprehensive array of services in-house or form interorganizational relationships to ensure safety, permanency, and well-being outcomes are met.

While these trends are well-documented, less well understood are the strategies and structures that private child and family serving agencies have employed to adapt to these shifting environmental demands. In the general social services sector, focus groups conducted with social service agencies in one county in the 1990s suggest that agencies may respond by building administrative capacity, developing new inter-organizational relationships, and strategically expanding programs and client bases to capture new revenue (Alexander, 2000). More recent evidence drawn from 2007 data on 501(c)(3) organizations maintained by the Urban Institute indicate that while some private, non-profit organizations have evolved into large, multi-service organizations with high administrative capacity and extensive ties within the community, many remain small and relatively isolated from other social service organizations (Smith, 2012). Specific agency responses to environmental pressures are likely to be influenced by local context as well as internal factors such as mission, current capacity, and leadership style (Battilana & Casciaro, 2012; Crilly, Zollo, & Hansen, 2012; Fiss & Zajac, 2006), resulting in considerable heterogeneity in organizational adaptations and service structures.

Evidence in the human services literature suggests that differences in how services are organized and delivered can contribute significantly to variation in outcomes experienced by children and families (Keiser & Soss, 1998; McBeath & Meezan, 2009; Sandfort, 2000; Yoo & Brooks, 2005). However, few comparative studies identifying the strengths and limitations of alternative delivery system configurations exist. As a result, public child welfare policymakers and administrators currently have little empirical information on which to base decisions about the organization of responsibilities and the allocation of resources via subcontract to private child and family serving agencies. A better understanding of how private child and family serving agencies are configured, and the extent to which these configurations developed in response to specific environmental pressures, represents a critical first step towards subsequent comparative effectiveness research on strategies for improving agency performance and client-level outcomes.

In other areas such as health services and public health, researchers and policy analysts often rely on typologies to classify heterogeneous organizations and delivery systems, including health insurance plans (Brach et al., 2000; Grembowski et al., 2000), health care networks and systems (Bazzoli, Shortell, Dubbs, Chan, & Kralovec, 1999; Dubbs, Bazzoli, Shortell, & Kralovec, 2004), public health delivery systems (Mays, Scutchfield, Bhandari, & Smith, 2010), and community health partnerships (Mitchell & Shortell, 2000). These typologies are used for the purpose of comparing identified groups or classes of organizations and systems on selected performance and outcome indicators, and ultimately, identifying strategies for improvement. In health care, typologies have informed policy and administrative approaches to improving hospital quality and efficiency (Bazzoli et al., 1999; Dubbs et al., 2004; Shortell, Bazzoli, Dubbs, & Kralovec, 2000). In public health, typologies of public health systems have allowed for the identification of new governance and inter-organizational arrangements resulting in improved population health (Mays et al., 2010; Rodriguez, Chen, Owusu-Edusei, Suh, & Bekemeier, 2012).

The current study utilizes a similar approach to develop a theoretically grounded typology of private child and family serving agencies. Data collected in 2011 from a national sample of private child and family serving agencies are used to classify agencies into distinct groups based on four identified structural and strategic characteristics (e.g., internal management capacity, diversification, integration, and policy advocacy). We then explore the extent to which these characteristics were associated with different pressures within agencies' external environment. Since many private agencies serving child welfare client populations do not consider themselves "child welfare" agencies, private child and family serving agencies are defined as any private non-profit and for-profit agencies providing services to

children and families involved with child welfare, i.e., investigated or assessed for maltreatment by Child Protective Services. These services could include traditional child welfare services as well as preventive, behavioral health, and social services.

#### 1.1. Environmental forces influencing agency behavior

Agency structure and strategy, represented by the unique mix of activities and values each puts into practice, are heavily influenced by factors in the external environment. The current study focuses on four elements in agencies' external environment known to influence the ways in which private child and family serving agencies develop new programs, deliver long-standing ones, and form inter-organizational relationships. These environmental factors include available funding sources, laws and regulations, local population needs, and use of performance management systems at the federal and state level.

Services provided by state child welfare agencies are supported by government funds. However, specific funding sources, total per capita spending on child welfare, and types of services contracted vary significantly across states and counties (Geen, Boots, & Tumlin, 1999; Scarcella et al., 2006). Intentionally or not, financial incentives and pressures within agencies' external environment may also influence agency behavior in ways that affect both specific populations served and services provided (e.g., Jang & Feiock, 2007). For example, families involved with child welfare also frequently access services such as mental health treatment through systems other than child welfare. Increased privatization and deinstitutionalization of such services have affected the types of revenue opportunities available to private agencies and may also have implications for the types of services they provide. Although the Great Recession of 2008 resulted in cutbacks, overall public spending on public social welfare programs has more than quadrupled since the 1960s, much of it driven by growth of Medicaid and other federal programs (Gronbjerg & Salamon, 2012; Smith & Lipsky, 1993). The expanded role of federal programs such as Medicaid in funding services for vulnerable populations means that funds are increasingly linked to client eligibility rather than through provided as block grants or cost-reimbursement contracts (Scarcella et al., 2006; Smith, 2012). In theory, this trend should result in increased competition for clients. In practice, federal and state efforts to control costs, either via managed care arrangements or by setting reimbursement at pre-determined amounts rather than at cost, means that funds for certain categories of services may be insufficient to cover costs of employing professional staff to provide them. In these situations, agencies providing such services may limit the number of Medicaid clients they are willing to take, strategically compensate for losses in one service area via fundraising and/or profits in another, or stop providing that service altogether (Decker, 2012; Gronbjerg, 2009; Raghavan, Inkelas, Franke, & Halfon, 2007).

With regards to laws and regulations, child welfare systems exist because legal mandates require states to investigate allegations of maltreatment and when necessary, intervene to ensure child safety, permanency, and family well-being. Specific child welfare policies are defined by government statutes and regulations as well as by case law, e.g., court decisions and consent decrees, and vary significantly at the state and local level (Child Welfare League of America, 2005; Stein, 1991). While intended to ensure compliance with specific processes and/or to compel systemic reform, these policies can also have unanticipated consequences. For example, state procurement rules and policies may ensure fair competition but deter inter-agency collaboration (McCullough et al., 2008). Consent decrees may support system-level improvements or impose barriers to organizational change that have the opposite effect (Meltzer, Joseph, & Shookhoff, 2012). Laws and regulations therefore represent an important external force impacting agency behavior.

Local population needs also play an important role. Size and make-up of child welfare caseloads vary significantly across states and counties (Children's Bureau, 2012) and over time. Surveys of state child welfare administrators conducted in 2003 and 2005 indicate that nationally, agencies are serving increased numbers of children and families with multiple or severe needs (Scarcella et al., 2006). Timely provision of a wide range of services can affect child well-being as well as agencies' efforts to preserve or reunite these families; however, the extent to which necessary services are available and responsive to client needs are often strongly affected by local context (GAO, 2013; Hasenfeld & Garrow, 2012; Keiser & Soss, 1998). For example, need for public assistance increased significantly following the Great Recession of 2008, with a record number of families reporting difficulty providing basic needs such as adequate nutrition and stable housing (Oberg, 2011). When service gaps exist, agencies may either expand service offerings in response to community need or identify partner agencies to which clients can be referred. For families receiving services from multiple providers or systems, agency development of inter-organizational relationships may affect the extent to which such services are effectively coordinated (Daleiden, Chorpita, Donkervoet, Arensdorf, & Brogan, 2006; Oppenheim, Lee, Lichtenstein, Bledsoe, & Fisher, 2012). The effectiveness of certain services in meeting client needs may also depend on the extent to which they are evidence-based, culturally appropriate, and/or implemented with fidelity, necessitating agency attention to new developments within the field, internal workflows, and staff training (Aarons & Palinkas, 2007; Gambrill, 2006; Torrey, Bond, McHugo, & Swain, 2012).

Finally, in child welfare and other human service sectors, performance measures linked to financial incentives and/or sanctions are increasingly used to monitor program performance and impose accountability for public expenditures (Heinrich, Lynn, & Milward, 2010; Soss, Fording, & Schram, 2011). Federal officials use Child and Family Service Review findings to evaluate state child welfare performance. States in turn increasingly use performance measures to guide decisions about when to renew or terminate contracts with local providers and monitor the achievement of program goals. Whether intended or not, selected performance indicators influence where resources are allocated, what types of services are funded, and how client-level populations and outcomes are conceptualized (Courtney, Needell, & Wulczyn, 2004; Tilbury, 2004). Evidence from the broader public administration literature suggests that performance management pressures significantly affect agency behavior, but not always as intended. Some agencies do use performance data to inform and improve their programs, and/or to document efforts and successes in ways that legitimize their services and enhance their ability to acquire new resources (Moynihan, Pandey, & Wright, 2012). However, agencies may also comply with requirements to create performance data without actually using it to improve performance, or depending on the level of financial risk involved, may even "game" indicators in ways that undermine their intended purpose (Dias & Maynard-Moody, 2007; Moynihan, 2009). Specific effects of performance pressures on agency behavior are expected to vary based on local context as well as factors internal to the agency, such as existing capacity to engage in quality improvement and program evaluation activities.

# 1.2. Structural characteristics and strategic decision-making in response to external change

In order to be "successful," i.e., survive, agencies must adapt to environmental demands in ways that allow for the acquisition and maintenance of critical resources such as funding, staff, and clientele (Baum & Singh, 1996; Drazin & Van de Ven, 1985). Organization and management theory has identified a number of structural attributes and strategic decisions influential in agencies' efforts to adapt to external demands (Dalton, Todor, Spendolini, Fielding, & Porter, 1980; Hall & Saias, 1980). In the current study, these are grouped into

four categories considered most relevant for differentiating private child and family serving agencies: internal management capacity, service diversification, integration, and advocacy. A brief definition and overview of each is provided below.

Successful service delivery is contingent on agencies' capacity to perform a range of managerial tasks and functions, e.g., planning and strategizing, budgeting and mobilizing financial resources, managing human resources, and evaluating and tracking service quality (Brody, 2005; Dunn, 2010). Internal management capacity directly affects agencies' ability to acquire, assimilate, and use new information to improve agency performance, and consequently, the types of adaptive strategies available to them (Brush & Chaganti, 1999; Zahra & George, 2002). Evidence from the public administration literature suggests that internal management capacity is significantly associated with agency performance, with financial, information technology, and other administrative systems alone accounting for up to 8-10% of variation in agency outcomes (Boyne, Meier, O'Toole, & Walker, 2005; Hou, Moynihan, & Ingraham, 2003). Longitudinal data on human service nonprofits collected in 2002 and 2004 also reveal significant effects of agency size on adaptive tactics used by agencies in responding to financial uncertainty (Mosley, Maronick, & Katz, 2012). External pressures may in turn affect agency need for and ability to invest in internal management capacity. For example, contract reporting requirements and accreditation standards may place institutional pressures on private agencies to either invest in administrative infrastructure or contract with another agency to provide specific administrative functions (Lee, 2013). Conversely, constrained economic conditions may cause agencies to reduce overhead and administrative costs (Austin, 2003).

In the health and human services, diversification is conceptualized as the number and type of services and programs offered by the agency within the potential continuum of care (Bazzoli et al., 1999; Blau, 1970). Highly diversified agencies provide a broad array of services, while less diversified agencies specialize in a narrower range of services and/or activities. For private child and family serving agencies, few strategic decisions are as important as the choice of services offered. When employed as a growth strategy and/or to exploit local market inefficiencies (Nayyar, 1993; Rumelt, 1974), controlled diversification in related service areas can provide agencies with competitive advantage, e.g., via opportunities to share knowledge across service areas, offer clients a "one-stop" shop for services, and/or simultaneously take action against competitors in multiple markets (Clement, D Aunno, & Poyzer, 1993; Hitt, Bierman, Shimizu, & Kocchar, 2001; Knudsen, Roman, & Ducharme, 2005). However, diversification also generates coordination and integration costs that can strain management resources and limit organizational attention in ways that slow agencies' response to external pressures (Grant, Jammine, & Thomas, 1988; Ocasio, 1997). Consequently, while the particular mix of services offered by an agency is heavily influenced by external factors (e.g., client service needs and preferences, competition), internal factors such as organizational capacity / ability to provide certain services also play a role.

Integration refers to the activities and mechanisms used by health and human service agencies to coordinate services and programs for clients across the potential continuum of care (Mays et al., 2010; Robinson & Casalino, 1996; Van de Ven, Delbecq, & Koenig, 1976). For private child and family serving agencies, choice of integration mode, and specifically of whether to provide services directly (ownership model) versus via interorganizational relationships with others, is a critical strategic decision with direct ramifications for the types of performance incentives and administrative controls established (Alexander et al., 1996; Zajac & D'Aunno, 1994). Inter-organizational relationships can yield significant benefits for all agencies involved, e.g., via strengthened resource base and/ or ability to satisfy pressures in the institutional environment (Sowa, 2009; Takahashi &

Smutny, 2002), but also incur increased transaction costs and loss of control (Lorange & Roos, 1993; Williamson, 1981). Expected benefits and costs also vary significantly based on the nature of the relationship; a loosely integrated relationship in which information is shared to coordinate service delivery involves different trade-offs than a tightly integrated relationship in which decision-making, financial risk, and/or operations are shared via long-term contract or a unified ownership model. Integration decisions are expected to be strongly affected by local environmental context as well as partner type and history.

Finally, policy advocacy refers to agencies' efforts to influence decisions of any institutional elite to promote a collective goal or interest (Boris & Mosher-Williams, 1998; Jenkins, 1987; Mosley, 2010). While typically peripheral to agencies' core mission of serving clients, advocacy participation - either directly or by board members - can serve as an important vehicle for agencies to promote themselves, broker resources, ensure representation of otherwise marginalized client populations, and achieve favorable policy change (Mosley, 2012; Schmid, Bar, & Nirel, 2008). For agencies with common interests and/or those constrained in the extent to which they can directly engage in policy advocacy, joint membership in a national, state, or local association may be particularly useful in the creation of a "new political space" that demands more access and attention from institutional elites than agencies can achieve alone (Balassiano & Chandler, 2010; Selsky, 1998). Particularly in uncertain fiscal and contracting environments, participation in such associations may also provide opportunities for agency leaders to collect and share information critical to successful strategy formulation and implementation (Daft, Sormunen, & Parks, 1988; Elenkov, 1997; Farmbry, 2004). For example, data collected from a national sample of community-based organizations between 1990 and 2004 indicated that affiliation with a national or regional network predicted organizational survival through greater agency access to resources (Walker & McCarthy, 2010). For private child and family serving agencies, participation in state-level associations may be particularly critical because much of the action in "privatization of services, eligibility determination, and other human services issues is happening in state capitals" (Hoefer, 2000, pp. 80–81).

#### 1.3. Study Objectives

The structural and strategic attributes enacted by private child and family serving agencies can affect agency performance, including outcomes experienced by children and their families. However, currently little is known about private child and family serving agencies are configured or the extent to which these configurations may be affected by specific resources, priorities, and incentives within agencies' local environment. This study seeks to address this gap in the literature by applying the constructs of internal management capacity, diversification, integration, and policy advocacy to develop an empirical typology of private child and family serving agencies. We also examine the extent to which different configurations of attributes are associated with pressures in agencies' external environment, specifically financial pressures, regulatory or legal constraints, client needs and/or best practices, and performance management expectations at the federal and state level.

#### 2. METHODS

#### 2.1. Data and Sample

Data for this study were drawn from the National Survey of Private Child and Family Serving Agencies (NSPCFSA), the first national survey of private agencies involved with the formal child welfare system. NSPCFSA 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 (the Alliance). The NSPCFSA sampling frame included all private child family and serving

agencies registered on the membership listservs of CWLA, the Alliance, and state associations for children and families involved in the National Organization of State Associations for Children. Based on 2011 membership numbers for these organizations, the sampling frame was estimated to include between 600 to 1,000 unique agencies. An invitation to participate in this web-based survey was sent to private agency directors via these listservs, and the survey portal was made available between May 1 – June 30, 2011.

A total of 446 agency administrators in 38 states responded to the survey, resulting in an estimated response rate of between 45–74%; even the lower bound of this range is considered robust for studies utilizing organizational surveys (Baruch & Holton, 2008). Almost two thirds of the agencies in the sample (64%, n=287) were located in 10 states with large child welfare client populations: California, Indiana, Pennsylvania, New York, Kentucky, Texas, Arizona, Wisconsin, Michigan, and Missouri. The majority of agencies identified themselves as autonomous (84%, N=376) rather than part of a larger network or organization. Less than 3% of agencies (n=13) provided services in more than one state. Most agencies were not-for-profit; only 8% (N=37) reported being of private for-profit status. On average, 77% of agencies' revenue in the last fiscal year was from government contracts, 6% from private fees for services including insurance, 11% from foundation grants or donations, and 6% from other sources. Additional information on NSPCFSA sampling plan, procedures, and sample characteristics are available elsewhere (McBeath, Collins-Camargo, & Chuang, 2012).

In the current study, item non-response on study variables reduced the analytic sample to 410 agencies. T-test comparisons indicated that these agencies did not differ from those excluded due to listwise deletion in other model variables. Given uncertain effects of multiple imputation of missing data on cluster analysis outcomes (Basagana, Barrera-Gomez, Benet, Anto, & Garcia-Aymerich, 2013), missing data was handled using a complete case analysis approach.

#### 2.2. Measures

**2.2.1. External pressures**—Agency administrators were asked to report on the extent to which four key factors in private child and family serving agencies' external environment, influenced how the agency developed new programs, how the agency delivered longstanding programs, and how the agency formed inter-organizational relationships (IORs). These four factors included (a) financial pressures, e.g., agency's financial outlook, changes in reimbursement rate, and pressures related to financial risk (4 items,  $\alpha = 0.91$ ); (b) regulatory or legal constraints, such as state regulations, court requirements or consent decrees, and lawsuits involving the agency (3 items,  $\alpha = 0.78$ ); (c) client needs and best practices, including changes in needs of children and families, advice from experts and researchers, feedback/input from families and clients serviced, and staying abreast of best practices (4 items,  $\alpha = 0.92$ ); and (d) performance management, including performance expectations embedded in the agency's contract with the public child welfare agency, analysis of data regarding agency performance or outcome achievement, and State Child and Family Services Review findings and the state's Program Improvement Plan (3 items,  $\alpha =$ 0.89). Responses to these 14 items were on a 1–5 Likert scale, with 1 indicating "No Influence" and 5 indicating "Very Strong Influence".

**2.2.2. Internal management capacity—**Internal management capacity was measured using three variables known to affect agency adaptation and performance: agency age

<sup>&</sup>lt;sup>1</sup>The upper range of 1,000 assumes no overlap in association membership. In our data, approximately 40% of agencies reported belonging to more than one professional association, resulting in the lower bound estimate of 600 unique agencies.

(Aldrich & Ruef, 2006; Hannan & Freeman, 1984), administrative infrastructure (Hou et al., 2003), and size (Amirkhanyan, Kim, & Lambright, 2013). Age was operationalized as the number of years the agency reported being in operation. Administrative infrastructure was a count variable (0-4) summing whether the agency reported having any of the following: a full-time chief financial officer (CFO), a program evaluation department or manager, a quality assurance/quality improvement (QA/QI) unit or manager, or an information technology (IT) department or manager. Total annual operating budget in the last fiscal year was used as a proxy for agency size.

- **2.2.3. Diversification**—Diversification was operationalized as the range of services provided by the agency. Respondents were asked whether their agency provided 21 different services, either directly or via subcontract with other providers. Seven of these services were specific to child welfare and the remaining 14 services covered a range of health, mental health, and social services (see Table 1). Responses were summed and then divided by 21 to obtain the appropriate percentage.
- **2.2.4. Integration**—Integration was measured using three variables reflecting choice of integration mode as well as extent to which agencies were integrated with two types of partners: public child welfare agencies and other local private child and family serving agencies. Choice of integration mode was operationalized as the percentage of services offered via subcontract with other providers (as opposed to directly). Extent of integration was operationalized as the strength of ties with each type of partner. Agency directors were asked to rate on a 1-5 Likert scale, with 1 = "No collaboration" and 5 = "Constant collaboration," the extent to which they collaborated with the public child welfare agency and other local private child and family serving agencies, respectively, around data sharing, cross-training of staff, joint service delivery, and joint budgeting. Two count variables (range 0-4) were created, reflecting the sum of the extent to which the agency reported frequent or constant collaboration with each entity in these four areas.
- **2.2.5. Advocacy**—Given the reliance of many private agencies on government contracts and the importance of collective advocacy at the state level, we chose to focus on the strength of private agency ties with the state association of private child and family service providers. Agency directors were asked to rate on a 1-5 Likert scale, with 1 = "No collaboration" and 5 = "Constant collaboration," the extent to which they collaborated with the state association around data sharing, cross-training of staff, joint service delivery, and joint budgeting. Strength of ties was operationalized as a count variable (range 0-4) reflecting the sum of the extent to which the agency reported frequent or constant collaboration with the state association in these four areas.

#### 2.3. Analyses

Data were analyzed in a multi-stage process. In the first stage, agglomerative hierarchical cluster analysis was used to place private agencies into mutually exclusive categories, or clusters, based on similarity across measures of internal management capacity, diversification, integration, and advocacy (Hair, Anderson, Tatham, & Black, 1992). Cluster analysis is a multivariate statistical technique that seeks to subdivide objects into a hierarchical arrangement of homogeneous subgroupings (Everitt, Landau, Leese, & Stahl, 2011; Lorr, 1983); it is particularly useful when the number and types of groups cannot be determined a priori by the researcher. To conduct this analysis, all measures were standardized into z-scores to limit potential effects of scale differences among variables, and Mahalanobis distance measures were used to identify potential outliers. Ward's method, also known as the minimum sum of squares approach, was selected for assigning agencies to clusters because it has been shown to empirically outperform other clustering techniques in

analysis of organizational data (Everitt et al., 2011; Ward, 1963). Visual inspection of the clusters and their distance measures as well as examination of pseudo-F and pseudo-t<sup>2</sup> statistics were used to select a parsimonious number of well-defined clusters (Calinski & Harabasz, 1974; Duda & Hart, 1973). Predictive discriminant analysis was used to validate the identified cluster solution. Discriminant analysis serves as an internal validity check by providing post-hoc diagnostics regarding the rate of correct cluster assignment and as appropriate, reclassifying misassigned observations to the appropriate clusters (Hastie, Tibshirani, & Friedman, 2009; McLachlan, 2004).

After reclassification, cluster membership was reviewed and discussed with an expert panel. This expert panel was comprised of six individuals across the U.S. who were executive directors of state associations representing children and children's services or of private child and family serving agencies. The firsthand knowledge of these individuals provided a second, external validity check of the cluster solution from a policy-practice perspective.

The final stage of analysis involved descriptive comparison of clusters. Of particular interest was the extent to which clusters systematically differed in the extent to which four key factors in the external environment (financial pressures, client needs and/or best practices, performance or outcome achievement, and regulatory or legal constraints) influenced agency behavior, specifically the development of new programs, delivery of long-standing programs, and nature of integration employed. Duncan multiple range testing was used to assess key similarities and differences across cluster categories.

Initial analyses indicated that the budget variable was highly skewed, with a very wide range. To address potential concerns over effects of this variable on the cluster analysis, analyses were re-run using a categorical variable (range 1 to 9) representing the number of full-time staff (FTE) in the agency in the last fiscal year. Categories ranged from 1 = fewer than 10 FTEs to 9 = 1000 or more FTEs. This variable was highly correlated with agency budget (r=0.70) but normally distributed. Because the cluster solution identified as best-fitting the data was identical to that produced with the budget variable, analyses with the continuous budget variable were retained as providing more information than the categorical FTE variable. All analyses were conducted using Stata 12.0 (StataCorp, 2011).

#### 3. RESULTS

#### 3.1. Descriptive characteristics of the sample

Table 2 provides an overview of the private child and family serving agencies in our sample. On average, agencies were about 63 years old with a median annual operating budget of \$7.5 million. Agencies also had fairly developed administrative infrastructures, with approximately 50% of agencies indicating at least 3 out of 4 of the following: a full-time CFO, a program evaluation department or manager, a QA/QI unit or manager, or an IT department or manager. Agencies were moderately diversified, providing approximately 10 of 21 possible services. Of services offered, 22% were subcontracted out rather than provided directly. Subcontracts for child welfare services were less prevalent (12%) than subcontracts for health, behavioral health, and social services (27%).

In general, agencies in our sample reported stronger ties with the state association of private providers than with the public child welfare agency or with other private agencies. Data sharing was the most commonly reported type of tie with all three stakeholders: Approximately 60% of agencies reported frequent or constant collaboration around data sharing with the state association of private providers, 50% indicated such ties with the public child welfare agency, and one third of agencies reported frequent or constant collaboration around data sharing with other private agencies. Joint budgeting was the least

commonly reported type of tie, with less than 15% of agencies reporting frequent or constant collaboration in this area with any stakeholder.

Of the different external pressures examined, financial pressures were consistently identified as having the greatest influence on agency behavior. Perceived influence of financial pressures on the development of new programs was particularly high, with an average rating of 3.78 out of 5, indicating between "Some influence" and "A strong influence" on agency behavior. Client needs and/or best practices was the second most influential factor affecting development of new programs and delivery of long-standing ones (average rating of 3.38 and 3.34, respectively). Legal or regulatory pressures had the least influence on agency behavior, especially with regards to inter-agency collaboration (average rating of 2.02 out of 5, indicating only "A little influence" on agency behavior in this area).

#### 3.2. Cluster profiles

Cluster analysis identified a five-cluster solution (i.e., five distinct groups of agencies) as providing the best fit with the data. Mahalanobis distance measures identified two outlier agencies, reflecting large, geographically spread agencies that differed significantly from others in the sample. These two outliers comprised the fifth group (N=2). Although Ward's method can be sensitive to the presence of outliers (Everitt et al., 2011), re-running the cluster analysis without the two outliers did not affect the composition of the remaining four groups. Discriminant analysis also indicated that 93% of agencies were correctly classified, providing further support for the internal validity of this solution. The expert panel also confirmed the face validity of these categories; consequently, the original five-cluster solution was retained.

The basic structure of the final cluster solution is provided in a dendrogram (see Figure 1). This dendrogram traces the hierarchical order in which agencies clustered into groups, and the branching structure can be used to identify groupings that are more similar vs. dissimilar to one another (e.g., Groups 4 and 5 are more similar to one another than they are to Groups 1–3). Comparisons of descriptive data across the five identified groups are provided in Table 3. For ease of interpretation, raw variable means are provided instead of z-scores. Key characteristics of each group are summarized below in the order in which they are presented in Figure 1.

- **3.2.1.** Group 1: Small agencies with low diversification, integration, and collective advocacy (35%, n=143)—Agencies in this group were the youngest (~35 years), with the least administrative infrastructure and the smallest budgets (<\$10M). As might be expected given their limited internal management capacity, agencies in this group were also the least diversified and integrated. On average, agencies offered 41% of all 21 possible services; compared to other groups, agencies in Group 1 offered a much smaller range of non-child welfare services (39% compared to the overall sample mean of 48%). Only 8% of services offered were subcontracted out to other agencies. Strength of ties, representing the extent to which agencies were integrated with the public child welfare agency and other private child and family serving agencies, were also the lowest of all the groups (0.94 and 0.38 out of 4, respectively). Strength of ties with the state association of private providers was also quite low (average value of 0.49 out of 4).
- **3.2.2.** Group 2: Mid-sized, high-administrative capacity agencies with low integration but high collective advocacy (29%, n=119)—Agencies in this group were the oldest in the sample (approximately 106 years, with a standard deviation of 45), with an average annual budget of \$17.2 million. These agencies also had the most administrative infrastructure of any group (mean value of 3.62 out of 4), with most

indicating they had a full-time CFO, a program evaluation department or manager, a QA/QI unit or manager, and an IT department or manager. These agencies were moderately diversified, offering ~11 of 21 possible services representing a mix of child welfare as well as health, behavioral health, and social services. Most of these services were provided directly (84%) rather than subcontracted out. Strength of ties with other private child and family serving agencies was low (0.44 out of 4), but ties with the state association of private providers were the second highest of all the groups (1.66 out of 4).

- **3.2.3. Group 3: Large, highly subcontracted agencies (15%, n=61)**—Agencies in this group were relatively young (~41 years old), but with larger budgets (~\$16.6 million) and more administrative infrastructure than agencies in Group 1. Although highly diversified, the majority of services (69%) were offered via subcontract rather than directly. Most of these subcontracts were for services such as physical health, behavioral health, domestic violence, housing assistance, and transportation (77%) rather than child welfare (37%). Perhaps due to the nature of these subcontracts (i.e., mostly for non-child welfare services), reported strength of ties with other local private child and family serving agencies was fairly low (only 0.57 out of 4).
- **3.2.4.** Group 4: Mid-sized agencies with low subcontract but high integration and collective advocacy (21%, n=85)—Agencies in this group were between Groups 2 and 3 in terms of age (~70 years) but tended to be somewhat larger in size (average annual operating budget of \$19.4 million). These agencies were moderately diversified (~12 of 21 possible). In terms of service delivery mode, most services were provided directly (77%) rather than subcontracted out. Where these agencies differed most from other groups was in strength of ties with key child welfare stakeholders: Agencies in this group reported the highest strength of ties with public child welfare and with other local private agencies (2.05 and 2.29 out of 4, respectively), as well as with the state association of private providers (2.65 out of 4).
- **3.2.5. Group 5: Large, highly diversified, highly subcontracted agencies (<1%, n=2)**—The two agencies in this group were anomalous in terms of age and size. Although only in operation for an average of 21.5 years, these agencies reported a mean annual operating budget of \$122.5 million. Consistent with their large size, these agencies were also the most highly diversified (~17 of 21 possible services provided). Over half of these services (55%) were subcontracted out rather than provided directly. Similar to other groups, agencies in Group 5 subcontracted out a higher percentage of health and social services (66%) than traditional child welfare services (29%). Agencies reported moderate strength of ties with public child welfare agencies, other private agencies, and the state association of private providers (between 1.0 and 1.5 out of 4.0).
- 3.2.6. Cross-group comparisons of perceived influence of external pressures
- —Table 4 provides detailed information regarding effects of external pressures on specific agency behaviors, e.g., development of new programs, delivery of long-standing programs, and formation of IORs. In general, the young, small agencies in Group 1 (*low diversification, integration, and collective advocacy*) reported the least influence of financial considerations, performance management, and legal or regulatory constraints on agency behavior. Closer examination of associations between external pressures and specific agency behaviors suggest that pressure to form IORs was rated particularly low, with client needs and/or best practices and legal/regulatory pressures identified as having between "No influence" and "A little influence" on formation of IORs. In contrast, agencies in Group 3 who were also young but large and highly subcontracted, reported much higher financial pressures to develop new programs and form IORs. For these agencies, performance

management pressures were also identified as influential in delivery of long-standing programs, but not in the development of new programs.

Older, mid-sized agencies in Group 4 with low subcontracting but high integration and collective advocacy also reported strong influence of financial pressures and client needs on agency behavior; in particular, financial pressures were identified as influential in delivery of long-standing programs and use of IORs (mean rating of 3.87 and 3.17 out of 5, respectively, indicating between "Some influence" and "A strong influence" on agency behavior). Perceived influence of performance management and legal or regulatory pressures were also quite high among agencies in this group. In contrast, agencies in Group 2, who were similar to agencies in Group 4 except in the extent to which they were integrated with public child welfare agencies and other local private child and family serving agencies, reported much perceived influence of external pressures on agency behavior, particularly in the formation of IORs.

Finally, external pressures reported by the two young, large, "outlier" agencies in Group 5 were also notable in several ways: First, influence of client needs and/or best practices was rated significantly lower than other groups, but influence of performance management on agency behavior was rated significantly higher. Legal or regulatory pressure to develop new programs was also the highest in this group (mean rating 3.17 indicating between "Some influence" and "A very strong influence," compared to the overall sample mean of 2.43).

#### 4. DISCUSSION

As the current study demonstrates, private child and family serving agencies vary widely in their organizational structures and activities. The purpose of this study was to develop an empirical typology useful for identifying clusters of agencies sharing common structural and strategic features, and to examine whether these features were associated with and may therefore have developed in response to different environmental pressures. In empirical analyses, four features (agencies' internal management capacity, service diversification, integration, and policy advocacy) were successfully applied to identify five distinct clusters of private agencies: Agencies in Group 1 were small, young agencies that offered a limited range of services directly and were not well-integrated with other child welfare stakeholders. In contrast, agencies in Group 3 were also young but with a highly diversified service array made possible primarily via subcontracts with other agencies. Agencies in Groups 2 and 4 tended to be older, with more developed administrative infrastructure, moderately diversified service arrays, relatively few subcontracts, and close ties to the state association of private providers; however, agencies in these two groups differed significantly in the extent to which they were integrated with public child welfare and other local private child and family serving agencies. Finally, the two agencies in Group 5 were characterized by very large size, the highest level of diversification in the sample, and a relatively high proportion of services subcontracted.

The five groups of child-serving agencies that emerged from cluster analyses were all relatively mature, suggesting the presence of agencies that have survived beyond the "liability of adolescence" (Aldrich & Ruef, 2006; Bruderl & Schussler, 1990). Despite the current sample's likely under-representation of smaller and younger agencies, we believe the presence of a core of established agencies bodes well for overall system stability. At the same time, the five groups of agencies differed substantially in age and may represent groups of agencies that formed at different points over the last century, reflecting the evolution of publicly funded child welfare services over this time.

Cross-group comparisons revealed several interesting similarities and differences. For example, the two oldest groups (Groups 2 and 4) also reported the strongest ties with state associations of private providers, perhaps because some of these agencies either founded or had particularly influential histories with these associations. Conversely, the youngest large group of agencies (Group 1) had the weakest ties with their state association. Expert panel members speculated that agencies in this group could consist primarily of community-based agencies providing niche services; for such agencies, which may have been formed to fulfill specific local community needs, low levels of integration with other providers may be an appropriate strategic decision, particularly in the absence of strong external pressures to collaborate or change their current service delivery model. However, given recent changes in the financing of state child welfare and other public service systems, it is possible that even these agencies may be well-served by having more representation in state forums that influence service definitions and thus which services are reimbursed and how adequately.

Excepting the two agencies in Group 5, levels of service diversification were relatively consistent across groups (ranging from 41-61%). With no group of agencies providing fewer than 40% of possible children's services, there was no group of agencies we could characterize as specialists. However, choice of integration mode varied widely across groups: the percent of services subcontracted out ranged from a mean of 8% in Group 1 to 69% in Group 3, suggesting very different agency responses to the recent trend towards subcontracting. Subcontracting requires selection and monitoring capabilities that differ substantially from those needed to provide services directly (Gooden, 1998). The fact that the group of agencies with the lowest proportion of subcontracted services also had the least administrative infrastructure suggests that agency leadership may be choosing this integration mode based in part on their ability to oversee them.

Study findings also suggest that variation in agencies' strategic and structural features may correlate with directors' perceptions of specific pressures in agencies' external environment. For example, for the small, young agencies in Group 1, directors' perceptions of relatively limited influence of external pressures on agency behavior may have led to the low observed levels of integration and collective advocacy. By contrast, agencies in Group 4 were larger, older agencies, with more developed administrative infrastructures. While these agencies also provided most services directly rather than via subcontract, they were highly integrated with the public child welfare agency, other private agencies, and the state association of private providers. Directors of these agencies reported relatively strong influence of all types of external pressures, but particularly of financial considerations and client needs or best practices, on agency behavior. Experts on our panel noted that agencies in this group could have relied historically on delivery of residential and other congregate care services for revenue and might now be under financial pressure to change and expand service programs given recent changes in need for and perceived role of congregate care in child welfare (Kids Count, 2011; Noonan & Menashi, 2009). In the absence of additional contextual and organizational data, specific sources of these external pressures could not be determined. However, these pressures were clearly influential and associated with agencies' strategic and structural features.

#### 4.1. Implications for future child welfare research, policy, and practice

What types of private agencies arise to meet the needs of clients and the demands of public child welfare agencies? Understanding heterogeneity and the extent to which clusters of agencies respond or evolve based on internal and external pressures is a first step in examining the extent to which a certain mix of agency types may contribute to the maintenance of a stable, yet responsive system of care. Child welfare systems are comprised of agencies that vary (in some cases widely) in their size and historical prominence, administrative resources, service continua, and links to other providers and funders. The

specific mixture of agencies present may affect whether a child welfare system is stable and/ or flexible in responding to changing economic conditions, regulatory factors, client needs, and performance data. Viewed through the lens of an approach to human service delivery, one cannot forget that private child and family serving agencies are businesses that are responsive to market influences of varying types. From a systems perspective, the dynamic nature of how the parts function themselves and with each other to contribute to the whole is worthy of study in a field established to serve vulnerable populations. Results related to integration and collective advocacy open the door to further study regarding how such a system seeks to sustain itself and meet emerging demands.

The current study was not able to associate identified organizational configurations with specific agency outcomes (e.g., agency sustainment, service quality, efficiency, client permanency, safety, or well-being), nor did it identify the circumstances in which a given configuration might perform best. Although study findings revealed that agency structure correlated with directors' perceptions of different pressures in agencies' external environment, the use of cross-sectional data meant that we could not ascertain the extent to which such pressures may have influenced the evolution of agencies over time. A more thorough understanding of how agency structure *and* performance are dynamically shaped by factors in the external environment remains an important area of inquiry; the typology identified in this study provides a starting point for the type of comparative research necessary to address this topic.

By more fully accounting for heterogeneity in the population of private child and family serving agencies, a typological approach could add significantly to the evidence regarding which types of child welfare practices or programs work best in specific settings and why. For example, the typology measures used in this study could serve as independent variables in examining cross-agency differences in quality, efficiency, or other outcomes. Structural measures from this typology (e.g., internal management capacity, diversification, integration) could serve as dependent variables in examining effects of future policy or other environmental changes on these agencies. Methodologically, the current paper highlights the importance of documenting and explaining the substantial variation across child welfare agencies. Collectively, future studies in this area could provide the field with a clearer understanding of the relative strengths and weaknesses of different approaches to organizing and delivering services for child welfare-involved families, as well as the environmental contexts (political, economic, institutional, etc.) in which these approaches may work best.

This type of evidence could also be useful to policymakers and agency administrators in determining which structures and strategies might be most feasible and desirable in the communities they serve. In child welfare and behavioral health, considerable emphasis has been placed on the establishment of systems of care that better meet the needs of children and families (e.g., Stroul & Blau, 2010). Rather than viewing agencies in isolation, there is now increased attention to collective impact-based approaches to enacting social change in which public and private agencies coordinate funding and service delivery for optimal effects on communities and client populations (Hanleybrown, Kania, & Kramer, 2012). These approaches demonstrate the practical importance of identifying and optimizing the mix of local service providers. Understanding the pool of providers, their characteristics and their adaptation to external influences may help public administrators make contract decisions and support agencies in adapting to meet new service needs. A typological approach could be used to identify groups of similarly structured agencies for benchmarking and quality improvement (rather than a "one size fits all" approach to performance assessment). Consistent with configurational approaches used in other sectors (e.g., health care, public health), this typology should be tested via application to new data and through development of more refined measures of identified structural dimensions (Dubbs et al.,

2004; Mays et al., 2010). For example, applying the typology to a single state could allow for more detailed data on both organizational characteristics and external context, creating further opportunities for refinement. When applied to the same sample of agencies over time, a typological approach could provide policymakers and practitioners with a framework useful for assessing effects of organizational programs and policies (e.g., Bazzoli et al., 1999; Dubbs et al., 2004).

#### 4.2. Limitations

Several limitations must be taken into consideration in interpreting results of this study. First and foremost, the NSPCFSA sampling frame was limited to agencies affiliated with CWLA, the Alliance, or state associations for children and families involved in NOSAC, resulting in a sample that was national but not necessarily nationally representative (McKelvey, 1975). Data on non-profit human service organizations in Los Angeles County suggest that agencies with more professionalized leadership, greater collaboration, and greater size are more likely to participate in coalitions and arguably, professional associations such as the ones from which our sample was drawn (Donaldson, 2007; Mosley, 2011). Although analysis of NSPCFSA data revealed significant variation in organizational size and age, potential under-representation of private for-profits and small, community-based agencies must be taken into account and may limit the generalizability of study results.

This study was also limited by our inability to fully account for all structural characteristics likely to be important in understanding organization and operation of local agency activities. For example, although the majority of agencies in our sample were autonomous (84%) and operated in only one state (97%), larger agencies in our sample likely provided services at multiple sites. We were not able to capture heterogeneity in agency operations or leadership across those sites, nor were we able to reflect the extent to which control over agency operations was centralized vs. distributed. In measuring internal management capacity, we could not account for assets other than revenue that agencies might also draw upon in responding to different environmental pressures. Finally, even though agencies are under pressure to demonstrate services are coordinated with all other federal or federally assisted programs serving this population, the current study only examined strength of private agency ties with public child welfare agencies, other local private child and family serving agencies, and the state association of private providers. Examining ties with other providers and associations may yield additional insights: for example, it is reasonable to infer that agencies in Group 3, which on average subcontracted out only 37% of child welfare services but 77% of health, behavioral health, and social services, would have also been strongly integrated with other types of providers. Agencies located in states without a state association of private providers may have formed ties with other entities critical to advocacy efforts. In operationalizing the strength of ties measure, the decision to use a count variable reflecting the sum of strong ties was consistent with our focus on integration, but did preclude examination of weaker ties. Further research is needed to evaluate the extent to which such ties may affect current study findings.

The use of cross-sectional rather than longitudinal data also limited our ability to test the stability of identified organizational configurations over time and determine the extent to which agency strategy and structure may have changed in response to recent trends. Evaluating the stability of organizational configurations over time is important because research suggests that inter-organizational relationships in human service systems may shift based not only on the types of resources involved but on the "stage" of network evolution, indicating differences across time (Provan & Huang, 2012).

Last but not least, this study relied on directors' self-report of external pressures; study measures also focused on perceived influence of such pressures rather than their source.

Although directors' perceptions are more important for explaining strategy than more "objective" measures of the environment (Bourgeois, 1980), further research is needed to determine the extent to which directors' responses resulted in improved alignment with demands in agencies' external environment. Evidence in the strategic management literature suggests that the external environment is a major source of uncertainty in the strategic planning process. Directors' efforts to identify opportunities and threats and implement strategic changes are inherently filtered by how they perceive and interpret different forces in the agencies' external environment (Miles, Snow, & Pfeffer, 1978; Schneider & DeMeyer, 1991), which are in turn shaped by the means through which they gather information about external events and trends (Daft et al., 1988; Hambrick, 1982). Future research that incorporates more information about the specific strategies that directors use to perceive external events and trends and their relative utility in different contexts (e.g., in terms of effects on organizational survival or performance) may yield additional insights of use to practitioners and policymakers.

#### 5. CONCLUSION

Despite the tremendous number of private child-serving agencies in the U.S., relatively little is known about configurations of service providers and their implications for child and family well-being. The current study yielded potentially useful insights into the profile of private agencies currently serving some of our society's most vulnerable families. Agencies in the study sample tended to be well-established and to provide a broad range of services. However, they differed considerably in their internal structures, service delivery, and integration with other key child welfare stakeholders. Differences in agency structure and strategy correlated with directors' perceptions of pressures in the external environment. Further research is needed to understand which types of child and family serving agencies are most effective in different settings and why. Such research could help both managers and policymakers improve the alignment between system structure and family needs.

#### **Acknowledgments**

This research was conducted under the Quality Improvement Center on Privatization of Child Welfare Services funded by the U.S. Department of Health and Human Services, Administration for Youth and Families, Children's Bureau. We would also like to thank the six members of our expert panel (Marge Berglind, Cathy Graham, Laura Boyd, Gregory Kurth, Michelle Sanborn, and Mary Hollie) for their input.

#### **REFERENCES**

Aarons GA, Palinkas L. Implementation of evidence-based practice in child welfare: Service provider perspectives. Administration and Policy in Mental Health and Mental Health Services Research. 2007; 34(4):411–419. [PubMed: 17410420]

Aldrich, H.; Ruef, M. Organizations evolving, 2nd edition. Thousand Oaks, CA: Sage; 2006.

Alexander J. Adaptive strategies of nonprofit human service organizations in an era of devolution and New Public Management. Nonprofit Management & Leadership. 2000; 10(3):287–303.

Alexander J, Vaughn T, Burns L, Zuckerman H, Andersen RM, Torrens P, Hilberman D. Organizational approaches to integrated health care delivery: A taxonomic analysis of physician-organization arrangements. Medical Care Research and Review. 1996; 53(1):71–93. [PubMed: 10156436]

Alter, C. Interorganizational collaboration in the task environment. In: Patti, RJ., editor. The handbook of social welfare management. Thousand Oaks, CA: Sage; 2000.

Amirkhanyan A, Kim HK, Lambright K. The performance puzzle: Understanding the factors influencing alternative dimensions and views of performance. Journal of Public Administration Research and Theory. 2013

Auger D. Privatization, contracting, and the states: Lessons from state government experience. Public Productivity & Management Review. 1999; 22(4):435–454.

- Austin M. The changing relationship between nonprofit organizations and public social service agencies in the era of welfare reform. Nonprofit and Voluntary Sector Quarterly. 2003; 32(1):97–114.
- Balassiano K, Chandler S. The emerging role of nonprofit associations in advocacy and public policy: Trends, issues, and prospects. Nonprofit and Voluntary Sector Quarterly. 2010; 39(5):946–955.
- Baruch Y, Holton B. Survey response rate levels and trends in organizational research. Human Relations. 2008; 61:1139–1160.
- Basagana X, Barrera-Gomez J, Benet M, Anto J, Garcia-Aymerich J. A framework for multiple imputation in cluster analysis. American Journal of Epidemiology. 2013; 177(7):718–725. [PubMed: 23445902]
- Battilana J, Casciaro T. Change agents, networks, and institutions: A contingency theory of organizational change. Academy of Management Journal. 2012; 55(2):381–898.
- Baum J, Singh J. Dynamics of organizational responses to competition. Social Forces. 1996; 74(4): 1261–1297.
- Bazzoli G, Shortell S, Dubbs N, Chan C, Kralovec P. A taxonomy of health networks and systems: Bringing order out of chaos. Health Services Research. 1999; 33(6):1683–1717. [PubMed: 10029504]
- Blau P. A formal theory of differentiation in organizations. American Sociological Review. 1970; 35(2):201–218.
- Blome WW, Steib SD. Like musical chairs? Become a child welfare worker. Child Welfare. 2004; 83(4):381. [PubMed: 15310063]
- Boris E, Mosher-Williams R. Nonprofit advocacy organizations: Assessing the definitions, classifications, and data. Nonprofit and Voluntary Sector Quarterly. 1998; 27(4):488–506.
- Bourgeois L. Strategy and environment: A conceptual integration. Academy of Management Review. 1980; 5(1):25–39.
- Boyne G, Meier KJ, O'Toole L, Walker R. Where next? Research directions on performance in public organizations. Journal of Public Administration Research and Theory. 2005; 15:633–639.
- Brach C, Sanches L, Young D, Rodgers J, Harvey H, McLemore T, Fraser I. Wrestling with typology: Penetrating the 'black box' of managed care by focusing on health care system characteristics. Medical Care Research and Review. 2000; 57(Supplement 2):93–115. [PubMed: 11105508]
- Brody, R. Effectively managing human service organizations, 3rd edition. Thousand Oaks, CA: Sage; 2005.
- Bruderl J, Schussler R. Organizational mortality: The liabilities of newness and adolescence. Administrative Science Quarterly. 1990; 35(3):530–547.
- Brush C, Chaganti R. Businesses without glamour? An analysis of resources on performance by size and age in small service and retail firms. Journal of Business Venturing. 1999; 14(3):233–257.
- Calinski T, Harabasz J. A dendrite method for cluster analysis. Communications in Statistics. 1974; 3:1–27.
- Child Welfare League of America. Child welfare consent decrees: Analysis of thirty-five court actions from 1995 to 2005. Washington DC: Child Welfare League of America; 2005.
- Children's Bureau. Alternative responses to child maltreatment: Findings from NCANDS. Washington DC: U.S. Government Printing Office; 2005.
- Children's Bureau. Child welfare outcomes 2007–2010: Report to Congress. Washington DC: U.S. Department of Health and Human Services, Administration for Children and Families; 2012.
- Clement J, D Aunno T, Poyzer B. The financial performance of diversified hospital subsidiaries. Health Services Research. 1993; 27(6):741–763. [PubMed: 8428811]
- Collins-Camargo C, Ensign K, Flaherty C. The National Quality Improvement Center on the Privatization of Child Welfare Services: A program description. Research on Social Work Practice. 2008; 18(1):72–81.

Collins-Camargo C, McBeath B, Ensign K. Privatization and performance-based contracting in child welfare: Recent trends and implications for social service administrators. Administration in Social Work. 2011; 35:494–516.

- Conlan, TJ. From new federalism to devolution: Twenty-five years of intergovernmental reform. Brookings Inst Pr.; 1998.
- Conley A, Berrick JD. Community-based child abuse prevention: Outcomes associated with a differential response program in California. Child Maltreatment. 2010; 15(4):282–292. [PubMed: 20647255]
- Courtney M, Needell B, Wulczyn FW. Unintended consequences of the push for accountability: the case of national child welfare performance standards. Children and Youth Services Review. 2004; 26(12):1141–1154.
- Crilly D, Zollo M, Hansen M. Faking it or muddling through? Understanding decoupling in response to stakeholder pressures. Academy of Management Journal. 2012; 55(6):1429–1448.
- Daft R, Sormunen J, Parks D. Chief executive scanning, environmental characteristics, and company performance: An empirical study. Strategic Management Journal. 1988; 9(2):123–139.
- Daleiden EL, Chorpita BF, Donkervoet C, Arensdorf AM, Brogan M. Getting better at getting them better: Health outcomes and evidence-based practice within a system of care. Journal of the American Academy of Child & Adolescent Psychiatry. 2006; 45(6):749–756. [PubMed: 16721326]
- Dalton D, Todor W, Spendolini M, Fielding G, Porter L. Organization structure and performance: A critical review. Academy of Management Review. 1980; 5(1):49–64.
- Decker S. In 2011 nearly one-third of physicians said they would not accept new Medicaid patients, but rising fees may help. Health Affairs. 2012; 31(8):1673–1679. [PubMed: 22869644]
- Dias JJ, Maynard-Moody S. For-profit welfare: contracts, conflicts, and the performance paradox. Journal of Public Administration Research and Theory. 2007; 17(2):189.
- Dilger R, Moffett R, Struyk L. Privatization of municipal services in America's largest cities. Public Administration Review. 1997; 57(1):21–26.
- Donaldson L. Advocacy by nonprofit human service agencies. Journal of Community Practice. 2007; 15(3):139–158.
- Drazin R, Van de Ven AH. Alternative forms of fit in contingency theory. Administrative Science Quarterly. 1985; 30(4):514–539.
- Dubbs N, Bazzoli G, Shortell S, Kralovec P. Reexamining organizational configurations: An update, validation, and expansion of the taxonomy of health networks and systems. Health Services Research. 2004; 39(1):207–220. [PubMed: 14965084]
- Duda, R.; Hart, P. Pattern classification and scene analysis. New York: Wiley; 1973.
- Dunn, R. Healthcare Management, 9th edition. Chicago, IL: Health Administration Press; 2010.
- Elenkov D. Strategic uncertainty and environmental scanning: The case for institutional influences on scanning behavior. Strategic Management Journal. 1997; 18(4):287–302.
- Everitt, B.; Landau, S.; Leese, M.; Stahl, D. Cluster analysis, 5th edition. West Sussex, UK: John Wiley & Sons, Ltd; 2011.
- Farmbry, K. Environmental scanning for nonprofit human service organizations. In: Austin, M.; Hopkins, K., editors. Supervision as collaboration in the human services: Building a learning culture. Thousand Oaks, CA: Sage; 2004. p. 252-260.
- Fiss P, Zajac E. The symbolic management of strategic change: Sensegiving via framing and decoupling. Academy of Management Journal. 2006; 49(6):1173–1193.
- Flaherty C, Collins-Camargo C, Lee E. Privatization of child welfare services: Lessons learned from experienced states regarding site readiness assessment and planning. Children and Youth Services Review. 2008; 30(7):809–820.
- Gambrill E. Evidence-based practice and policy: Choices ahead. Research on Social Work Practice. 2006; 16(3):338–357.
- GAO. Child welfare: States use flexible federal funds but struggle to meet service needs. Washington DC: U.S. Government Accountability Office (GAO-13-170); 2013.

Geen, R.; Boots, SW.; Tumlin, KC. The cost of protecting vulnerable children: Understanding federal, state, and local child welfare spending. Washington DC: the Urban Institute; 1999.

- Geen, R.; Sommers, A.; Cohen, M. Medicaid spending on foster children. Washington, DC: the Urban Institute; 2005.
- Gooden V. Contracting and negotiation: Effective practices of successful human service contract managers. Public Administration Review. 1998; 58(6):499–509.
- Grant R, Jammine A, Thomas H. Diversity, diversification, and profitability among British manufacturing companies. Academy of Management Journal. 1988; 31(4):771–801.
- Grembowski D, Diehr P, Novak L, Roussel A, Martin D, Patrick D, Ulrich C. Measuring the 'managedness' and covered benefits of health plans. Health Services Research. 2000; 35(3):707–734. [PubMed: 10966092]
- Gronbjerg, KA. Human Services as Complex Organizations. Los Angeles, CA: Sage Publications; 2009. The U.S. nonprofit human service sector; p. 79-96.
- Gronbjerg, KA.; Salamon, LM. Devolution, marketization, and the changing shape of government-nonprofit relations. In: Salamon, LM., editor. The state of nonprofit America, 2nd edition. Washington DC: Brookings Institution; 2012.
- Hair, J.; Anderson, R.; Tatham, R.; Black, W. Multivariate data analysis, 3rd edition. New York: Macmillan: 1992.
- Hall D, Saias M. Strategy follows structure. Strategic Management Journal. 1980; 1(2):149–163.
- Hambrick D. Environmental scanning and organizational strategy. Strategic Management Journal. 1982; 3(2):159–174.
- Hanleybrown F, Kania J, Kramer M. Channeling change: Making collective impact work. Stanford Social Innovation Review. 2012 Retrieved from: http://www.ssireview.org/blog/entry/channeling\_change\_making\_collective\_impact\_work.
- Hannan M, Freeman J. Structural intertia and organizational change. American Sociological Review. 1984; 49(2):149–164.
- Hasenfeld Y, Garrow E. Nonprofit human service organizations, social rights, and advocacy in a neoliberal welfare state. Social Service Review. 2012; 86(2):295–322.
- Hastie, T.; Tibshirani, R.; Friedman, J. The elements of statistical learning: Data mining, inference, and prediction, 2nd edition. New York: Springer; 2009.
- Heinrich C, Lynn L, Milward HB. A state of agents? Sharpening the debate and evidence over the extent and impact of the transformation of governance. Journal of Public Administration Research and Theory. 2010; 20(Supplement 1):i3–i19.
- Hitt M, Bierman L, Shimizu K, Kocchar R. Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. Academy of Management Journal. 2001; 44(1):13–28.
- Hoefer R. Human services interest groups in four states. Journal of Community Practice. 2000; 7(4): 77–94.
- Hou Y, Moynihan D, Ingraham P. Capacity, management, and performance: Exploring the links. American Review of Public Administration. 2003; 33(3):295–315.
- Jang H, Feiock R. Public versus private funding of nonprofit organizations: Implications for collaboration. Public Performance and Management Review. 2007; 31(2):174–190.
- Jenkins, J. Nonprofit organization and policy advocacy. In: Powell, W., editor. The nonprofit sector: A research handbook. New Haven, CT: Yale University Press; 1987. p. 296-318.
- Keiser LR, Soss J. With good cause: Bureaucratic discretion and the politics of child support enforcement. American Journal of Political Science. 1998:1133–1156.
- Kids Count. Data snapshot on foster care placement. Baltimore, MD: Annie E. Casey Foundation; 2011. Retrieved from: http://www.aecf.org/~/media/Pubs/Initiatives/KIDS%20COUNT/D/DataSnapshotFosterCarePlcmnt/DataSnapshot\_FinalWeb.pdf.
- Knudsen H, Roman P, Ducharme L. Does service diversification enhance organizational survival? Evidence from the private substance abuse treatment system. Journal of Behavioral Health Services and Research. 2005; 32(3):241–252. [PubMed: 16010181]

Lee M. Children and family service agencies' experience with the initial Council on Accreditation process: An exploratory study. Families in Society: The Journal of Contemporary Social Services. 2013; 94(1):23–30.

- Lorange, P.; Roos, D. Strategic alliances: Formation, implementation, evolution. New York: Wiley; 1993.
- Lorr, M. Cluster analysis for social scientists. San Francisco, CA: Jossey-Bass; 1983.
- Mark TL, Levit KL, Buck JA, Coffey RM, Vandivort-Warren R. Mental health treatment expenditure trends 1986–2003. Psychiatric Services. 2007; 58(8):1041–1048. [PubMed: 17664514]
- Mays GP, Scutchfield F, Bhandari M, Smith S. Understanding the organization of public health delivery systems: An empirical typology. The Milbank Quarterly. 2010; 88(1):81–111. [PubMed: 20377759]
- McBeath B, Collins-Camargo C, Chuang E. The role of the private sector in child welfare: Historical reflections and a contemporary snapshot based on the National Survey of Private Child and Family Serving Agencies. Journal of Public Child Welfare. 2012; 6(4):459–481.
- McBeath B, Meezan W. Interorganizational disparities in foster care service provision. Children and Youth Services Review. 2009; 31(5):513–525.
- McCullough, C. Financing and contracting practices in child welfare initiatives and Medicaid managed care. Washington DC: Child Welfare League of America Press; 2004.
- McCullough, C.; Pindus, N.; Lee, E. Preparing effective contracts in privatized child welfare systems. Washington DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation; 2008.
- McCullough C, Schmitt B. Managed care and privatization: Results of a national survey. Children and Youth Services Review. 2000; 22:117–130.
- McKelvey B. Guidelines for the empirical classification of organizations. Administrative Science Quarterly. 1975; 20(4):509–525.
- McLachlan, G. Discriminant analysis and statistical pattern recognition. New York: Wiley; 2004.
- Meltzer, J.; Joseph, R.; Shookhoff, A. For the welfare of children: Lessons learned from class action litigation. Washington DC: Center for the Study of Social Policy; 2012.
- Miles, R.; Snow, C.; Pfeffer, J. Organizational strategy, structure, and process. New York: McGraw-Hill; 1978.
- Mitchell S, Shortell SM. The governance and management of effective community health partnerships: A typology for research, policy, and practice. Milbank Quarterly. 2000; 78(2):241–289. [PubMed: 10934994]
- Mosley, J. The policy advocacy role of human service nonprofits: Incentives, involvement, and impact. In: Hasenfeld, Y., editor. Human services as complex organizations, 2nd edition. Thousand Oaks, CA: Sage; 2010. p. 505-531.
- Mosley J. Institutionalization, privatization, and political opportunity: What tactical choices reveal about the policy advocacy of human service nonprofits. Nonprofit and Voluntary Sector Quarterly. 2011; 40(3):435–457.
- Mosley J. Keeping the lights on: How government funding concerns drive the advocacy agendas of nonprofit homeless service providers. Journal of Public Administration Research and Theory. 2012; 22(4):841–866.
- Mosley J, Maronick M, Katz H. How organizational characteristics affect the adaptive tactics used by human service nonprofit managers confronting financial uncertainty. Nonprofit and Voluntary Sector Quarterly. 2012; 22(3):281–303.
- Moynihan D. Through a glass, darkly: Understanding the effects of performance regimes. Public Performance and Management Review. 2009; 32(4):592–603.
- Moynihan D, Pandey S, Wright B. Prosocial values and performance management theory: Linking perceived social impact and performance information use. Governance: An international journal of policy, administration, and institutions. 2012; 25(3):463–483.
- Nayyar P. Performance effects of information assymetry and economies of scope in diversified service firms. Academy of Management Journal. 1993; 36(1):28–57. [PubMed: 10123744]

Noonan, K.; Menashi, D. Rightsizing congregate care: A powerful first step in transforming child welfare systems. Baltimore, MD: Annie E Casey Foundation; 2009.

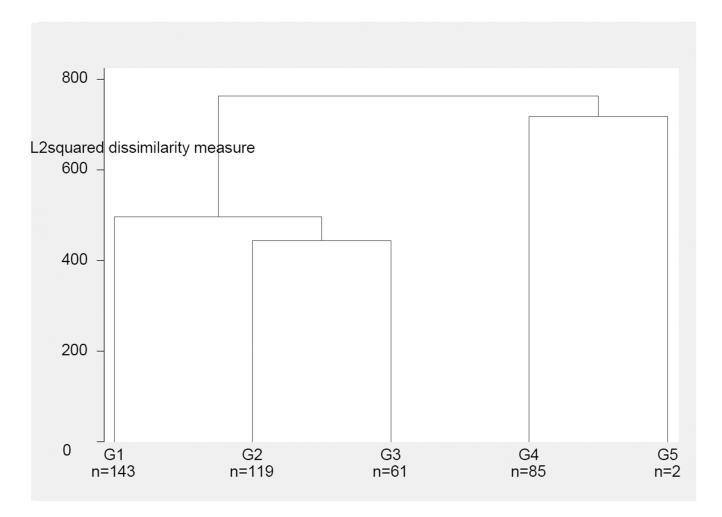
- Oberg C. The Great Recession's impact on children. Maternal and Child Health Journal. 2011; 15(5): 553–554. [PubMed: 21528399]
- Ocasio W. Towards an attention-based view of the firm. Strategic Management Journal. 1997; 18(S1): 187–206.
- Oppenheim E, Lee R, Lichtenstein C, Bledsoe K, Fisher S. Reforming mental health services for children in foster care: The role of child welfare class action lawsuits and systems of care. Families in Society. 2012; 93(4):287–294.
- Provan KG, Huang K. Resource tangibility and the evolution of a publicly funded health and human services network. Public Administration Review. 2012; 72(3):366–375.
- Raghavan R, Inkelas M, Franke T, Halfon N. Administrative barriers to the adoption of high-quality mental health services for children in foster care: A national study. Administration and Policy in Mental Health and Mental Health Services Research. 2007; 34(3):191–201. [PubMed: 17211714]
- Robinson J, Casalino L. Vertical integration and organizational networks in health care. Health Affairs. 1996; 15(1):7–22. [PubMed: 8920566]
- Rodriguez H, Chen J, Owusu-Edusei K, Suh A, Bekemeier B. Local public health systems and the incidence of sexually transmitted diseases. American Journal of Public Health. 2012; 102(9): 1773–1781. [PubMed: 22813090]
- Rumelt, R. Strategy, structure, and economic performance. Cambridge, MA: Harvard University Press; 1974.
- Salamon, LM. Partners in public service: Government-nonprofit relations in the modern welfare state. Baltimore, MD: Johns Hopkins University Press; 1995.
- Sandfort JR. Moving beyond discretion and outcomes: Examining public management from the front lines of the welfare system. Journal of Public Administration Research and Theory. 2000; 10(4): 729–756.
- Scarcella, CA.; Bess, R.; Zielewski, E.; Geen, R. The cost of protecting vulnerable children V: Understanding state variation in child welfare financing. Washington DC: the Urban Institute; 2006.
- Scarcella, CA.; Bess, R.; Zielewski, EH.; Warner, L.; Geen, R. The cost of protecting vulnerable children IV: How child welfare funding fared during the recession. Washington DC: Urban Institute; 2004.
- Schmid H, Bar M, Nirel R. Advocacy activities in nonprofit human service organizations: Implications for policy. Nonprofit and Voluntary Sector Quarterly. 2008; 37(4):581–602.
- Schneider S, DeMeyer A. Interpreting and responding to strategic issues: The impact of national culture. Strategic Management Journal. 1991; 12(4):307–320.
- Selsky J. Developmental dynamics in nonprofit-sector federations. Voluntas: International Journal of Voluntary and Nonprofit Organizations. 1998; 9(3):293–303.
- Shortell S, Bazzoli G, Dubbs N, Kralovec P. Classifying health networks and systems: Managerial and policy implications. Health Care Management Review. 2000; 25(4):9–17. [PubMed: 11072628]
- Smith, S. The political economy of contracting and competition. In: Hasenfeld, Y., editor. Human Services as Complex Organizations. Los Angeles, CA: Sage Publications; 2009. p. 139-160.
- Smith, S. Social services. In: Salamon, LM., editor. The state of nonprofit America, 2nd edition. Washington, DC: Brookings Institution Press and the Aspen Institute; 2012. p. 192-228.
- Smith, S.; Lipsky, M. Nonprofits for hire: The welfare state in the age of contracting. Cambridge, MA: Harvard University Press; 1993.
- Soss J, Fording RC, Schram SF. The organization of discipline: From performance management to perversity and punishment. Journal of Public Administration Research and Theory. 2011; 21(Supplement 2):i203–i232.
- Sowa J. The collaboration decision in nonprofit organizations: Views from the front line. Nonprofit and Voluntary Sector Quarterly. 2009; 38(6):1003–1025.
- StataCorp. Stata Statistical Software: Release 12. College Station, TX: StataCorp LP.; 2011.
- Stein, T. Child welfare and the law. New York: Longman; 1991.

Stroul BA, Blau G. Defining the system of care concept and philosophy: To update or not to update? Evaluation and Program Planning. 2010; 33(1):59–62. [PubMed: 19836078]

- Takahashi L, Smutny G. Collaborative windows and organizational governance: Exploring the formation and demise of social service partnerships. Nonprofit and Voluntary Sector Quarterly. 2002; 31(2):165–185.
- Terry L. Administrative leadership, neomanagerialism, and the public management movement. Public Administration Review. 1998; 58(3):194–200.
- Tilbury C. The influence of performance measurement on child welfare policy and practice. British journal of social work. 2004; 34(2):225.
- Torrey W, Bond G, McHugo G, Swain K. Evidence-based practice implementation in community mental health settings: The relative importance of key domains of implementation activity. Administration and Policy in Mental Health and Mental Health Services Research. 2012; 39(5): 353–364. [PubMed: 21574016]
- Van de Ven AH, Delbecq A, Koenig R. Determination of coordination modes within organizations. American Sociological Review. 1976; 41(2):322–338.
- Walker E, McCarthy J. Legitimacy, strategy, and resources in the survival of community-based organizations. Social Problems. 2010; 57(3):315–340.
- Ward J. Hierarchical grouping to optimize an objective function. Journal of the American Statistical Association. 1963; 58:236–244.
- Williamson O. The economics of organization: The transaction cost approach. The American Journal of Sociology. 1981; 87(3):548–577.
- Yoo J, Brooks D. The role of organizational variables in predicting service effectiveness: An analysis of a multilevel model. Research on Social Work Practice. 2005; 15(4):267.
- Zahra S, George G. Absorptive capacity: A review, reconceptualization, and extension. Academy of Management Review. 2002; 27(2):185–203.
- Zajac, E.; D'Aunno, T. Managing strategic alliances. In: Shortell, S.; Kaluzny, A., editors. Health Care Management: Organization Design and Behavior, 3rd edition. Albany, NY: Delmar; 1994.

#### **HIGHLIGHTS**

- Cluster analyses revealed five distinct types of private agencies
- Agencies differed in internal capacity, service diversification, and integration
- Perceived environmental pressures also differed across these clusters of agencies
- Considerable heterogeneity exists in private agencies' structure and activities
- Typologies may inform efforts to maximize local system capacity and performance



**Figure 1.** Dendogram of agency groupings

 $\label{table 1} \textbf{Table 1}$  Types of services provided by private child and family serving agencies (N=410)

	% providing
Child welfare services	
Ongoing case management services for cases in which children are removed from the home and reunification is not a goal	75%
Screening, intake services, and/or emergency arrangements for placements and services	68%
Reunification of children with birth parents or other permanency arrangements	67%
Ongoing case management for cases in which children have not been removed from the home	58%
Post-reunification services	48%
Pre-adoption or adoption services	45%
Investigation or assessment of child maltreatment	19%
Other types of services (e.g., health, behavioral health, social)	
Mental health services	87%
Parenting classes	72%
Services for transition-age youth	71%
Substance abuse treatment	60%
Respite care	59%
Physical health services	51%
Juvenile justice services	50%
Transportation assistance	50%
Employment assistance	43%
Housing assistance	37%
Child care	32%
Domestic violence services	28%
Income assistance	18%
Any other wraparound or system of care services	64%

 $\label{eq:Table 2} \textbf{ Characteristics of private child and family serving agencies (N=410)}$ 

	% / Mean ± S.D.	Min	Max
External pressures to develop new programs			
Financial	$3.78 \pm 0.97$	1	5
Legal or regulatory	$2.43 \pm 0.95$	1	5
Client needs and/or best practices	$3.38 \pm 0.95$	1	5
Performance management	2.94 ± 1.09	1	5
External pressures to deliver long-standing programs			
Financial	$3.59 \pm 0.98$	1	5
Legal or regulatory	$2.45 \pm 0.94$	1	5
Client needs and/or best practices	$3.34 \pm 0.97$	1	5
Performance management	2.93 ± 1.08	1	5
External pressures to form IORs			
Financial	2.73 ± 1.17	1	5
Legal or regulatory	$2.02 \pm 0.99$	1	5
Client needs and/or best practices	$2.13 \pm 0.96$	1	5
Performance management	$2.34 \pm 1.11$	1	5
Internal management capacity			
Years in operation	62.63 ± 49.39	2	212
Administrative infrastructure	$2.62 \pm 1.36$	0	4
Total operating budget (\$100K)	138.80 ± 196.49	0.01	1400
Diversification			
% of services offered (any)	49%	0	1
% of services offered (child welfare only)	51%	0	1
% of services offered (other services)	48%	0	1
Integration			
% services subcontracted (any)	22%	0	1
% services subcontracted (child welfare only)	12%	0	1
% services subcontracted (other services)	27%	0	1
Strength of ties with public CWS	$1.18 \pm 1.15$	0	4
Strength of ties with other private agencies	$0.83 \pm 1.11$	0	4
Collective advocacy			
Strength of ties with state association	$1.35 \pm 1.38$	0	4

Chuang et al.

Table 3

Characteristics of private agencies, overall and by group

	Overall	Group 1	Group 2	Group 3	Group 4	Group 5
	N=410	N=143	N=119	19=N	58=N	7=N
	Mean	Mean	Mean	Mean	Mean	Mean
Internal management capacity						
Years in operation	62.63	34.92	106.21	40.57	70.33	21.50
Administrative infrastructure	2.62	1.57	3.42	2.67	2.82	2.00
Total operating budget (\$10K increments)	138.80	97.26	172.06	165.84	193.97	1225.00
Diversification						
% of services offered (any)	%67	41%	%75	%19	%55	%6L
$^*$ of services offered (child welfare only)	%15	43%	%55	%4%	%65	71%
$^{st}$ of services offered (other services)	48%	%68	%15	%59	%85	%78
Integration						
% services subcontracted (any)	%77	%8	16%	%69	23%	%55
$\%$ services subcontracted (child welfare only) $^{\ast}$	12%	3%	%8	%LE	16%	%67
$^*$ services subcontracted (other services) $^*$	27%	11%	20%	% <i>LL</i>	%67	%99
Strength of ties with public CWS	1.18	0.94	1.01	1.00	2.05	1.50
Strength of ties with other private agencies	0.83	0.38	0.44	25.0	2.29	1.50
Collective advocacy						
Strength of ties with state association	1.35	0.49	1.66	1.08	2.65	1.00

These variables were not included in the cluster analysis and are provided for descriptive purposes only

Page 28

Chuang et al.

Table 4

Perceived influence of external pressures on specific agency behavior, overall and by group

	Overall	Group 1	Group 2	Group 3	Group 4	Group 5
	N=410	N=143	611=N	19=N	S=N	7=N
	Mean	Mean	Mean	Mean	Mean	Mean
External pressures to develop new programs						
Financial	3.78	3.51	3.85	3.90	3.96	3.88
Legal or regulatory	2.43	2.10	2.44	2.73	2.63	3.17
Client needs and/or best practices	3.38	3.16	3.44	3.53	3.61	2.63
Performance management	2.94	09.2	2.90	2.30	3.23	3.67
External pressures to deliver long-standing programs						
Financial	3.59	3.38	3.59	3.59	3.87	3.00
Legal or regulatory	2.45	2.17	2.47	2.60	2.69	2.67
Client needs and/or best practices	3.34	3.12	3.34	3.42	3.60	2.63
Performance management	2.93	09.2	2.90	3.15	3.29	3.33
External pressures to form IORs						
Financial	2.73	2.43	2.66	2.94	3.17	2.63
Legal or regulatory	2.02	1.79	1.86	2.26	2.39	2.17
Client needs and/or best practices	2.13	16.1	2.04	2.26	3.52	1.88
Performance management	2.34	2.08	2.14	2.73	2.71	3.33

Page 29