Reducing turnover is not enough: The need for proficient organizational cultures to support positive youth outcomes in child welfare

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Abstract

Objective—High caseworker turnover has been identified as a factor in the poor outcomes of child welfare services. However, almost no empirical research has examined the relationship between caseworker turnover and youth outcomes in child welfare systems and there is an important knowledge gap regarding whether, and how, caseworker turnover relates to outcomes for youth. We hypothesized that the effects of caseworker turnover are moderated by organizational culture such that reduced caseworker turnover is only associated with improved youth outcomes in organizations with proficient cultures.

Methods—The study applied hierarchical linear models (HLM) analysis to the second National Survey of Child and Adolescent Well-being (NSCAW II) with a U.S. nationwide sample of 2,346 youth aged 1.5- to 18-years-old and 1,544 caseworkers in 73 child welfare agencies. Proficient organizational culture was measured by caseworkers' responses to the Organizational Social Context (OSC) measure; staff turnover was reported by the agencies' directors; and youth outcomes were measured as total problems in psychosocial functioning with the Child Behavior Checklist (CBCL) completed by the youths' caregivers at intake and at 18 month follow-up.

Results—The association between caseworker turnover and youth outcomes was moderated by organizational culture. Youth outcomes were improved with lower staff turnover in proficient organizational cultures and the best outcomes occurred in organizations with low turnover and high proficiency.

Conclusions—To be successful, efforts to improve child welfare services by lowering staff turnover must also create proficient cultures that expect caseworkers to be competent and responsive to the needs of the youth and families they serve.

Keywords

turnover; organizational culture; proficiency; child welfare; youth outcomes

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1. Introduction

Child welfare systems in the United States are under increasing pressure to improve outcomes for the children and families they serve. Wide variation in the success of child welfare systems nationally has led to the search for system-level explanations of differential outcomes for youth (U.S. Department of Health and Human Services, 2011). Of the many system-level factors cited as potential causes of ineffectiveness, high caseworker turnover has received the most attention (Strand, Spath, & Bosco-Ruggiero, 2010; Strolin, McCarthy, & Caringi, 2007; U.S. General Accounting Office [GAO], 2003). High turnover is endemic in U.S. child welfare systems (Cyphers, 2001, 2005; Drake & Yadama, 1996; GAO, 2003) and, given the central role played by caseworkers in the care process (Ryan, Garnier, Zyphur, & Zhai, 2006; Westbrook, Ellett, & Asberg, 2012), numerous scholars have hypothesized that high turnover is detrimental to youth outcomes (DePanfilis & Zlotnik, 2008). However, almost no empirical research has examined the relationship between caseworker turnover rates and youth outcomes in child welfare systems (Strolin et al., 2007). Thus, there is an important knowledge gap regarding how caseworker turnover relates to outcomes for youth served by child welfare systems.

An understanding of the association between caseworker turnover and youth outcomes is important for child welfare systems because of its implications for administrative practice, resource expenditures, and intervention development (Collins-Camargo, Ellett, & Lester, 2012). Child welfare administrators control limited resources and exercise circumscribed influence over the many factors that affect the well-being of children who are referred, assessed, and treated for abuse and neglect (Webb, Dowd, Harden, Landsverk, & Testa, 2010). Accordingly, administrators must prioritize malleable and impactful causes of system ineffectiveness. To the extent that high turnover contributes to poor youth outcomes, investments in caseworker retention strategies represent cost-effective methods to enhance youth well-being (GAO, 2003; Kacmar, Andrews, Van Rooy, Steilberg, & Cerrone, 2006). However, these strategies may represent wasted resources and significant opportunity-costs if the turnover-outcomes relationship is contingent on other unaddressed agency factors or if caseworker turnover is not associated with youth outcomes.

Studies of the relationship between organizational turnover and performance in the broader organizational literature support the view, derived from human capital (Strober, 1990) and social capital theories (Shaw, Duffy, Johnson, & Lockhart, 2005), that employee turnover rates are negatively and linearly associated with a wide range of organizational outcomes. However, these studies also indicate that moderators play an important role in the strength of this relationship (Park & Shaw, 2013). For example, organizational culture has recently been identified as a moderator of the turnover-performance relationship in human services organizations (Mohr, Young, & Burgess, 2012). Studies of child welfare systems indicate that organizational culture is both an important predictor of service quality (Glisson & Green, 2006; Glisson & James, 2002; Yoo & Brooks, 2005) and associated with the development of caseworker human and social capital (DePanfilis & Zlotnik, 2008; Westbrook et al., 2012). These studies suggest a contingent relationship may exist between caseworker turnover and youth outcomes depending on the quality of organizational culture within the agency (Glisson, Green, & Williams, 2012). This study advances knowledge on strategies for increasing child welfare system effectiveness by examining the relationship between caseworker turnover and youth outcomes as moderated by organizational culture in a national sample of child welfare agencies.

1.1. Turnover and Organizational Performance

Studies of employee turnover in the organizational and child welfare literatures have focused primarily on understanding the *antecedents* to turnover, emphasizing such factors as

employee characteristics (e.g., age, education, burnout, organizational commitment), supervisory relationships (e.g., supportiveness), and job characteristics (e.g., caseload, flextime polices, on-call requirements, and compensation) (Griffeth, Hom, & Gaertner, 2000; Stolin et al., 2007). Much less well-developed is the body of literature examining the *consequences* of employee turnover. Recent reviews have characterized this literature as underdeveloped, minimally integrated, and in need of further study (Park & Shaw, 2013; Shaw, 2011). Surveying the turnover literature in child welfare settings, Strolin et al. (2007, p.29) noted "the empirical research on the effects of workforce turnover in child welfare is scant" and called for large-scale, empirical studies that test the hypothesized cross-level links between caseworker turnover and youth outcomes in child welfare systems.

The relationship between employee turnover and organizational performance is most often explained using human and social capital theories (Shaw et al., 2005; Strober, 1990). Human capital theory contends that more experienced employees accumulate specialized tacit and formal knowledge and skills through extended task-specific practice, training, and experience (Kacmar et al., 2006). The loss of these experienced employees through turnover damages organizational performance because of the loss of their accumulated expertise. Although organizations can replace employees who leave, newer employees require time to develop similar levels of competence and organizational performance suffers as a result.

Social capital theory emphasizes the importance of interpersonal relationships and the quality of social ties to an organization's effectiveness (Shaw et al., 2005). Networks of interpersonal relationships developed by employees over time (i.e., social capital) contribute to organizational performance by facilitating the development and application of knowledge, uniting employees around collective goals, building mutual trust, and generating a store of goodwill and mutually reinforcing favors among employees (Dess & Shaw, 2001). Increased turnover impedes organizational performance by disrupting these networks of relationships and social ties. Both human and social capital theories predict a negative linear relationship between turnover rates and organizational performance. Human and social capital theories have strong empirical support for predicting organizational effectiveness (Crook, Todd, Combs, Woehr, & Ketchen, 2011; Dess & Shaw, 2001) and for explaining the relationship between employee turnover and organizational performance (Park & Shaw, 2013).

Human and social capital are believed to be especially important to the effectiveness of human services organizations such as child welfare systems because these organizations rely on relationship-based and person-centered technologies to achieve targeted outcomes (Collins-Camargo et al., 2012; Mohr et al., 2012). Caseworkers are responsible for determining the validity of child abuse and neglect reports, assessing safety and making placement decisions, determining eligibility for benefits and sanctions, making timely and appropriate referrals for treatment and other supports, and implementing prevention and crisis services (Ryan et al., 2006; Westbrook et al., 2012). Effectiveness in this role requires the expert use of specialized knowledge and skills in complex, dynamic, and emotion-laden situations (Glisson & James, 2002). New caseworkers typically lack the specialized expertise, training, and experience (i.e., human capital) necessary to perform this job well and as a result, service effectiveness decreases when more experienced employees leave (GAO, 2003). Effective casework also requires well-developed social networks with care providers from other sectors, community resources, and colleagues within child welfare and other state bureaucracies (i.e., social capital). High turnover disrupts these social ties and may contribute to less effective casework as a result (Ryan et al., 2006).

A growing number of studies support the prediction, based on human and social capital theories (Shaw, 2011), of a negative linear association between employee turnover rates and organizational performance. A recent meta-analysis (Park & Shaw, 2013) indicated that the

population average correlation between turnover rates and organizational performance was significant and negative (= -.15). However, this meta-analysis indicated that moderators played an important role in the strength of the relationship. For example, the turnover-performance correlation varied from = -.02 to = -.29 depending on the type of performance criteria (e.g., financial performance *vs.* service quality), type of employee (e.g., manual labor *vs.* skilled professional), and industry (e.g., manufacturing *vs.* healthcare). Organizational culture has also recently been identified as a significant moderator of the relationship between turnover rates and outcomes, particularly in organizations that rely on knowledge-based professions such as hospitals and human services agencies (Mohr et al., 2012). These studies indicate that simplistic linear models may be inadequate to describe the complex and contingent relationship between turnover and organizational performance in child welfare systems. In particular, organizational culture is likely to play an important role in the strength of the turnover-outcomes relationship in child welfare systems (Glisson & Green, 2006; Glisson et al., 2012; Glisson & James, 2002).

1.2. Organizational Culture and Youth Outcomes in Child Welfare

Organizational culture refers to the shared behavioral norms and expectations that characterize a work environment and determine the way employees prioritize, approach, and complete their work (Glisson et al., 2012; Verbeke, Volgering, & Hessels, 1998). Organizational culture signals to employees the types of work activities and strategies that are valued, rewarded, and supported by the organization and forms the basis for a shared understanding and enactment of meaningful responses to the work environment (Cooke & Szumal, 1993; Schein, 2010; Verbeke et al., 1998). Decades of empirical studies, summarized by a recent meta-analysis of 84 studies (Hartnell, Ou, & Kinicki, 2011) and comprehensive narrative review of 55 studies (Sackmann, 2011), support the link between organizational culture and organizational performance across a wide range of settings and outcome criteria including studies in child welfare and youth mental health (Glisson & Green, 2006; Glisson et al., 2012; Glisson, Hemmelgarn, Green, & Williams, 2013; Glisson & James, 2002; Olin et al., 2013; Yoo & Brooks, 2005). These studies confirm that the shared behavioral norms and expectations in a work environment are associated with meaningful differences in individual employee behavior and organizational effectiveness.

Applied to child welfare settings, organizational culture theory posits that shared behavioral norms and expectations impact youth outcomes by directing caseworkers in prioritizing their work, guiding their selection of assessment methods and intervention models, determining the availability, responsiveness, and continuity of services to youth throughout the care process, and contributing to the development and expression of human and social capital among child welfare caseworkers (Glisson et al., 2012; Glisson & James, 2002). Within this conceptualization, organizational culture is a multi-faceted construct consisting of specific domains of shared norms and expectations that influence targeted caseworker behaviors. For example, one prominent theory of organizational culture for child welfare settings, proposed byGlisson et al. (2012), hypothesizes that three dimensions of organizational culture—proficiency, rigidity, and resistance—impact three domains of workforce behaviors which ultimately relate to youth outcomes. Rigidity describes behavioral norms and expectations related to caseworkers' discretion and flexibility in decision-making. Resistance describes norms related to openness to new innovations. Proficiency assesses agency expectations and norms for caseworker competence, up-to-date knowledge, and prioritization of client well-being (Glisson et al., 2012).

Of these three dimensions, proficiency is most relevant to the development of human and social capital among caseworkers and therefore is most likely to moderate the effect of turnover on child outcomes in child welfare systems. Although rigidity and resistance may have implications for youth outcomes in child welfare settings, these relationships may be

orthogonal to the development of human and social capital (e.g., resistance to new innovations does not imply that an agency's current operations, training procedures, and services are ineffective), may represent distal influences unrelated to current workforce turnover (e.g., failure to adopt newer, more effective practices may reduce effectiveness over the long-term but does not necessarily imply that current services are ineffective), or may be contingent on other factors (e.g., high rigidity may be beneficial when paired with best practices). In contrast, cultural norms and expectations related to proficiency bear directly on the extent to which agencies focus on achieving positive client outcomes through the development and expression of human and social capital within their current workforce. Proficient organizational culture represents a critical social context that sustains caseworkers' focus on client well-being, encourages the development of competencies they need to successfully serve youth, and sustains their motivation to effectively meet the challenges of achieving safety, permanency, and well-being of children who have been neglected or abused (Grant, 2007).

1.3. Study Theoretical Model and Hypothesis

Building on human capital, social capital, and organizational culture theories, this study tests the interaction between caseworker turnover rates and proficient organizational culture in their association with youth outcomes in a national sample of child welfare systems. Drawing on these theories we argue that optimal youth outcomes will occur in child welfare systems with low caseworker turnover and high proficiency cultures. In agencies with high proficiency cultures, norms and expectations that focus on client well-being, up-to-date knowledge and skills, and availability and responsiveness to clients' needs contribute to effective service provision and positive youth outcomes. Proficient organizational culture contributes to the development and effective use of human and social capital as caseworkers are rewarded, supported, and recognized for developing competencies that contribute to positive outcomes for youth. Because caseworkers in these systems accrue human and social capital that enhance youth outcomes, and because the services provided by these caseworkers are more likely to focus on and achieve child well-being, turnover will be negatively and linearly associated with youth outcomes (i.e., lower turnover, better outcomes) in agencies with high proficiency cultures.

Conversely, in child welfare systems with low proficiency cultures, minimal agency-level expectations for improvements in client well-being and caseworker responsiveness generate poor youth outcomes. In these systems lower turnover is not associated with better youth outcomes because the development and optimal use of human and social capital is stunted and the loss of more experienced employees does not represent a significant reduction in the already limited operative capacity of the service system. Agencies with low-proficiency cultures lack the shared behavioral norms and expectations that evoke and support effective casework and thus fail to develop the human and social capital of their workforces necessary for optimal work with clients. Thus, higher turnover in these systems will not result in worse youth outcomes.

> Hypothesis 1: Organizational culture moderates the relationship between caseworker turnover rates and youth outcomes such that high turnover is negatively associated with youth outcomes in child welfare agencies with high proficiency cultures and unrelated to youth outcomes in agencies with low proficiency cultures.

This hypothesis implies that increased caseworker *retention* will be associated with *improved outcomes* for youths in agencies with high-proficiency cultures but will not be associated with improved outcomes in agencies with low-proficiency cultures. If confirmed, it suggests that reducing turnover alone is insufficient to improve youth outcomes in child welfare systems with low proficiency cultures.

2. Method

2.1. Setting and Sample

Data for this study are from the second and most recent National Survey of Child and Adolescent Well-being (NSCAW II), a national probability survey of youth, ages 0- to 18-years-old who were investigated and monitored by the U.S. child welfare system due to allegations of abuse or neglect. Details of the NSCAW II study design are presented elsewhere (Dowd et al., 2012) and summarized here.

The target population for NSCAW II includes "all children in the US who were subjects of child abuse or neglect investigations (or assessments) conducted by CPS [child protective services] and who live in states not requiring an agency first contact of the sample members" (Dowd et al., 2012, p.22). Youth were selected for the study using a national, two-stage, stratified random sampling design that built on the sampling frame from NSCAW I (Webb et al., 2010). In the first sampling stage investigators divided the US into nine strata corresponding to the eight states with the largest child welfare caseloads and a single stratum including the remaining 38 states and the District of Columbia. In the second stage, primary sampling units (PSUs) were formed within each stratum based on the geographic areas served by CPS agencies. In most cases PSUs represented single counties or continuous areas of two or more counties; however, in large metropolitan areas PSUs corresponded to the catchment areas of urban CPS agencies. The within-PSU sampling process relied on simple random selection of eligible youth with varying service characteristics who did not have a sibling in the study, had not been previously sampled, and were not being investigated as perpetrators of abuse.

The two-stage sampling design in the first NSCAW study resulted in 92 PSUs in 97 counties across the United States (Webb et al., 2010). Agencies in these counties were recruited to participate in NSCAW II and 76% were retained. Replacement agencies were sampled for NSCAW II resulting in a total of 86 PSUs, representing 81 counties in 30 states. The most common reason for agency refusal to participate was passage or reinterpretation of state legislation requiring the CPS agency to make first contact with families suspected of neglect or abuse (Dowd et al., 2012).

The population for the present study included youth, ages 18 months to 18 years old, who were investigated or assessed by the U.S. child welfare system due to allegations of neglect or abuse. Because the accuracy of risk assessment and case dispositions cannot be determined *a priori*, the study sample included all youths who were investigated and assessed. Youths who were younger than 18 months old at baseline were excluded from the study because caregiver report measures of youth psychosocial functioning were not available for children less than 18-months-old.

2.2. Procedure

NSCAW II (Dowd et al., 2012) is a longitudinal survey with planned data collection extending over multiple waves, across multiple levels (e.g., system level, youth level), and relying on multiple informants (e.g., child welfare administrators, caseworkers, caregivers, and youths). The present study includes data collected from youth caregivers, front-line caseworkers, and child welfare administrators during waves 1 and 2. Wave 1 data collection occurred from February 2008 to April 2009. Wave 2 data collection occurred for each youth 18 months after the close of the investigation that brought the youth into the study.

Primary data collection interviews with key informants occurred in person using standardized protocols (Dowd et al., 2012). Key informant interviews with child welfare administrators occurred during wave 1. Organizational culture data were collected as

confidential responses from front-line caseworkers to a standardized measure using established protocols (e.g., no supervisors present) during wave 2. Caregiver-reported data were collected at both waves via in-person interviews. Permission was obtained from the appropriate Institutional Review Board for using the NSCAW II data files in this study.

2.3. Measures

2.3.1. Child behavior checklist—The outcome of interest was youths' psychosocial functioning at 18 month follow-up, controlling for their level of functioning at intake, as measured by the total problems T-score of the Child Behavior Checklist (CBCL) (Achenbach & Rescorla, 2001). The CBCL is a 118-item checklist (the preschool version has 99 items) that uses likert-type items to assess youths' behavior problems along two broadband dimensions— externalizing problems (e.g., aggression, stealing, disruptive behavior) and internalizing problems (e.g., depression, anxiety, withdrawal, somatic complaints). These dimensions are combined to form a total problem behavior score that indicates the overall level of emotional and behavior problems present. Higher scores indicate more problems. The CBCL assessment system includes forms for two age groups: youths aged 1.5- to 5-years-old and youths aged 6- to 18-years-old (Achenbach & Rescorla, 2001). The CBCL forms are widely used in research and practice applications and have demonstrated excellent score reliability and validity in numerous large and diverse samples of youth (Aschenbrand, Angelosante, & Kendall, 2005; Hudziak, Copeland, Stanger, & Wadsworth, 2004; Nakamura, Ebesutani, Bernstein, & Chorpita, 2009).

2.3.2. Organizational culture—Proficient organizational culture was assessed by the agency-level aggregated responses of front-line caseworkers' to the *proficiency* subscale of the Organizational Social Context (OSC) measure (Glisson et al., 2012). The OSC is an employee survey designed to assess the work environments of child welfare, social service, and mental health agencies. The 15-item measure of proficient culture asks caseworkers to indicate the extent to which their agency is characterized by behavioral expectations and norms that prioritize client well-being and expect caseworkers to be competent and have up-to-date knowledge. The internal consistency reliability of the proficiency subscale in this sample was α = .89. Previous research has supported the association of proficiency as measured by the OSC with service quality, attitudes toward evidence-based practices, and youth outcomes in child welfare and mental health systems (Aarons et al., 2012; Glisson & Green, 2006; Glisson et al, 2013; Olin et al., 2013).

The present study used aggregate, agency-level *proficiency* T-scores based on the national sample of child welfare agencies (Glisson et al., 2012). Agency-level T-scores were derived for 81 of 86 agencies in the NSCAW II sample based on surveys completed by 1,740 caseworkers in the 81 agencies. T scores were not available for five agencies because they had fewer than three caseworkers who completed the OSC (k=3), they did not provide OSC data (k=1), or they had unacceptably low caseworker agreement on their OSC responses based on the r_{wg} statistic (k=1) (James, Demaree, & Wolf, 1993). On average, 21 caseworkers per agency provided responses to the OSC with a range of 3 to 97 caseworkers per agency.Glisson et al. (2012) provided evidence of adequate within-agency agreement among caseworkers' on their responses to the proficiency subscale to justify aggregation, based on the r_{wg} statistic (James et al., 1993), as well as evidence of significant between-system variance.

2.3.3. Annual turnover rates—Annual child welfare agency turnover rates were defined as the proportion of caseworkers who left their jobs each year as reported by child welfare administrators in key informant interviews during the baseline assessment of the NSCAW II national survey. Child welfare administrators reported "the annual turnover rate or percent

leaving" in their agencies during the most recent fiscal year by indicating the total percentage of voluntary and involuntary annual caseworker turnover. Although the NSCAW II survey did not request information about specific types of turnover (e.g., voluntary, involuntary, reduction in force), studies of turnover in child welfare settings indicate that from two-thirds to three-fourths of caseworker turnover is voluntary and preventable (Cyphers, 2001). Meta-analytic findings indicate that type of informant (i.e., key informant interview versus agency records) does not significantly moderate the association between turnover rates and outcomes (Park & Shaw, 2013) and thus key informant data reported by administrators were considered appropriate to address the research question.

2.3.4. Model covariates—Covariates were included in the analysis in order to adjust youths' 18 month CBCL scores for their baseline level of functioning and in order to obtain estimates of the effects of proficient organizational culture and turnover above and beyond youth and agency characteristics. Youths' personal characteristics were reported by the child's caregiver or caseworker at baseline and included: child age in months, child gender, child race (coded as African American, Native American/Alaskan Native, or Asian/ Hawaiian/ Pacific Islander due to small cell sizes), and child ethnicity (Latino vs. non-Latino). One agency characteristic, location, was also included to control for the differences in urban versus non-urban child welfare settings.

2.4. Data Analysis

The hypothesis tested in this study required the use of hierarchical linear modeling (Raudenbush, Bryk, 2002), also known as random effects regression and multilevel modeling (Hox, 2010), to allow for specification of the cross-level effects of agency-level turnover and proficient organizational culture on individual-level youth outcomes. The hypothesis was tested using a two-level random intercept and random slopes hierarchical linear model (HLM), with youth covariates, including baseline CBCL T scores, modeled at level 1 and child welfare agency covariates modeled at level 2. The dependent variable was 18-month follow-up CBCL T-scores. The model estimated the effect of the interaction between proficient organizational culture and annual caseworker turnover rates on the covariate-adjusted scores in youth psychosocial functioning at 18-month follow-up. Analyses were implemented using HLM software, version 6.08 (Raudenbush, Bryk, Cheong, & Congdon, 2004).

Following the test of the main hypothesis, the significant interaction between turnover and proficiency was assessed further by calculating the region of significance for the conditional relationship between turnover and youth outcomes across values of proficiency (Aiken & West, 1991; Bauer & Curran, 2005; Preacher, Curran, & Bauer, 2006). The region of significance is derived using the Johnson-Neyman technique (Johnson & Neyman, 1936) as applied and extended to multilevel models (Bauer & Curran, 2005). The Johnson-Neyman technique calculates values of the moderator (i.e., proficiency) beyond which the conditional relationship between the focal predictor (i.e., agency turnover) and the dependent variable (i.e., youth outcomes) is statistically significant (Preacher et al., 2006).

3. Results

3.1. Descriptive Statistics

The sample included $N = 2,346$ youth who received services from $k = 73$ child welfare agencies. Organizational culture (i.e., proficiency) scores were based on responses from 1,544 caseworkers employed in the 73 agencies. Rates of missing data on demographic and risk variables for youth were generally low and ranged from 0% to 2.3% with the exception of 18-month CBCL score which was missing for 17.7% of youth. This rate of attrition is

typical of longitudinal studies of at-risk youth and of youth who are aging out of the foster care system. Youth with missing data were excluded from the study sample. Youth for whom an 18-month CBCL was not available were older ($M = 110.96$ months, $SD = 62.52$ vs. $M = 94.59$, $SD = 52.85$), $t(753.77) = 5.70$, $p < .001$, and less impaired at baseline ($M = 53.78$, $SD = 12.46$ vs. $M = 55.05$, $SD = 12.37$), $t(833.77) = -2.166$, $p = .031$, than youth for whom an 18-month follow-up was available, but did not differ on gender, race, or ethnicity (all p's > .200).

On average, youth in the sample were 7.88-years-old at baseline (SD = 4.40), and slightly more male (52%) and White (54%), but also included African American (33%), American Indian/ Alaskan Native (9%), and Asian American (4%). The average CBCL T-score was 55.05 (SD = 12.37) at baseline and 53.99 (SD = 12.40) at 18-month follow-up.

The majority of child welfare agencies in the sample were located in urban locations (81%) and the average organizational culture proficiency T-score was 50 (SD = 10, min = 26.59, max = 75.78). On average, child welfare administrators reported caseworker turnover rates of 14.64% (SD = 15.04%, min = 1%, max = 80%) which falls within the range of annual turnover reported by previous studies. For example, Burns & Christie (2013) reported annual caseworker turnover rates in two child welfare samples of 8% in 2006 and 11% in 2010 and the 2004 Child Welfare Workforce Survey reported a national average annual turnover rate of 22.1% with a range of 0 to 67% (Cyphers, 2005).

3.2. Correlations

Examination of the correlation matrix for agency-level covariates ($N = 73$) confirmed that annual caseworker turnover was not significantly correlated with proficient organizational culture ($r = .097$, $p = .414$) or urban location ($r = -.126$, $p = .289$) nor was proficient culture significantly correlated with urban location ($r = .098$, $p = .386$).

3.3. Interaction Between Turnover and Proficiency

Because the hypothesis focused on the interaction between two level-2 predictors, all level-1 and level-2 predictors were grand mean centered in order to facilitate interpretation of the results. Results from the full model supported the study hypothesis (see Table 1). After controlling for youth and agency covariates, annual caseworker turnover interacted significantly with proficient organizational culture to predict baseline-adjusted youth outcomes at 18-month follow-up. The interaction indicated that decreases in caseworker turnover were associated with improved youth outcomes in child welfare systems with proficient organizational cultures but not in systems with low-proficiency cultures. Figure 1 shows the relationship between annual caseworker turnover and youth outcomes (baseline adjusted 18-month follow-up CBCL scores) for agencies with low proficiency (10th percentile) and high proficiency (90th percentile) organizational cultures.

3.4. Region of Significance on Proficiency for the Turnover Effect

The region of significance indicates values of the moderator (i.e., proficiency) beyond which the association between the focal predictor (i.e., annual turnover) and the dependent variable (i.e., 18-month CBCL scores) is significant (Preacher et al., 2006). Decreased turnover was significantly associated with improvements in youth outcomes only in child welfare systems with proficient organizational cultures above the 47th percentile (T score > 49.51) on national norms for proficiency. The region of significance indicated the relationship between turnover and youth outcomes was not statistically significant in child welfare agencies with a proficiency T score below 49.51. These findings therefore indicate that decreases in turnover are not associated with positive youth outcomes in child welfare systems with a

proficiency T score below the national mean (T = 50) but are associated with positive youth outcomes in agencies with proficiency T scores above the national mean.

4. Discussion

Findings from this study indicate that decreased caseworker turnover is associated with improved outcomes for youth only in child welfare agencies with proficient organizational cultures that are above the national average in their expectations for caseworkers to have up-to-date knowledge and skills and an emphasis on improving youth well-being as their top priority. Reductions in caseworker turnover are not associated with improvements in youth outcomes in child welfare systems with organizational cultures below the national average on proficiency. Based on these results, a proficient organizational culture appears to be a necessary pre-condition for caseworker retention to associate positively with outcomes for youth. Efforts to increase caseworker retention are unlikely to be associated with improvements in youth outcomes in child welfare systems below the U.S. national average for proficiency.

Previous research has examined the relationship between organizational culture and youth outcomes in child welfare systems but has paid less attention to the relationship between caseworker turnover and youth outcomes or to the interaction between turnover and culture (Yoo & Brooks, 2005). The present study suggests that specific dimensions of these system-level characteristics interact in their association with youth outcomes. Reduced caseworker turnover is associated with youth outcomes, but only in child welfare systems with proficient organizational cultures that support positive youth outcomes and the development of human and social capital among caseworkers. These findings underscore the importance of developing child welfare work environments that focus on improving client well-being as the top priority, build caseworker competence and up-to-date knowledge, and engender high levels of service availability, responsiveness, and continuity.

4.1. Implications for Practice

Findings from this study have implications for the initiation of strategies to reduce caseworker turnover and improve youth outcomes in child welfare systems. Results suggest that prior to initiating turnover reduction strategies child welfare administrators should assess their organizational cultures with tools such as the Organizational Social Context measure which has national norms for child welfare and mental health systems (Glisson et al., 2012; Glisson et al., 2008). Such assessments will aid administrators in determining the best course of action for enacting system-level changes and will help prevent the opportunity costs incurred by implementing turnover reduction strategies in the absence of a proficient organizational culture.

Child welfare administrators interested in reducing caseworker turnover have a growing number of organizational improvement strategies from which to choose (e.g., Strolin-Goltzman, 2010). Many of these strategies are crafted specifically to address the needs of child welfare systems; however, most do not focus explicitly on improving organizational culture nor do they have evidence of effectiveness from randomized controlled trials. An important exception is the ARC (for Availability, Responsiveness, and Continuity) organizational improvement intervention which has demonstrated positive effects on caseworker turnover, organizational culture and climate, and youth outcomes in child welfare and youth mental health systems in randomized controlled trials (Glisson, Dukes, & Green, 2006; Glisson, Hemmelgarn, Green, Dukes, Atkinson, & Williams, 2012; Glisson et al., 2013; Glisson et al., 2010). Studies of ARC have also shown that improvements in organizational culture and climate associated with ARC are associated with improved outcomes for youth (Glisson et al., 2013).

4.2. Implications for Research

Results from this study highlight the need for research on the effects of caseworker turnover and organizational social context on youth outcomes in child welfare systems. Recognition of the importance of social context to caseworker behavior and youth outcomes is increasing among child welfare researchers (e.g., Collins-Camargo et al., 2012; Strolin et al., 2007); however, much remains to be learned about the most effective strategies for child welfare administrators to create work environments that support positive youth outcomes and how these effects are transmitted (e.g., turnover, service processes, etc.). Studies are needed to identify the intermediate linkages between proficient organizational culture, low caseworker turnover, and youth outcomes. Several recent initiatives focused on improving caseworker training and retention have developed an infrastructure that may support these types of studies (Strand, Spath, & Bosco-Ruggiero, 2010).

4.3. Limitations

Strengths of this study include its reliance on separate informants for each of the constructs (i.e., turnover, proficient organizational culture, youth outcomes), the use of a national sample of child welfare systems, and the use of a longitudinal design that met two (temporal precedence, association) of three conditions necessary to establish causal effects. Despite these strengths, readers are cautioned against interpreting the results from this study in a causal fashion (i.e., low caseworker turnover and high proficiency cause improvements in youths' well-being) because of the lack of random assignment of youth to conditions and the lack of manipulation of the independent variables. Findings from this study represent correlational relationships that must be replicated and experimentally tested in further research.

A second limitation pertains to the measurement of caseworker turnover. Although a recent meta-analysis (Park & Shaw, 2013) indicated that type of informant (e.g., key informant vs. agency records) did not moderate the turnover-performance relationship (= -.14 vs. = -.15, respectively), administrative records may provide a more precise measure of employee turnover and as such may result in more precise estimates of the magnitude of effects. Assuming agency administrators' reports of turnover incorporate more error than agency records, the true population correlation between turnover and youth outcomes may be stronger in proficient organizational cultures than that reported here. Additional studies using alternative measurement strategies are needed to confirm and extend these results.

A related issue pertains to the potential need to discriminate between types of caseworker turnover when assessing the turnover-outcomes relationship. Some caseworkers are terminated from employment involuntarily because of poor performance and the loss of these caseworkers is likely to have a different relationship with youth outcomes than the voluntary turnover of highly-skilled caseworkers. Again, meta-analytic evidence suggests that type of turnover (e.g., voluntary vs. involuntary) does not significantly moderate the turnover-outcomes relationship; however, the correlation between involuntary turnover and outcomes was much smaller (= -.01) than that of voluntary (= -.15) or reduction in force (= -.17) turnover (Park & Shaw, 2013). Because the present study included all types of turnover, it is possible that these results underestimate the magnitude of the relationship between turnover and youth outcomes. However, previous research indicates that the majority of caseworker turnover in child welfare settings is voluntary (Cyphers, 2001) thus mitigating this concern to a large extent.

Future studies should address remaining knowledge gaps regarding the relationship between turnover, organizational culture, and youth outcomes by conducting experiments in which caseworker turnover and organizational culture are manipulated and the consequences for

youth outcomes are assessed (e.g., Glisson et al, 2013).These types of studies have the potential to inform organizational intervention efforts to increase system effectiveness for children who are abused and neglected.

Acknowledgments

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Highlights

- Organizational culture interacts with turnover to predict child welfare outcomes

- Reduced turnover predicts improved outcomes in proficient child welfare systems

- Reduced turnover is not associated with outcomes in non-proficient systems

- Efforts to improve child welfare services by lowering turnover must also create proficient cultures
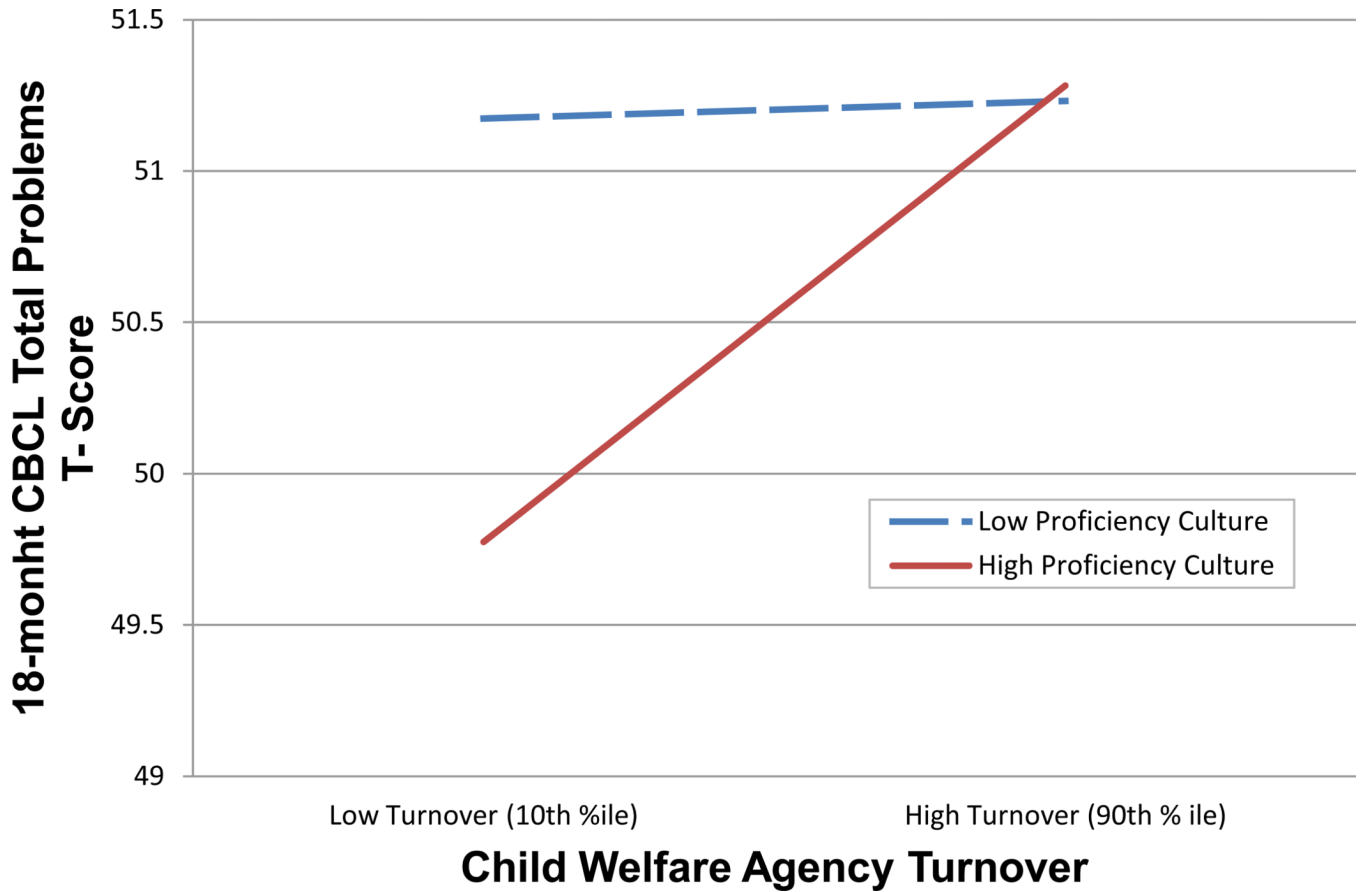
Figure 1.
Association of caseworker turnover with 18-month youth CBCL scores in child welfare
systems with low- and high-proficiency organizational cultures.
Note: CBCL = Child Behavior Checklist. 18-month CBCL T-scores are adjusted for youths'
baseline CBCL T-score and youth and agency covariates. Low and high proficiency cultures
correspond to the 10th and 90th percentiles, respectively.

Table 1

HLM analysis of the interaction between proficient organizational culture and turnover rates on youths' 18-month CBCL total problems scores.

Variable	Coefficient	SE	p
System-level			
Constant	53.456	.264	.000
Urban location	−.675	.585	.253
Annual turnover	−.074	.040	.068
Proficient organizational culture	−.060	.029	.039
Turnover x Proficient culture	.002	.001	.049
Youth-level			
Baseline CBCL	.627	.021	.000
Age	.013	.004	.004
Female	−.277	.379	.465
Substantiated abuse or neglect	.221	.405	.585
African American	−.503	.559	.371
Native American/ Alaskan Native	−1.390	.772	.071
Other race	−1.074	1.008	.287
Latino ethnicity	−1.089	.435	.013
Random Effects			
Intercept variance	1.027		.002
Baseline CBCL slope variance	.009		.004
African American slope variance	4.191		.005
Residual variance	87.311		

Note: Proportion of organizational variance explained = 77.41%; proportion of residual variance explained = 35.19%.

*
p < .05

**
p < .01

***
p < .001