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Abstract

Title of Dissertation: Evaluation of a Model Relating Inclusion, Organizational Commitment, and Intention to Leave among Child Welfare Workers

Jeongha Hwang, Doctor of Philosophy, 2012

Dissertation directed by: Karen Hopkins, PhD., Associate Professor, University of Maryland, Baltimore, School of Social Work

High turnover is a major problem in public child welfare organizations because it impedes effective and efficient service delivery. The purpose of my study is to investigate the effects of individual characteristics and organizational inclusion (e.g., a participative decision-making structure, accessible information) on organizational outcomes (e.g., organizational commitment, job satisfaction, intention to leave) among public child welfare workers. Several theories (e.g., organizational culture, social identity, and social exchange theories) provided a theoretical framework for the study.

The study used secondary data collected from public child welfare workers across the state of Maryland ($N=544$, 56.5% response rate). Multilevel modeling (MLM) and structural equation modeling (SEM) were used to investigate the relationships between variables and test the conceptual model.

Several significant pathways in the model were identified. Specifically, the results of MLM showed that public child welfare workers' level of organizational commitment mediated the impact of different levels of workers' perceived inclusion across organizations on turnover intention. The SEM analysis further supported the importance

of inclusion in predicting workers' turnover intention. The study findings have some practical implications. To tackle the high turnover rate in child welfare organizations, administrators and leaders need to focus on enhancing their workers' commitment as well as increasing opportunities for employees' participation in decision making and improving communication within the agency, thereby fostering a greater sense of inclusion in the daily life of the organization.

Evaluation of a Model Relating Inclusion, Organizational Commitment, and Intention to
Leave among Child Welfare Workers

by
Jeongha Hwang

Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, Baltimore in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

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Dedication

To the memory of my father,
Gui-Cheol Hwang

and

To the unconditional love of my mother,
Bok-Soon Jang

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This dissertation would not have been possible without support from many people around me. Thank you to all the people, faculty, friends, and the staff at the University of Maryland School of Social Work.

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rely on her whenever I was in difficulties throughout the program. She made me dream of being a genuine teacher who tries to help students with all kinds of hardships.

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CHAPTER ONE: INTRODUCTION

Translating “field theory¹” to organizational research, it is assumed that employees’ work behaviors are a function of their personal beliefs, values, and attitudes in interaction with their employing organization’s internal environment - structures, practices, climate, and culture (Beyer & Trice, 1979; Glisson, Dukes, & Green, 2006). For example, climate, which affects the work attitudes and behavior of members in the organization, emerges from overall assessments of key features of the organizational environment that take place in a Lewinian psychological field (Glisson & James, 2002). Further, a set of cognitive and motivational processes may be intervening in the functional determination of human behavior. An employee’s perception that the organization supports and cares about them is positively related to work attitudes, such as job satisfaction and organizational commitment. These work attitudes get translated into worker behaviors in organizations (Allen, Shore, & Griffeth, 2003).

Among various worker behaviors, employee turnover and its etiology and outcomes are of central interest to organizational scholars. High turnover within the public child welfare workforce has been a particularly persistent problem for the past four decades (Strolin, McCarthy, & Caringi, 2007). Thus, employee turnover is a topic of organizational research with clear relevance to child welfare policy and practice.

Contrary to the number of published empirical articles about employee turnover and its significance to the field of social work, little research has been conducted in child welfare

¹ Kurt Lewin’s (1951) renowned “field theory” states that human “behavior (B) is a function of the person (P) and the environment (E), $B = f(P, E)$, and that P and E are interdependent variables” (p. 25). In other words, human behavior should be explained by the interaction of personal and environmental conditions.

that provides a holistic picture of the high turnover phenomena. Previous research has identified individual and organizational factors associated with employee turnover or retention and examined the direct effects of each factor on employee turnover (DePanfilis & Zlotnik, 2008; Ellett, 2009; Strand, Spath, & Bosco-Ruggiero, 2010). However, the research falls short in capturing the organizational complexities, which need to be taken into account by examining the interactional relationship between the employee and the organizational context (e.g., cross-level effects or indirect effects such as moderating or mediating effects). In addition, prior research has not provided a deeper level of explanation about why employees within some child welfare organizations are more likely to turnover than those in other child welfare organizations from a multilevel perspective.

To address such limitations, this study tested a conceptual model, through multilevel modeling and structural equation modeling, linking child welfare employee characteristics, perception of organizational inclusion, work attitudes (organizational commitment and job satisfaction), and turnover intention. These advanced analytical techniques provided a more comprehensive understanding of employee behavior in the child welfare workplace.

1.1 Statement of the Problem

High turnover is considered a major problem in public child welfare agencies because it impedes effective and efficient delivery of services (Mor Barak, Nissly, & Levin, 2001). According to a recent empirical study (Faller, Grabarek, & Ortega, 2010), approximately one-fifth of public child welfare workers are estimated to leave their

organizations per year. The U.S. General Accounting Office (2003) estimates that nationally, employee turnover rates in child welfare are between 30% and 40%. The Child Welfare League of America (CWLA) estimated that the national annual turnover rate for public child welfare workers is approximately 22% (CWLA, 2008); however, some states report annual turnover rates as high as 50% for some service positions, such as child protective investigations (American Public Human Service Association, 2001). This level of turnover has consequential direct and indirect effects on the quality, consistency, and stability of both the workforce and the services provided to families and children (Faller et al., 2010). A *direct* effect (or outcome) of the high turnover is cost to the organizations (Moynihan & Pandey, 2008). Loss of existing workers results in a large financial cost for recruitment, hiring, and training of new workers, and additional costs associated with increased caseloads. For example, the training cost of a new worker corresponds with the average cost of one-third to one-half of a worker's annual salary (Graef & Hill, 2000).

Employee turnover has an *indirect* negative effect on child well-being, safety, and permanency due to lack of case continuity (Braddock & Mitchell, 1992). High turnover rates and the constant influx of new caseworkers into the workforce cause multiple challenges and risks in maintaining the safety of children within the system. Employee turnover disrupts the continuity of services and delays the timeliness of investigations and placement decisions (Strolin et al., 2007).

Although there is consensus on improving current child welfare workplace conditions to tackle the high turnover problem (Boyas et al., 2012; Lee et al., 2011; Williams et al., 2011), more research is needed to investigate how the interaction of

certain employee perceptions and attitudes and organizational conditions impact employee turnover. There is a limited amount of research on employee turnover that has focused on contextual variables, such as organizational inclusion, in the child welfare workforce. This gap in the literature can be large, given contextual factors' importance in influencing individual attitudes and behaviors in organizations (Johns, 2006). For example, organizational inclusion is an understudied but potentially critical factor in child welfare retention efforts that involves the extent to which workers perceive they are a part of critical organizational processes. Specifically, if an organization is resistant to involving workers in the process of decision-making or giving them access to information, it may be a barrier to employees' organizational commitment or job satisfaction. Lack of commitment or satisfaction may translate into negative employee behaviors (e.g., lateness, absenteeism, intent to leave, etc.). However, problems occur when variables such as organizational inclusion are defined at higher levels (e.g., organizational unit) and then measured with individual responses to surveys. It is also problematic when the relationships among variables are at different levels; some variables are organizational-level (e.g., organizational inclusion) and others are individual-level variables (e.g., commitment, job satisfaction). Alternatively, aggregating the responses of all employees from the same organization and using this as a measure of the organizational level variable enables us to view organizations as situations containing patterned activities of interdependent parts, including interdependent people (Krull & MacKinnon, 1999).

Most of the turnover studies tend to explore and examine predictors at only one time point with a cross-sectional design. Additionally, they are mostly conducted by

using bivariate analyses (e.g., *t*-tests, correlations, etc.) or conventional ordinary least squares (OLS) regression analysis. These research design and analytic methods reveal some methodological limitations such as inability to infer causality and potential violations of analytical assumptions (e.g., independence of observations). Within recent years, however, a growing number of empirical studies have been conducted with longitudinal designs that examine the causality between key individual and organizational variables and turnover (Caringi et al., 2008; Faller et al., 2010; Renner, Porter, & Preister, 2009; Strolin-Goltzman, 2009). Advanced analytical methods have also been utilized such as multilevel modeling (MLM) analysis (Glisson et al., 2006; Smith, 2005), structural equation modeling (SEM) analysis (Lee et al., 2011; Strolin-Goltzman et al., 2010), and survival analysis (Dickinson & Painter, 2009; Rosenthal & Waters, 2006).

1.2. Purposes of the Study

This study explored the following three different dimensions of turnover. First, at an initial stage, this study explored individual factors that are related to turnover. Second, it investigated organizational contexts that involve individual workers and affect their perceptions, attitudes, and behaviors related to turnover. Finally, it examined various indirect effects that are produced in the interactions between individuals and the organization. Thus, the overall purpose of this study was to broaden the understanding of employee turnover processes by integrating individual- and organizational-level factors associated with intention to leave in public child welfare.

The second purpose of the study was to develop a conceptual model, an integrative structural model linking worker perceptions (i.e., inclusion), work-related

affects (i.e. organizational commitment, job satisfaction), and turnover intention (i.e., the cognitive or behavioral precursor to actual turnover). This study validated the proposed conceptual model using advanced statistical analyses (e.g., multilevel modeling and structural equation modeling).

Lastly, the purpose of this study was to provide a stronger knowledge base for managers and practitioners so that they may implement practical interventions to address turnover in public child welfare organizations.

The specific aims of this study were to:

- 1) Examine child welfare workers' perception of organizational inclusion, and their work attitudes related to organizational commitment and job satisfaction;
- 2) Investigate the role of workers' attitudinal variables (e.g., organizational commitment) in the determination of workers' turnover behavior (e.g., intention to leave);
- 3) Examine the cross-level effects of organization-level inclusion, and individual-level commitment and job satisfaction on intention to leave among workers; and
- 4) Test a structural equation model explicating the linkage among individual diversity characteristics, perceived organizational inclusion, work attitudes (organizational commitment and job satisfaction), and turnover intention.

1.3 Theoretical Framework

Many studies have explored the factors that motivate workers to leave or stay with an organization and identified practical implications for the high turnover phenomena in child welfare. Moreover, in exploring the processes leading to voluntary employee turnover in public child welfare, some prominent theoretical models have been

developed and empirically tested (e.g., Glisson et al., 2006; Mor Barak et al., 2006; Smith, 2005).

In particular, the organizational culture/climate theory provides a conceptual framework for how personal, economic, organizational, and role-related factors determine work-related affects (e.g., job satisfaction, organizational commitment), which in turn determine individuals' intentions to leave, or actual turnover (Glisson et al., 2006). Thus, a model that specifies a relationship between workers' perception of inclusion, their attitudes toward organizational commitment (or job satisfaction), and their intention to leave as a precursor of actual turnover can be proposed to explain the phenomena of high turnover in child welfare.

Social identity theory is also a valid theoretical foundation in this study. This theory suggests that people classify themselves and others into social categories based on attributes such as demographic characteristics; as a result, they tend to see members of their own category as more likable and trustworthy than members of other social categories (Tajfel, 1982). In line with this, Mor Barak and colleagues (2006) defined organizational inclusion as "the individual sense of being a part of the organizational system" (p. 550). They developed a conceptual model, including organizational inclusion as a primary construct based on social identity theory and tested it using SEM. As a result, they concluded "employees who lack a sense of inclusion are more likely to be unhappy with their jobs and to feel less committed to the organization" (p. 552).

Finally, rooted in social exchange theory and the norm of reciprocity (Landsman, 2008), it can be hypothesized that greater perceived organizational support results in greater affective attachment and feelings of obligation. Research suggests that employees

develop global beliefs about the extent to which their employing organization both values their contributions and cares about their well-being (Smith, 2005). Smith (2005) tested her conceptual model and found that higher levels of perceived organizational support are associated with increased organizational commitment and, indirectly, with reduced job turnover.

In sum, this study employed three different theoretical models to comprehensively analyze the persistent turnover problem in child welfare rather than a single dominant theory, given that each theory contributes to understanding some segment of the whole employee turnover process. Building an integrated conceptual model (further developed in chapter 2) with these three distinct theories, the study provides a more complete picture of employee turnover in a public child welfare setting.

1.4 Rationale and Significance of the Study

This study contributes to the existing turnover literature in several ways. First, the study investigated the role of a contextual variable (i.e., organizational inclusion) in processes of employee turnover intention, departing from the dominant emphasis on employee stress and well-being (e.g., burnout, self-efficacy). This study built upon the elaborated efforts by Mor Barak and her colleagues (Mor Barak & Cherin, 1998; Mor Barak et al., 2006) for conceptualization of “inclusion” and delineated mediating mechanisms that explain how perception of inclusion decreases worker intention to leave. Utilizing a multilevel perspective further explains how turnover processes contribute to turnover-related outcomes. Prior studies have examined employee perceptions and attitudes toward organizations at the individual-level; however, individuals’ perceptions

can be confounded by contextual conditions at the organizational-level. Therefore, the assessment may fail to capture the broader contextual influences resulting from situational conditions around employees within organizations, and these may translate into meaningful differences in turnover-related behaviors.

Second, this study contributes to methodological rigor by utilizing advanced analytical techniques. This study conducted a multilevel modeling analysis. The collection of individuals in an organization creates norms, values, and expectations of the work environment that influence how individuals act (Glisson, 2007; Glisson & James, 2002). The multilevel perspective on organizational analysis represents a shift away from analyzing organizations through a single-level lens and toward the view of organizations as complex and interconnected social systems (Katz & Kahn, 1978). The central feature of such thinking is that organizational entities reside in nested arrangements. The nested nature of data creates a bias in standard errors and statistical tests resulting from dependence of observations (Gelman & Hill, 2007) unless appropriate data analysis techniques, such as multilevel modeling, are used to adjust for the potential bias due to the nested nature of the data. Furthermore, the study employed structural equation modeling to test a proposed conceptual model linking various latent variables to employee turnover intention. SEM provides a better understanding of employee turnover with cross-sectional data on a sample of public child welfare workers.

In addition to these contributions to the existing research, this study is also significant in testing the importance of organizational inclusion perceptions among child welfare workers, and the mediating role of attitudinal variables, commitment, and job satisfaction. Thus, the results, based on empirical evidence, could be translated into an

intervention study for the future. The findings have some practical significance for administrators and policy makers who are concerned about employee turnover among child welfare workers.

Also, as a contextual variable, organizational inclusion is playing a significant role in improving the understanding of organizational culture in public child welfare organizations. Specifically, a multilevel approach is better suited to answer the research question “What are the differences between agencies that are experiencing high turnover in comparison to those that are not?” than a single-level approach. For example, Figure 1 portrays a distinct picture of the relationship between child welfare workers’ perceptions of organizational inclusion and average turnover rate from a sample of agencies across all counties in Maryland. However, this depiction of inclusion perception and turnover fails to provide us in-depth information about how these two variables relate to each other. So, the development of a conceptual model built on relevant theories and the evaluation of its validity significantly extends common knowledge of the effects of a contextual variable in the field of public child welfare.

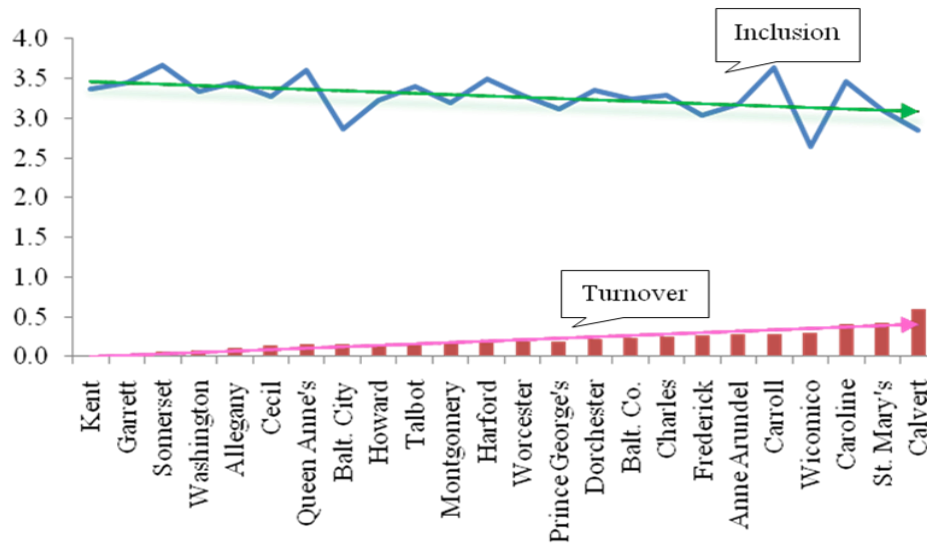


Figure 1. Organizational Inclusions and Turnover Rate by MD County

Note: organizational inclusion scores were computed using the survey data; turnover rates were retrieved from the Maryland Department of Human Resources (DHR) database in 2007.

Additionally, the understanding of organizational culture and climate can be enhanced among organizational scholars. This study examined the notion that “culture impacts climate and climate, in turn, impacts work attitudes” (Aarons & Sawitzky, 2006, p. 297) by testing a conceptual model linking these psychological processes with a sample of public child welfare workers. For more accurate evaluation of the conceptual model, SEM analysis was performed to examine the interdependent relationships among the variables, using the theoretical frameworks as a guide.

The next chapter presents a substantive review of empirical literature relevant to the topic - including the definition of turnover, its related factors, and key constructs - provides a theoretical model of turnover, and presents the study’s research questions and hypotheses.

CHAPTER TWO: REVIEW OF LITERATURE

This chapter reviews the findings of empirical research relevant to organizational voluntary turnover and provides a conceptual framework for the research questions and hypotheses.

2.1 Turnover: Definitions and Search Strategy

2.1.1 What is Turnover?

Literally, turnover means the number of times a particular stock of goods is sold and restocked during a given period of time; furthermore, regarding “workforce or employee turnover,” the term refers to “the ratio of the number of workers that had to be replaced in a given time period to the average number of workers” (American Heritage® Dictionary, 2011). Specifically, the study focused on child welfare workforce turnover.

In child welfare research, turnover is defined as actual job exit (Drake & Yadama, 1996) or leaving child welfare (Rosenthal & Waters, 2006), while some studies examined precursors to actual turnover such as intention to leave (Nissly, Mor Barak, & Levin, 2005) and intention to turnover (Jayarante & Chess, 1984). A term related to turnover in the research literature is work withdrawal, which captures negative behaviors including lateness, absenteeism, and other undesirable behaviors that dissatisfied employees engage in to avoid work while still remaining in the job (Hanish & Hulin, 1990; Hopkins, Cohen-Callow, Kim, & Hwang, 2010). Thus, “turnover” can be viewed as part of a continuum of withdrawal behaviors, from the least extreme (e.g., lateness, absenteeism) to the more

extreme (e.g., intention to leave, attempts to transfer to another job, etc.), and to the most extreme form of actual exit from the organization (Hopkins et al., 2010).

The term *retention* has also been considered as an outcome variable in turnover research, for these two terms mirror each other as a workforce concern and potential solution (Curry, McCarragher, & Dellman-Jenkins, 2005; Ellett, 2009; Rosenthal & Waters, 2006). Retention is defined in the child welfare literature as intention to remain employed in child welfare (Dickinson & Perry, 2002; Ellett, 2009) and remaining employed in child welfare over time (Cahalane & Sites, 2004; Rosenthal et al., 1998). During the last 7 years from 2005 to 2012, the focus of research on the child welfare workforce moved toward determining personal and organizational factors related to employee retention rather than turnover (Zlotnik, DePanfilis, Daining, & Lane, 2005). Focusing on retention, as opposed to turnover, as an outcome variable may provide a better understanding for developing a stable and competent child welfare workforce (Ellett, Ellett, & Rugutt, 2003).

2.1.2 Search Strategy

DePanfilis and Zlotnik (2008) conducted a systematic review of the research on child welfare turnover from 1974 to 2004. Therefore, in this study, special attention was given to the turnover literature from 2005 through 2012. The literature review partly replicated DePanfilis and Zlotnik's (2008) procedures regarding search terms and inclusion and exclusion criteria. However, unpublished studies were excluded due to limited access and time of the study. The study's search strategies were as follows:

First, search terms included: child welfare personnel and "intention to leave" or "turnover," "retention" or "intention to stay", and child welfare workforce and "intention

to leave” or “turnover.” Only published documents were included. Second, some studies were excluded as follows: if the publication was based on a previous study already included in the review; if the publication did not provide sufficient detail about the study methods and results; or if the study did not use multivariate statistics to investigate the relationship between individual factors or organizational factors and child welfare worker turnover or retention. The University of Maryland Baltimore’s library online databases were used to search for literature, including Social Work Abstracts, Social Science Index, and PsycINFO.

As a result of conducting a comprehensive search, 96 published articles were identified. After screening these articles using the exclusion criteria (e.g., retention, intention to stay, turnover, or intent to leave was not used as a dependent variable, no quantitative method, no original study, etc.), 52 research articles were initially selected for the literature review. After more intense examination (e.g., not specific to child welfare workers, not survey data but administrative data only), a final sample of 32 studies was selected. These screening processes of previous empirical studies may increase the external validity of a review by synthesizing results across studies on the topic of turnover or retention in the child welfare workforce. A list of studies included in the literature review can be found in Appendix A with information about the research designs, sample sizes, characteristics of the samples, definitions of the dependent variables, and the significant factors.

2.2 Factors Associated with Turnover

Prediction of turnover by identifying the processes (or *paths*) leading to it has been the focus of many research studies. A prerequisite to effectively retaining competent child welfare workers is knowing what factors cause them to leave and what factors motivate workers to stay. A body of research has been developed to identify personal (*individual*) or organizational factors related to child welfare worker turnover (Dickinson & Painter, 2009; Ellett, 2000; Hopkins et al., 2010; Landsman, 2007; Mor Barak, Nissly, & Levin, 2001; Strolin, et al., 2007). A few of these studies have identified the role of both individual and organizational factors in contributing to child welfare worker turnover. These studies have made significant contributions to better understanding the turnover problem in child welfare and provide a framework for categorizing the correlates of turnover. Building on previous empirical research, this study further explores particular factors associated with child welfare workforce turnover. The predictive factors are categorized into two areas cited most often throughout the literature: individual factors, and organizational factors.

2.2.1 Individual Factors

Turnover has been associated with individual worker characteristics such as educational level, position/ rank, and demographics. Evidence from prior empirical studies on the child welfare workforce has identified individual characteristic variables (e.g., age, gender, job level, etc.) and psychological factors (e.g., self-efficacy, job stress, and burnout) as predictors of turnover of workers (DePanfilis & Zlotnik, 2008; Ellett, 2009; Strolin et al., 2007).

Individual Characteristics

Several individual characteristics are among the most common predictors in the turnover literature. These variables include age, gender, education, job level, social work degree, prior child welfare experience, and tenure with the organization.

Age was significantly correlated with intention to leave or turnover in some studies of human service workers: older workers are less likely to leave their job than their younger coworkers (Boyas et al., 2012; Cohen-Callow, Hopkins, & Kim, 2009; Mor Barak et al., 2001; Shim, 2010). However, other studies did not find a significant correlation (Jayaratne & Chess, 1984; Koeske & Kirk, 1995). Age and tenure on the job seem to be very highly correlated, suggesting that they may be measuring the same concept; the more time an employee remains in an organization, the more committed he or she is to continuing employment with the organization (Lance, 1998; Mor Barak et al., 2001). Gender was mostly unrelated to turnover intention (Nissly et al., 2005). The findings related to gender and actual turnover are mixed; some research indicates that women are more likely to leave their job than men (Powell & York, 1992), while other studies find that women are less likely to leave than men (Rosenthal & Waters, 2006; Shim, 2010, Weaver et al., 2007).

The research results related to race/ethnicity and turnover are also mixed. Although some studies indicate that workers of color (or members of minority groups) are more likely to leave their jobs than their counterparts (Koeske & Kirk, 1995; Hopkins et al., 2010; Rosenthal, 2006; Smith et al., 2011), others have found that turnover is less likely among ethnic minority groups (Tai, Bame, & Robinson, 1998; Shim, 2010). According to a recent study by Faller and colleagues (2010), race was not a significant predictor of who left the agency, but workers of color were significantly less committed

to their jobs, suggesting that further attention to retaining workers of color may be needed (Faller et al., 2010).

Prior child welfare experience was related to retention in one study (Lee, Forster, & Rehner, 2011; Rosenthal & Water, 2004), but not related in an earlier exploratory study by the same researcher (Rosenthal et al., 1998). Studies regarding educational level and degree also had mixed results. Some researchers noted that workers with higher educational levels were more likely to leave their job (Graef et al., 2002; Nissly et al., 2005), while others found supportive evidence for higher education as a predictive factor for retention (Curry et al., 2005; Nissly et al., 2005). Several studies indicated that employees with degrees in social work were less likely to leave their jobs than those with non-social work degrees (Dickinson & Perry, 2002; Shim, 2010; Smith, 2005). However, Strolin and colleagues (2007) took a cautious position, noting that there needs to be more convincing and generalizable evidence on the relationship between social work degree and turnover.

Individual Psychological Factors

Burnout, job stress, and self-efficacy have been cited as the most significant psychological factors related to child welfare worker turnover (Boyas et al., 2012; Cahalane et al., 2008; Ellett, 2009; Mor Barak et al., 2006; Strolin-Goltzman, 2010). Burnout, a chronic and pervasive problem in the mental health and social service fields, is a major contributor to poor morale and subsequent turnover (Cahalane & Sites, 2004; Dickinson & Perry, 2002; Kim & Stoner, 2008; Mor Barak et al., 2001; Smith, 2005). Specifically, emotional exhaustion, one subscale of burnout, was identified as a consistent predictor of turnover (Dickinson & Perry, 2002; Kim & Stoner, 2008; Shim,

2010; Yankeelov et al., 2009). Work-related stress is also consistently one of the strongest predictors of turnover (Mor Barak et al., 2001; Hopkins et al., 2010).

Self-efficacy refers to “one’s capability to organize and execute courses of action to produce given attainment” (Bandura, 1997, p. 3). Researchers have demonstrated that degree of self-efficacy is positively related to child welfare workers’ intentions to remain employed in child welfare (Ellett, 2009; Ellett, Ellis, Westbrook, & Dews, 2007).

2.2.2 Organizational Factors

The most frequently studied organizational factors included co-worker support, supervisor support, and quality of supervision (e.g., Collins-Camargo et al., 2012; Curry et al., 2005; Dickinson & Perry, 2002; Ellett, 2000; Ellett et al., 2003; Nissly et al., 2005; Smith, 2005; Weaver, Chang, Clark, & Rhee, 2007), workload (e.g., Ellett, 2000; Smith, 2005), salary and benefits (e.g., Ellett et al., 2003; Lambert et al., 2012; Weaver et al., 2007), job satisfaction (Landsman, 2001; Mor Barak et al., 2001), and organizational commitment (e.g., Cahalane & Sites, 2004; Claiborne et al., 2011; Ellett, 2000; Lambert et al., 2012; Smith, 2005). Other organizational factors less frequently studied include the agency’s culture, climate, structures (e.g., decision-making, leadership, and management structures), and operational processes (e.g., record keeping, case transfers, accountability processes). It is noteworthy that more organizational factors are associated with turnover than individual characteristics, especially supervision skills, organizational structure, organizational commitment, and job satisfaction (Landsman, 2008; Mor Barak, Nissly, & Levin, 2001; Renner et al., 2009).

Supervisory Support

Supervision promotes and respects child welfare worker autonomy and competency, while contributing to employee retention (Ellett, Ellis, Westbrook, & Dews, 2007; Smith et al., 2011). Supervisory support has been identified in multiple studies as critical to preventing employee intention to leave or actual turnover (Curry et al., 2005; Dickinson & Painter, 2009; Faller et al., 2010; Landsman, 2007; Mor Barak et al., 2001; Renner et al., 2009; Smith, 2005; Weaver et al., 2007).

Caseload and Workload

Caseload and workload are two distinct constructs in the literature. Caseload in child welfare represents the actual number of cases assigned to a caseworker regardless of risk level or difficulty. *High caseload* is not consistently defined, but the Child Welfare League of America (CWLA) specified standards and guidelines of 12 children or families as a monthly *average caseload* size. Recently, Yamatani, Engel, and Spjednes (2009) calculated a caseload standard for child welfare workers and recommended a number of 17 as a maximum caseload per month. Smith (2005) reported high caseload size as a factor in child welfare turnover.

Workload takes into account the amount of time it takes workers to complete all tasks related to their job descriptions. These tasks include direct client contact, paperwork, supervision, court, interagency collaboration, etc. Interestingly, workload has not been found to be a significant predictor of turnover, while high caseloads were found to be associated with turnover for child welfare workers (Jayaratne, Spelling, Himle, & Chess, 1991). It can be assumed that this finding would be related to workers' perceptions of their ability to manage a caseload well; that is, it's not the hours of work that matter for turnover, but the worker's sense of efficacy.

However, there appears to be a need for more empirical evidence on the impact of caseload and workload on turnover.

Salary

Salary has been included as a predictor of turnover. Child welfare workers make significantly lower salaries—about \$9,000 less than employees in analogous fields such as education or probation (U.S. General Accounting Office, 2003). Empirical findings on the effect of salary on turnover have been mixed. Some studies found that remuneration was significant (e.g., Dickinson & Perry, 2002; Lee et al., 2011; Powell & York, 1992). According to Dickinson and Perry (2002), child welfare caseworkers who remained in their jobs had significantly higher salaries than those who left. Other researchers, however, found no significant relationship between salary and turnover (e.g., Hopkins et al., 2010; Jayaratne & Chess, 1994; Smith, 2005). Despite such mixed results on salary, the literature continues to articulate that remuneration matters. For example, in a systematic review by DePanfilis et al. (2008) on retention of child welfare staff, only 2 of the 25 articles reviewed found salary as a significant factor, but the authors still concluded that salary was an important organizational factor affecting retention.

Job Satisfaction

The degree of job satisfaction can be a result of the “goodness of fit” between the individual and the actual job demands, but it can also be related to organizational climate and conditions. A meta-analysis of 155 studies across multiple fields established that job satisfaction uniquely contributes to turnover, regardless of individual levels of organizational commitment (Tett & Meyer, 1993). None of the studies that were reviewed in the meta-analysis considered a child welfare workforce solely. Job

satisfaction predicted turnover or intention to leave among social workers in some studies (Hopkins et al., 2010; Jayaratne & Chess, 1984; Landsman, 2001; Levy et al., 2012; Mor Barak et al., 2001), but not others (Fryer, Miyoshi, & Thomas, 1989; Manlove & Guzell, 1997). Whereas some studies have found that job satisfaction predicts job retention (Mor Barak, Nissly, & Levin, 2001), one study found few differences in job satisfaction between staff who had left a child welfare job (one year after a survey) and staff who had stayed (Fryer et al., 1989).

Organizational Commitment

Commitment to the organization consistently predicts job retention. A meta-analysis of 25 articles found that lack of organizational commitment was significantly related to both intention to leave and actual job turnover (Mor Barak et al., 2001). Manlove and Guzell (1997) found that organizational commitment had a greater influence on turnover than did job satisfaction in a sample of child care workers. Landsman (2001) extended the linkage among these variables, successfully testing a conceptual model that job satisfaction influences organizational commitment, which then directly predicts intention to stay in the agency.

General Organizational Practices

The extent to which an organization provides opportunities consistent with a worker's professional goals and encourages practices congruent with the agency's mission is related to its ability to retain workers (Rycraft, 1994). One study of child welfare caseworkers found that intrinsic value was not associated with actual job retention, although rewards from external sources such as work-life fit were significantly related to actual job retention (Smith, 2005). Arches (1991) emphasized the role of

extrinsic rewards and stressed the need for organizations to embed external rewards into their agency functioning and climate. In a comparison study of child welfare agencies with high and low turnover, the fit between both work and home life significantly decreased the odds of intention to leave among both groups; however, clarity of practice had a larger effect on intention to leave in the low turnover systems than the high turnover systems (Strolin-Goltzman, 2008).

2.3. Child Welfare Worker Perception, Work Attitudes and Turnover Behaviors: Toward a Conceptual Model

The body of literature devoted to turnover models is considerable. The focus of this review is to create a process model of turnover in child welfare to guide the current study.

2.3.1 The Impact of Inclusion

Organizational inclusion is a new concept in the organizational literature and still in its infancy. Although inclusion has started to gain popularity among diversity scholars, it still remains a new concept without consensus on the construct (Shore et al., 2011). Unlike other concepts such as social integration, social exclusion, and social cohesion, the concept of organizational inclusion particularly focuses on employee involvement and the integration of diversity characteristics into organizational systems and process (Roberson, 2006).

As Fiske and Taylor (1991) have pointed out, “people initially categorize each other automatically on the basis of noticeable physical cues” or diversity characteristics such as gender, race/ethnicity, and age (p. 137). These diversity characteristics have a

significant effect on employees' affective experiences in the workplace, including the sense of isolation and exclusion from support networks (Findler et al., 2007; Mor Barak & Cherin, 1998). Relatedly, inclusion is regarded as "a potential bridge concept" that can enhance our understanding of how people from diverse backgrounds and different personal characteristics perceive the organizational environment (Mor Barak & Cherin, 1998, p. 57). For example, given the research finding that individuals from diverse social and racial groups are often excluded from access to information and opportunity in organizations, inclusion can be utilized to improve their participation and empowerment. Thus, inclusion facilitates each individual's ability to contribute fully and effectively to an organization (Mor Barak et al., 1998). Moreover, Mor Barak and Levin (2002) stated that the concept of inclusion can serve as an important underpinning, expanding organizational *antecedents* of understanding and working with today's diverse workforce.

Employee perception of inclusion is conceptualized as the extent to which a worker feels a part of the critical organizational processes: access to information and resources, involvement in the work group, and the ability to participate in and influence decision-making (Mor Barak & Cherin, 1998). In the management field, Roberson (2006) simply states that inclusion refers to "the removal of obstacles to the full participation and contribution of employees in organizations" (p. 217). Pelled, Ledford, and Mohrman (1999) also defined inclusion as "the degree to which an employee is accepted and treated as an insider by others in a work system" (p. 1014). Further, they assessed the construct by the following indicators (Pelled et al., 1999):

- 1) Decision-making influence: the degree of influence that an employee has over decisions that affect him/her or the work that she/he does (Steel et al., 1992; Steel & Mento, 1987).

- 2) Access to sensitive work information: the degree to which an employee is kept well-informed about the company business objectives and plans.
- 3) Job security: the likelihood that an employee will retain his/her job. While job security in itself does not always mean that one is an insider in the workplace, organizations may show acceptance of a person by granting that person stable employment. (p. 1020)

Pelled and colleagues (1999) found that dissimilarity in race and gender (with the dominant groups within an agency) were negatively associated with the above three indicators; but, dissimilarity in tenure and education were positively associated with them. The association between age and the three indicators of inclusion was mixed; age is referred to as a “middle of the road” demographic variable because it is often related with tenure (p. 1027).

Recently, Shore and her colleagues (2011) developed an analytic framework of inclusion that categorizes it along a continuum of inclusion-exclusion according to “the degree to which an employee perceives his or her level of satisfaction in terms of ‘belongingness’ and ‘uniqueness’ within the work group” (p. 1265). Specifically, at one end of the continuum minority members (who are unique) with developed networks (a sense of belongingness) are more likely to be included within organizations than non-minority members because, at the group level, diverse work groups have the potential to create a feeling of inclusion by incorporating both uniqueness (through viewing diversity as a resource) and belongingness (through members feeling valued and respected). On the other end of the continuum is the low-belongingness and low-uniqueness combination named *exclusion*, which happens when the individual is not treated as an organizational insider and is perceived as having low unique value in the work group.

Several researchers reported that employee perception of inclusion is related to organizational outcomes such as job satisfaction, organizational commitment, and employee well-being (Findler, Wind, & Mor Barak, 2007). Lawler (1994) supported the connection between employee perception of inclusion, degree of job satisfaction, and level of commitment to the organization. Mor Barak and Levin (2002) also examined the relationship between diversity characteristics, perception of inclusion, and the outcome variables of job satisfaction and well-being, taking into consideration other relevant covariates, such as perception of fairness, stress, and social support.

There is some evidence to imply that inclusion is related to either job satisfaction or turnover intention (Acquavita, Pittman, Gibbons, & Castellanos-Brown, 2009; Mor Barak & Levin, 2002; Mor Barak et al., 2006). Acquavita et al. (2009) showed that inclusion was associated with job satisfaction in a study of social workers. Mor Barak and colleagues (2006) found that perceptions of inclusion were significant in predicting social workers' job satisfaction, which, in turn, was related to turnover intentions. Leary and Downs (1995) found that the degree to which other people include a coworker is associated with the employee's psychological well-being. Hitlan, Clifton, and DeSoto (2006) found that workplace exclusion was detrimental to work attitudes and psychological well-being. Additionally, inclusion has been indirectly associated with enhanced job performance and higher levels of organizational citizenship behavior (Wayne, Shore, & Liden, 1997). Research by Cho and Mor Barak (2008) showed that perception of inclusion predicted both organizational commitment and job performance.

Building on these empirical findings, we can hypothesize that the degree to which the organization accommodates employees' desire to belong or be included affects

employees' job satisfaction and, ultimately, turnover intention. Shore and her colleagues (2011) state "inclusion has positive consequences for individuals and organizations, but as yet, little is known as to how or why this occurs" (p. 1270). So, the inclusion construct and its underlying theoretical basis need greater development.

2.3.2 The Impact of Organizational Commitment

The organizational literature describes organizational commitment as a form of attitudinal commitment (Allen & Meyer, 1991; Mowday, Steers, & Porter, 1982).

Mowday et al. (1982) defined organizational commitment as the relative strength of an individual's identification with and involvement in a particular organization.

Conceptually, it can be characterized by at least three factors: 1) a strong belief in and acceptance of the organization's goals and values; 2) a willingness to exert considerable effort on behalf of the organization; and 3) a strong desire to maintain membership in the organization (p. 27).

Allen and Meyer (1991) developed three-dimensional commitment scales (three 8-item scales): first, affective commitment captures "positive feelings of identification with, attachment to, and involvement in, the work organization"; continuance commitment captures "the extent to which employees feel committed to their organizations by virtue of the costs associated with leaving"; and, normative commitment assesses "employees' feelings of obligation to remain with the organization" (pp. 69-72).

Morrow (1983) suggested that different forms of commitment exist, specifically, professional and organizational commitment. Compared to organizational commitment, as articulated above, professional commitment refers to "the relative strength of employees' identification with, and involvement in, their profession" (Aranya, Pollack, &

Amernic, 1981, p. 272). Professionally committed employees exert effort on behalf of the profession, which results in their internalization of the profession's success or failure (Giffords, 2003).

Many studies demonstrated an empirical link between organizational commitment and employee attitudinal and behavioral outcomes. Meyer, Stanley, Herscovitch, and Topolnytsky (2002) conducted a meta-analysis on organizational commitment research following Meyer and Allen's (1991) three-component model. They concluded that all three forms of organizational commitment correlate negatively with turnover intention and turnover, but correlate somewhat differently with other work behaviors (i.e., job performance and organizational citizenship behaviors). First, as expected, affective and normative commitment correlated positively, and continuance commitment correlated negatively, with job performance. Second, affective and normative commitment correlated positively with organizational citizenship behavior (OCB), whereas the correlation with continuance commitment was near zero. Third, affective commitment correlated negatively with both self-reported stress and work-family conflict; however, continuance commitment correlated positively with both variables. In sum, affective commitment has the strongest positive correlation with desirable work behaviors, followed by normative commitment; continuance commitment is unrelated or negatively related to desirable work behaviors.

Research has consistently demonstrated that organizational commitment is positively associated with organizational effectiveness and performance (McNeese-Smith & Cook, 2003; Testa, 2001) and negatively related to turnover. Manlove and Guzella (1997) found that organizational commitment had a greater influence on turnover than

did job satisfaction. In a study of welfare workers, Freund (2005) examined a conceptual model using structural equation modeling that linked job involvement, commitment, job satisfaction, and intent to leave. She found that organizational commitment affected job satisfaction and then intention to leave (Freund, 2005). Additionally, Landsman (2001) found that job satisfaction influences organizational commitment, which then directly predicts intention to stay in the agency. In particular, a meta-analysis by Mor Barak and her colleagues (2001) demonstrated that organizational commitment is one of the most significant predictors of turnover and retention in the child welfare workforce. A lack of commitment can occur when workers perceive unfair practices or problematic organizational behaviors, which then results in increased absenteeism and turnover (Faller et al., 2010; Lambert, Pasupuleti, Cluse-Tolar, Jennings, & Baker, 2006).

Lee, Ashford, Walsh, and Mowday (1992) investigated the process by which personal characteristics, situational factors, and their interaction shape organizational commitment and subsequent voluntary turnover, concluding “personal characteristics [*propensity to commitment*] shape subsequent attitudes and behaviors” (p. 29). Therefore, commitment propensity leads to more favorable reactions to environmental characteristics (e.g., utility of feedback) and it, in turn, enhances subsequent organizational commitment. Over time, the reciprocal interaction between personal propensity to commitment and organizational commitment may increase the likelihood of employee retention.

There is some empirical support to suggest that organizational commitment serves as a moderator of job stress (Boyas & Wind, 2010; Glazer & Kruse, 2008). In a sample of 506 nurses in Israel, Glazer and Kruse (2008) found that affective commitment was

negatively related to job stress. Boyas and Wind (2010) also found that higher organizational commitment among public child protection workers was significantly associated with lower perceived job stress. The increased job stress, in turn, was found that it predicted increased thoughts of leaving and accounted for 18% of the variance intentions of leaving among a sample of public child welfare workers (Nissly et al., 2005).

Overall, organizational commitment is generally viewed as a global affective reaction to the organization as a whole, whereas job satisfaction is traditionally defined as an affective reaction to relatively specific aspects of one's job (Lance, 1991). Therefore, studies of organizational commitment have adopted a more holistic definition of job satisfaction and have posited that job satisfaction plays a key role as the intervening variable between organizational commitment and outcome behaviors (Mueller, Wallace, & Price, 1992).

2.3.3 The Impact of Job Satisfaction

Job satisfaction is a specific application of a social attitude (Hulin & Judge, 2003). Before the focus on organizational commitment as a predictor of employee behavior and intentions (Mowday et al., 1982), job satisfaction was considered the key attitude related to employee behaviors such as turnover and job performance (Locke (1976). Hellman's (1997) meta-analysis showed that "the more dissatisfied employees become, the more likely they are to consider other employment opportunities" (p. 684).

Brief (1998) defines job satisfaction as "an internal state that is expressed by affectively and cognitively evaluating an experienced job with some degree of favor or disfavor" (p. 86). According to Whitman, Van Rooy, and Viswesvaran (2010), job satisfaction is noted as "a specific application of a social attitude and can be inferred from

a respondent's placement of the attitude object along a scale of evaluation" (p. 43).

Several work conditions have been found to significantly influence the job satisfaction of public employees (Bright, 2008). For example, the inclusion of employees in participative decision making positively influences job satisfaction (Macy, Peterson, & Norton 1989; Miller & Monge, 1988).

Ostroff (1992) was one of the first scholars to construe job satisfaction as a collective construct and concluded, "organizations with more satisfied employees tended to be more effective than organizations with less satisfied employees" (p. 969). Additionally, Whitman et al. (2010) noted that productivity was positively related to job satisfaction. A collective of satisfied workers is likely to construct a work environment in which productivity norms are very high. Conversely, low levels of collective satisfaction should lead to more conflict, which should have a negative effect on productivity. Li, Liang, and Crant (2010) found that job satisfaction is positively related to organizational citizenship behavior (OCB), which refers to "individual behavior that is discretionary, not direct or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (Organ, 1988, p. 4). There is theoretical reason to expect a relationship between satisfaction and OCB, based on the proposition that proactive people create favorable situations conducive to job satisfaction and work performance (p. 395). However, in child welfare research, little is known about the relationship between job satisfaction and job performance (or productivity or OCB).

Research supports the relationship between job satisfaction and turnover. Generally, job satisfaction is a rather consistent predictor of turnover behavior and is negatively correlated with turnover intentions among child welfare workers (e.g.,

Landsman, 2001; Mor Barak et al., 2006; Rosenthal & Waters, 2006; Weaver et al., 2007). That is, employees who are satisfied with their jobs are less likely to quit (Hellman, 1997; Manlove & Guzell, 1997; Lum, Kervin, Clark, Reid, & Sirola, 1998; Tett & Meyer, 1993). There is some debate, however, about whether job satisfaction is a precursor to organizational commitment that, in turn, affects employee turnover intention. Several child welfare researchers found that job satisfaction leads to turnover through its effects on organizational commitment and intention to leave (Landsman, 2001; Mannheim & Papo, 2000), the relationship between these two are reciprocal rather than causal (Mor Barak et al., 2006).

Job satisfaction has also been studied as an outcome variable in the child welfare literature. Some studies found that diversity characteristics correlate negatively with job satisfaction. Specifically, minority groups such as women, African-Americans, and older employees have more negative experiences than other groups (Mor Barak & Levin, 2002). There is accumulating evidence to support the connection between one's perception of inclusion and acceptance by the organization and levels of job satisfaction (Mor Barak & Cherin, 1998). Barth, Lloyd, Christ, Chapman, and Dickinson (2008) reported that quality and quantity of supervision, nonurban work location, and social work education are all associated with higher job satisfaction. Research on job satisfaction clearly shows that lack of resources, less rewarding work conditions, lack of support from supervisors and coworkers, and heavy workloads all produce dissatisfied employees (Mor Barak et al., 2006). In conclusion, assessing job satisfaction among current child welfare workers provides important clues to understanding workforce attitudes and behaviors and, to some extent, what might be done to prevent turnover.

2.3.4 The Linkage between Turnover Intention and Actual Turnover

Turnover intention is conceived to be a conscious and deliberate willfulness to leave the organization. It is often measured with reference to a specific interval (e.g., within the next 6 months), and has been described as the last in a sequence of job withdrawal cognitions, a set to which thinking of quitting and intent to search for alternative employment also belong (Blau, 1993). Turnover intention (*or* intention to leave) is believed to be the most powerful predictor of actual turnover (Lance, 1991). Moreover, turnover intention, the most noted precursor of actual turnover, has been well validated as a predictor of turnover (Dickinson & Painter, 2009). Turnover is understood to be the termination of an individual's employment with a given company. Voluntary turnover has been used as an alternative to turnover throughout the research. Voluntary turnover is relevant to consider in evaluating turnover models because those models invariably apply to self-motivated (i.e., voluntary) termination. Many researchers excluded known cases of involuntary turnover (e.g., firings) from their samples (e.g., Fulcher & Smith, 2010; Shaw, Delery, & Gupta, 1998).

As Mor Barak et al. (2001) noted, turnover intention is the single strongest predictor of turnover, and therefore, it is legitimate to use it as an outcome variable in turnover studies. Second, it is more practical to ask child welfare workers their intention to leave in a cross-sectional study because it is difficult to track them longitudinally to see if they have left. Overall, the literature focused on intention to leave suggests that employees who perceive a lack of inclusion by others in the organization, who lack organizational commitment, and who are dissatisfied with their jobs, are more likely to contemplate leaving the organization, consistently the best predictor of actual turnover.

Table 1 illustrates key constructs, and their level of measurement and definitions. In the next section, the theoretical framework will be described that serves as a guide for the conceptual model for this study.

Table 1. *Description of Key Constructs*

Construct	Level of Analysis	Definition
Organizational inclusion	Organization-Group*	The degree to which an employee perceives that he or she is an esteemed member of the work group through experiencing treatment that satisfies his/her needs for belongingness (Shore et al., 2011)
Organizational commitment	Employee-Individual	The relative strength of an individual's identification with and involvement in a particular organization (Mowday et al., 1982)
Job satisfaction	Employee-Individual	An internal state that is expressed by affectively and cognitively evaluating an experienced job with some degree of favor or disfavor (Brief, 1998)
Turnover intention	Employee-Individual	The degree to which an employee is thinking of quitting his/her job (Hanisch & Hulin, 1990)

Note: * The perception of inclusion was also considered as an individual level variable when SEM is utilized.

2.4 Theoretical Framework

As Carpiano and Daley (2006) noted, “a model may draw upon several theories to explore a specific problem in a particular setting” (p. 565). The conceptual model for this study is built upon an overarching theory (*organizational culture/climate* conceptual framework) and two middle-range theories (*social identity theory* and *social exchange theory*).

2.4.1 Organizational Culture/Climate Framework

Organizational culture theory emerged from anthropology and is based on the idea of symbolic interactions between individuals in a social setting (Schein, 1992).

Organizational culture theory identifies culture and climate as central constructs in organizational social context (Ashkanasy, Broadfoot, & Falkus, 2000). The evolution of each construct in the organizational research literature has a unique history.

Glisson and his colleagues (2006) defined culture and climate separately. That is, culture refers to the normative beliefs and shared behavioral expectations in an organizational unit and can be operationalized as behavior, which is the visible part of culture whereas values represent the invisible part (p. 436). Glisson (2002) defined organizational culture as a property of the collective social system, thus culture describes the social context of the work environment and captures patterns of social interaction. Climate is defined as two distinctive components, psychological climate and organizational climate. Psychological climate refers to the individual employee's perception of the psychological impact of the work environment on his or her own well-being (James & James, 1989). When employees in a particular work unit agree on their perceptions of the impact of their work environment, their shared perceptions describe the *organizational climate* in their work unit (Glisson & James, 2002). Climate is a stable organizational characteristic that is maintained over time and gains considerable inertia as generations of workers come and go (Wiener, 1988).

In this study, the organizational culture theory provides a fundamental philosophy for the model. The theory has been consistent with the assumption that organizational culture affects employees' work attitudes and behavior (Glisson et al., 2006). Although there are still debates on the distinction between culture and climate, and multiple definitions of culture and climate have evolved (Glisson & James, 2002), there is some consensus that climate refers to "the way people perceive their work environment" and

culture refers to “the way things are done in the organization” (Verbeke, Volgering, Hessels, 1998, pp. 319-320). Cahalane and Sites (2008) note that a great deal of interest in understanding the dynamics of work environments has been generated among researchers as well as practitioners. Both organizational climate and organizational culture have been demonstrated to have the power to influence and affect the attitudes and behavior of individuals working within an organization.

Glisson et al. (2006) examined the effects of organizational culture and climate on access to mental health care for children in child welfare and juvenile justice systems by conducting an experimental intervention study. Their results showed that constructive organizational cultures have a significant effect on children’s access to mental health care. Lee, Forster, and Rehner (2011) developed a conceptual model to explain the process of turnover in the child welfare workforce. They hypothesized that organizational culture, characterized by adequate supervision/leadership, collegial support, and professional commitment, would significantly influence workers' behavioral and attitudinal outcomes, including propensity to leave or stay. They found that organizational culture was positively associated with worker’s intention to remain; further, in the model testing, coping strategy (i.e., positive thinking, help seeking) was identified as a mediator between organizational culture and intention to remain (Lee et al., 2011).

2.4.2 Social Identity Theory

Social identity theory can restore some coherence to organizational identification, and it can suggest fruitful applications to organizational behavior. Social identity encompasses a person’s holistic psychological identification with social groups and roles

that are deemed meaningful and significant in shaping attitudes, belief, and behaviors (Hopkins, 1997; Tajfel, 1982). Often, people regard members of other categories less favorably than members of their own category in order to enhance self-identity. As a result, they tend to see members of their own category as more likable and trustworthy than members of other social categories (Tajfel, 1982).

Social identity theory is used to explain the relationship between individual identity and social structures through the meaning people attach to their membership in identity groups (i.e., race/ethnicity, gender, age, etc.). As an underlying framework for the model for this study, social identity theory provides a good theoretical foundation for the connection between social context and individual identity through the meaning people attach to their organizations. Mor Barak and her colleagues (2006) employed the social identity theory to explain the linkage between individual identity and social structures through the meanings people attach to their membership in identity groups (e.g., gender, race/ethnicity, age) and found that it was applicable to child welfare worker turnover. Moreover, Cho and Mor Barak (2008) recently identified the relationship between employees' perception of inclusion and their organizational commitment based on social identity theory in culturally different populations. They also specified that social identity theory "indicates that employees' perceptions of organizational actions and policies are influenced by their belonging to specific groups" (Cho & Mor Barak, 2008, p. 106).

2.4.3 Social Exchange Theory

Social exchange theory is among the most influential conceptual frameworks for understanding workplace behavior (Cropanzano & Mitchell, 2005). Social exchange is conceptualized as a "joint activity" of two or more actors in which each actor has

something the other values (Lawler, 2001, p. 322). The implicit or explicit task in exchange is to generate benefit for each individual by exchanging behaviors or goods that actors cannot achieve alone (Emerson, 1976).

Social exchange theory expands the conceptualization of exchange in two main ways. First, exchange outcomes (e.g., rewards and punishments) are construed as having emotional effects that vary in form and intensity. When exchanges occur successfully, actors experience an emotional uplift (a “high”), and when exchanges do not occur successfully, they experience emotional “downs” (Lawler & Yoon, 1996). Therefore, these feelings are intertwined with exchange throughout daily work life. Second, social exchange is a reciprocal activity, but the nature and degree of reciprocity varies. Interdependencies embedded in exchange structures determine the reciprocity of the exchange task. Given the exchange structure, workers’ emotions or feelings from reciprocal exchanges influence how they perceive and feel about their shared activity, and their relationship within organizations. In child welfare workforce research, social exchange theory views intra-organizational relationships, such as those between workers and their supervisors, as social exchanges (Landsman, 2008). Strengthening reciprocal support and communication between administrator and supervisor, and between supervisor and worker, may enhance these exchanges. Moreover, if the exchange relationships are successful in child welfare work settings, they will produce effective work behavior and positive employee attitudes (Hopkins, 2002; Morrison 1996).

Social exchange theory also contributes to constructing the model for this study because it is among the most influential of middle range theories that conceptually connect social constructs and enhance the understanding of employees’ behavior.

According to Blau (1964), social exchanges are referred to as “voluntary actions” that may be initiated by an organization’s treatment of its employees, with the expectation that such treatment will eventually be reciprocated. For example, individuals come to organizations with certain needs, desires, skills, and so forth, and expect that a work environment should be a place in which they can use their abilities and satisfy many of their basic needs. Steers (1977) argued “when an organization provides such a [*exchange*] vehicle, the likelihood of increasing commitment is apparently enhanced” (p. 53). Smith (2005) employed social exchange theory and examined the applicability of it in the child welfare workforce. She found that higher levels of perceived organizational support have an effect of increased organizational commitment and indirectly lead to reduced job turnover. Grounded in the notion of social exchange, the conceptual model for this study suggests that workers develop perceptions about the extent to which their employing organization values their contributions and cares about their welfare. Table 2 exemplifies how these theories and their fundamental assumptions were linked to research questions in this study.

Table 2. *Research Questions Based on Theory*

Theory	Assumption	Research Question
Organizational culture theory (Schein, 1992)	The organizational culture determines employees' behaviors.	<ul style="list-style-type: none"> • Does employees' perception of inclusion vary across organizations? • Does perception of inclusion also relate to employees' work attitudes (commitment and satisfaction) and turnover intention?
Organizational identity theory (Ashforth & Mael, 1989)	The employees' personal characteristics, attitudes, and behaviors change the organizational setting.	<ul style="list-style-type: none"> • Does employees' perception of inclusion vary with diversity characteristics (gender, race/ethnicity, age)? • Does employees' perception of inclusion mediate the effect of diversity characteristics on turnover intention?
Social exchange theory (Blau, 1964)	Employee behavior is a function of person and environment.	<ul style="list-style-type: none"> • Do employees' work attitudes (organizational commitment and job satisfaction) mediate the effect of inclusion perception on turnover intentions?

2.4.4 Conceptual Model

Several theories were needed to fully describe, explain, and predict all the phenomena encompassed by the conceptual model for this study. As shown above in Table 2, organizational culture theory identifies culture and climate as central constructs in an organizational social context to explain the phenomena of turnover (Ashkanasy et al., 2000). Both social identity theory and social exchange theory provide theoretical foundations to pinpoint the major factors of inclusion and exchanges that help explain the phenomena of turnover.

Based on these underlying theories and the integration of prior research (e.g., Lance, 1991; Mor Barak et al., 2006; Schneider, 1987), a structural model was developed,

linking employees' perception of inclusion to their work attitudes (i.e., organizational commitment, job satisfaction), which in turn affects their intentions to leave their jobs. Specifically, the model extends Mor Barak and her colleagues' (2006) conclusion that poorly perceived inclusion among child welfare employees resulted in less satisfaction with their jobs and less commitment to the organization, and builds on Lance's (1991) presumptions that work-related affects such as job satisfaction and organizational commitment act as mediators between predictor variables (i.e., organizational inclusion) and turnover intentions. The model becomes explicit when it is specified as a diagram, which is depicted in Figure 2 (inclusion → organizational commitment/job satisfaction → intention to leave).

There are various kinds of turnover models, but the integrative structural model for this study (see Figure 3) was tested to help explain decisional processes preceding voluntary turnover. Technically, the study model is more exploratory than confirmatory. However, several pathways depicted in Figure 2 (work environment perceptions → affective reactions → withdrawal intention → actual turnover) were tested by SEM analysis and received general support by organizational psychologists (Barden & Petty, 2008).

In sum, the model tested two attitudinal variables (organizational commitment and job satisfaction) as potential bridge constructs and further examined why intention to leave among child welfare workers would be affected by the level of perception of workers' inclusion in a particular organization.

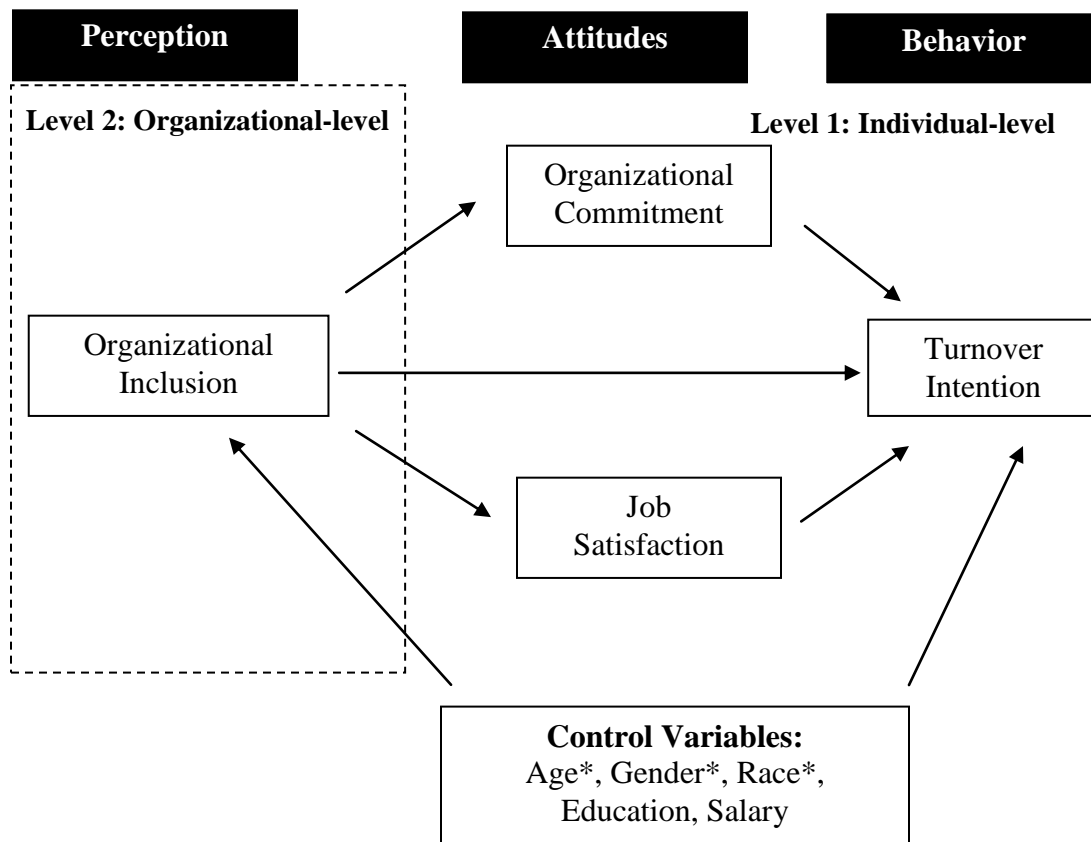


Figure 2. Conceptual Model

Note: variables with* account for diversity characteristics and they are considered as independent variables and control variables as well.

2.4.5 Research Questions and Hypotheses

Based on this model, the study examined the following research questions and hypotheses.

Research Questions 1: What is the relationship between organizational inclusion² and organizational outcomes (e.g., organizational commitment, job satisfaction, intention to leave)?

Hypothesis 1.1 Inclusion perception will be positively related to organizational commitment.

Hypothesis 1.2 Inclusion perception will be positively related to job satisfaction.

Hypothesis 1.3 Inclusion perception will be negatively related to turnover intentions.

Research Questions 2: Are attitudinal variables mediating the effect of inclusion perception on turnover intentions?

Hypothesis 2.1 Organizational commitment will mediate the effect of inclusion perception on turnover intentions.

Hypothesis 2.2 Job satisfaction will mediate the effect of inclusion perception on turnover intentions.

Research Questions 3: Are there cross-level interactions between organizational inclusion as an organizational-level construct and individual attitudinal variables (e.g., commitment or job satisfaction) on turnover intention as individual-level constructs?

² The construct of organizational inclusion was captured by a second-level variable (a contextual variable) throughout the multilevel analytical framework in the study. That is, the variable was created by aggregating individual responses of each county organization. The composition models play an important role in cross-level inferences that link organizational inclusion to individual-level outcome variables. Specifically, reference-shift consensus composition can be well applied to the organizational inclusion construct because it may be considered as a property of the work unit, not of the individual. However, work-group consensus is required to justify the aggregation of the individuals' beliefs about the behavioral expectations and norms within the work unit as a representation of the organizational-level construct, e.g., culture (Chan, 1998; Glisson et al., 2002).

Research Questions 4: Is the structural model, explicating the relationship between diversity characteristics, employee perception of inclusion, organizational commitment (job satisfaction), and intention to leave, psychometrically valid? (see Figure 3)

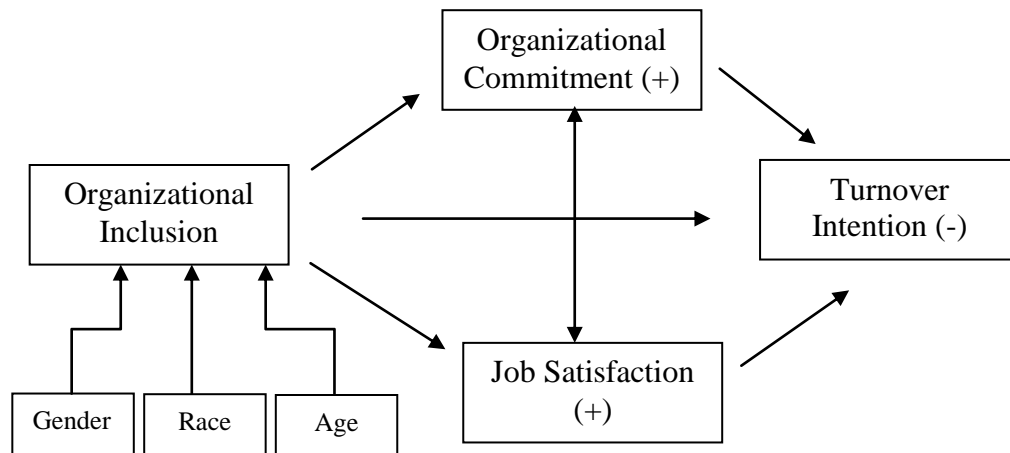


Figure 3. Structural Model for the Study

2.5 Summary

The literature offers important conceptual links for examining employee attitudes and behaviors related to turnover in the public child welfare workforce. Several organizational theories have conceptualized psychological processes that mediate between individual variables and organizational variables, thus affecting employees' behavior. However, little research has been conducted from a multilevel approach using multilevel analysis, even though it may be more appropriate to deal with administrative data that are naturally nested (i.e., *employees in an organization*).

The purpose of the study is to assess whether or not certain attitudinal variables (e.g., organizational commitment or job satisfaction), key factors in retaining competent

employees, mediate the effects of organizational inclusion (e.g., *participation in decision-making, accessibility to organizational resources, and communicability*) on turnover intention in different child welfare county organizations using multilevel analysis.

Attitudes are important to study in organizational research as they affect the way we process information, shape the meaning of our perceptions, and simplify our experiences; in short, attitudes help us to make sense of an overly complex world (Katz, 1960).

Thus, this study examines the role of workers' attitudinal variables (e.g., *organizational commitment, job satisfaction*) in the determination of workers' intention to leave). In addition, the study examines the cross-level effects of organization-level inclusion and individual-level commitment and turnover intention among public child welfare workers.

CHAPTER THREE: METHOD

3.1 Study Overview

This study employed a cross-sectional design using secondary data analysis. A conceptual model was tested that builds on several relevant theories of workforce turnover. The research involved advanced quantitative analysis of survey data from a statewide study of public child welfare workers. First, the study examined the role of an organizational contextual variable, organizational inclusion, in linking attitudinal variables, organizational commitment and job satisfaction, to turnover intention using multilevel mediational analyses. Second, this study tested a conceptual model, linking employee perceptions of organizational inclusion, attitudes about organizational commitment (and job satisfaction), and intention to leave.

3.2. Research Design and Procedures for the Original Study

3.2.1 Research Design

The present study used secondary survey data, which were collected by the University of Maryland School of Social Work (UMSSW) Child Welfare Workforce Retention team, in collaboration with the Maryland Department of Human Resources (DHR) over an 18-month period (Hopkins et al., 2007). A comprehensive, standardized, self-report online questionnaire was developed and the study employed a cross-sectional design. A total of 544 surveys were completed for a response rate of 56.5%. The sample

included a random selection of child welfare workers, supervisors, and administrators from local departments (23 counties, and one city and one central office of the state Department of Human Resources) across the state over an 18-month period.

3.2.2 Sample and Data Collection

The sampling frame came from public child welfare agency databases. The survey samples were selected across counties in the state of Maryland. A web-based survey was implemented for collecting the quantitative data from the sample of public child welfare workers. Additionally, administrative records of current workers and those who had left during the study period were gained through the state DHR database. A \$20 gift card was promised to each respondent who completed the survey to show that the researchers appreciated the participants' time and effort. Table 3 provides the basic profile of the 2007 public child welfare workforce from Maryland counties including demographics such as gender, race, age, and salary. The original source of data is the DHR personnel database.

Table 3. *Demographic Characteristics of Maryland Child Welfare Workforce*

Characteristics		N	%
Gender	Female	1755	85.9
	Male	286	14.0
	unknown	2	0.1
Race	White	817	40.0
	Black	1056	51.7
	Other	123	6.0
	unknown	47	2.3
Total		2043	100%
	Average	Minimum	Maximum
Age	45	23	81
Salary	\$44,997	\$23,358	\$122,067

Source: Maryland DHR database in 2007.

The initial sampling frame for the survey was selected from a proportional representation of public child welfare employees across all 23 counties in the state, and one city and one central office of the state Department of Human Resources, which comprised a total of 2,043 employees. The sampling frame was divided into two groups, one group was 500 employees hired within the previous two years and the other group was 500 employees randomly selected from those with a longer tenure (more than 3 years) (Hopkins et al., 2010). Among them, 29 workers were excluded from the sample because they were incorrectly identified as child welfare workers (i.e., they were actually adult service staff) or they were on medical leave. For the final stage, the maximum sample for the survey was reduced to 971. Of the 971 employees selected, 544 completed a web-based survey with a 56.5% response rate. Table 4 presents the descriptive characteristics of the study participants' age, gender, minority status, and salary.

With regard to data collection, the initial study used the following procedures. First, an invitation letter was sent to each employee selected for the online survey.

Second, the surveys were coded and paired with a list of participant names for the purposes of matching personnel information from the DHR database to the survey respondents, facilitating follow-up reminders to non-respondents, and reimbursing respondents with a gift card for their participation. Third, following Dillman's (2009) format, several waves of "follow-up" (e.g., one letter reminder, one email reminder, and one phone call reminder) were conducted with remaining non-responders to the survey. These above procedures resulted in a relatively good response rate (56.5%), even though the survey was conducted in a web-based format, which is known for a notoriously low response rate, 13% on average, according to the literature (Dillman, 2009).

3.2.3 Measurement

The survey included a series of questions about respondents' personal characteristics and perceptions of organizational and environmental factors related to employees' satisfaction, organizational commitment, perceived work and job withdrawal, and current job search behaviors (see Appendix C).

The research team, in collaboration with an advisory group, developed a comprehensive, valid and reliable survey instrument with standardized measures that would yield useful data for exploring factors related to employee turnover. The research team also examined turnover and retention research, and included discussions with researchers from several other states who were also engaged in child welfare turnover and retention research. Before the implementation of the survey, it was pilot-tested with four child welfare workers who were also social work graduate students to ascertain ease of completion, comprehension, and time commitment. The survey was reconstructed in a web-based format that the study participants could easily access and confidentially

complete. The research team contracted with the company named *Question-Pro* (Online Research Made Easy™) to provide a dedicated web site for the web-based survey. On average, the survey took around 30-45 minutes to complete. The primary measures of interest for the dissertation study are described below.

Organizational Inclusion Scale

Mor Barak and Cherin (1998) developed the original 15-item inclusion scale. It measures the degree to which individuals feel a part of critical organizational processes, which are work group involvement, decision making and access to information and resources. The scale has been used and examined as a reliable measure by a series of subsequent studies (Cho & Mor Barak, 2008; Fidler, Wind, & Mor Barak, 2007; Mor Barak et al., 2002; Mor Barak et al., 2006). In the child welfare study (Hopkins et al., 2007), a brief 8-item scale (the subscale of work group involvement was dropped because of high overlap with another scale measuring work group behavior), was used with a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), whereas the original scale used a 6-point Likert-type scale with the 15-item. The 5-point scale was used for consistency across the survey. The data in the current study indicated good internal consistency reliability (Cronbach's alpha = .77).

Organizational Commitment Scale

The most widely used and validated Organizational Commitment Questionnaire (OCQ; Mowday, Steers, & Porter, 1979) was used to measure individual workers' perception of commitment to their agencies. The OCQ uses a 7-point Likert-type scale ranging from 1 (*not at all*) to 7 (*extremely*). This scale has been tested in subsequent studies (McKay et al., 2007; O'Neill et al., 2009; Simons & Roberson, 2003; Westbrook,

Ellis, & Ellett, 2006). The child welfare study used the 8-item brief version with a 5-point Likert-type scale (also for consistency across the survey) ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The scale showed strong internal consistency reliability with Cronbach's alpha of .91.

Job Satisfaction Scale

A component of Glisson's (2002) Organizational Climate Scale (OCS), that was later converted to a second order factor of morale (Glisson et al., 2006), was used to assess the level of workers' job satisfaction. It consists of a 9-item scale (e.g., How satisfied are you with being able to do things the right way?) that used a 5-point Likert scale from 1 (*not at all*) to 5 (*a very great extent*). The scale showed strong internal consistency reliability with Cronbach's alpha of .89.

Intention to Leave Scale

In order to measure individual worker's turnover intention, a 3-item turnover scale was used in the dissertation study. The turnover scale, a subscale of the Organizational Withdrawal Scale (OWS; Laczko & Hanisch, 1999) from the child welfare study, uses a 5-point Likert-type scale ranging from 1 (*Never*) to 5 (*Constantly*). The scale showed a strong internal consistency for the data with Cronbach's alpha of .84.

Table 4. *Internal Consistency Reliability of Primary Constructs*

Scale	Cronbach's α coefficients
Inclusion	0.77
Organizational Commitment	0.91
Job Satisfaction	0.89
Intention to Leave	0.84

Note: Cronbach's $\alpha > 0.7$ were considered as evidence of an acceptable internal consistency.

Control Variables or Covariates

Based on Glisson and James's (2002) study, several control variables were included for data analysis: individual characteristics of gender, age, minority status, and education. Salary level was added based on Dickinson and Perry's (2002) study. Gender (1 = female, 0 = male), minority status (non-white = 1, 0 = white), and education (MSW = 1, non-MSW = 0) were coded as dichotomous variables distinguishing females from males, workers of color from whites, and Master's degree in social work from other degrees. Age, job tenure, and salary were identified through organizational records and captured in actual years and dollar amount. Among these individual diversity characteristics, gender, age, and race/ethnicity were considered as independent variables. These characteristics are called "visible" or "noticeable" diversity and have been widely used to identify the term "workforce diversity" across studies.

3.3. Data Analysis Plan

3.3.1 Missing data analysis

Missing data can be a serious impediment for data analysis because of the potential for biased results, regardless of how minimal the missing data (He, 2010). Before conducting quantitative data analyses, the following three steps were taken, as recommended by Schlomer, Bauman, and Card (2010). The first step was to estimate the amount of missing data. Experts have not reached a consensus regarding the percentage of missing data that becomes problematic. Schafer (1999) recommended 5% as the cutoff. However, Bennett (2001) suggested that when more than 10% of data is missing, statistical analyses are likely to be biased; and others have used 20% (Peng et al., 2006). The second step was to understand the causes or mechanisms of missing data. Understanding the type or pattern of missing data is key to making correct statistical inference. The third step was to handle missing data using appropriate imputation methods. Full information maximum likelihood (FIML) estimation was used to deal with missing data in the study.

3.3.2 Sample Size Estimation

In order to confirm appropriate sample size with effective power, a post hoc power analysis was conducted. On single-level data analysis, this study has a large enough sample size to provide a precise estimate of parameters. Additionally, regarding single-level structural equation modeling, Kline (2005) states “a sample size of 200 or even much larger may be necessary for a very complicated model” (p.110).

However, in multilevel analysis, it is noted that second level sample size is considered more important than individual level sample size. When the number of groups

at the second level is small, it may be troublesome to estimate the between-group variation and multilevel modeling often adds little to accurate coefficient estimation in such situations, beyond classical OLS regression models (Bickel, 2007). The most common rule of thumb with regard to sample size for multilevel models is to get at least 30 groups and 30 observations per group (Hox, 2002). However, a multilevel analysis with 20 groups and 30 observations per group can be acceptable to run the analysis (Heck & Thomas, 2000). Taken together, this study's second level sample size barely met the threshold with 25 groups and 22 observations per group. But according to Gelman and Hill (2007, p.276), "even two observations per group are enough to fit a multilevel model", and "it is even acceptable to have one observation in many of the groups."

3.3.3 Uni- and Bivariate Data Analysis

Frequencies and percentages were computed for all individual characteristics (e.g., gender, race/ethnicity, and education). Means and standard deviations were also computed for some continuous variables (e.g., age, tenure, and annual salary). Relevant descriptive statistics and bivariate analyses (e.g., Pearson's correlations) were conducted for all standardized scales (organizational inclusion, commitment, satisfaction, intention to leave). In addition, several preliminary analyses were run to examine the bivariate relationships between each personal characteristic and the scaled variables. These preliminary analyses provide a better understanding of group differences with regard to workers' perceptions, work attitudes, and behaviors. *t-tests* were conducted to examine the relationship between demographic variables (e.g., gender, minority, and education) and all other continuous variables. The significance of all the tests was set at an alpha level of .05.

3.3.4 Multivariate Data Analysis

Most of the multivariate analyses used to test the dissertation study's hypotheses were run on SPSS 19. Only the SEM analyses were conducted with *Mplus* 6.1 (Muthén & Muthén, 2010).

Multilevel Mediation Analysis

Multilevel model (MLM) analyses were used to examine the multilevel mediation effects in the study, using SPSS 19. The analyses were conducted using restricted maximum likelihood (REML) estimation for MLMs. REML overweighs ML estimation because it produces diminished bias in estimates of the random components of random regression coefficients when the number of group-level observation is small like the study (Bickel, 2007).

The MLM analyses were used to assess the proportions of variance in individual-level work attitudes (organizational commitment, job satisfaction) and worker's intention to leave explained by organizational-level members' perception of organizational inclusion, over and above the variance explained by individual-level characteristic covariates (e.g., gender, age, race, education, and salary). In the study, a second level variable, organizational inclusion, was created by aggregating individual responses of each organization. To justify the usage of the aggregation method, a within-group consistency analysis and between-group variability analysis were conducted using the $r_{WG(J)}$ and the intraclass correlation coefficient (ICC) before running MLM analyses.

Moreover, to test the multilevel mediating effects, three-stage MLMs were constructed for the two dependent variables, turnover intention and organizational commitment (or job satisfaction). In the first stage, only the organizational random

effects were included (Glisson & James, 2002). In the second stage, individual-level characteristic covariates (i.e., gender, age, minority status, education, and salary) or individual-level constructs (organizational commitment or job satisfaction) were added to control for any organization-related effects in these variables. It should be noted that individual-level covariates were centered at the grand mean. The grand mean centering is a useful corrective for bias in estimating variance of random components, random slopes and intercepts (Bickel, 2007; Enders & Tofighi, 2007). In the third stage, the organization-level construct (organizational inclusion) was included. These three MLM analyses provided: 1) estimates of the incremental proportions of organization and residual variance explained by each model; and 2) estimates of the cross-level effects that exist between each individual-level construct (organizational commitment/job satisfaction) and organizational construct (organizational inclusion), after controlling for all individual-level covariates.

With regard to multilevel mediation effect, the study followed the well-known steps of MacKinnon (2008), conducting three regressions to test mediating effects.

Structural Equation Modeling

Using structural equation modeling (SEM), the conceptual model that depicts the relationship between inclusion, organizational commitment (*or* job satisfaction) and the outcome variable of intention to leave was tested. SEM is a flexible and powerful statistical tool for the development, refinement, and validation of theories and hypothesized relationships among variables (Kline, 2011).

Prior to conducting full SEM, measurement models for latent constructs were tested using confirmatory factor analyses (CFAs) with *Mplus* 6.1 (Muthén & Muthén,

2010). All analyses were conducted according to Byrne's (2012) procedure. Specifically, the CFAs were conducted to see whether the fit of measurement models were good. This step is necessary because misfit in the factors would add to misfit in the structural models that had nothing to do with the hypothesized model (Kline, 2011). If the model fit was good, then the latent variables were used in the structural model.

However, if the initial model fit was bad, several steps were taken to improve the model fit. According to the procedure, one thing that can seriously improve model fit is to correlate some items errors by examining the modification indices suggested. If the model fit was still bad, one of the items may be taken off. But these modification procedures should be justified by strong substantive or empirical rationale for adding to the model. These steps were followed until it could be confirmed that the model fit became good. Through all these procedures, the goal of measurement models was to find the most parsimonious good fitting model; these were selected as final measurement models.

To test the structural equation model, a two-step approach was employed as recommended by Anderson and Gerbing (1988). First, a separate estimation of the measurement model employing Confirmatory Factor Analysis (CFA) was conducted to evaluate whether the observed variables served as adequate indicators of the latent variables. As Kline (2011) noted, "valid measurement model is needed before it makes sense to evaluate the structural part of the model" (p.265), meaning an important preliminary step in the analysis of full SEM is to test first for the validity of the measurement model before making any attempt to evaluate the structural portion of a full SEM. Accordingly, CFAs were conducted in testing the validity of the latent variables of

interest. In this study, there were 4 latent constructs and 3 indicator variables (e.g., gender, age, and race/ethnicity). Full information maximum likelihood (FIML) estimations were used to analyze the variance-covariance matrix because the data revealed evidence of normality and were used for the SEMs with missing data.

For accurate estimates of the variances at the group level, multilevel SEM may be preferred (Hox & Maas, 2001). However, this study does not meet the minimum level two sample size requirement because Hox and Mass (2001) note that “we caution against using multilevel SEM when the number of groups is smaller than 100, especially if the ICC turns out to be low, that is, under 0.25” (p. 171). Recently, Muthén and Muthén (2011) also recommended at least 30-50 groups for multilevel SEM analysis.

The study followed Kline’s (2011) six step application of SEM: (1) specifying a model; (2) identification of the model; (3) estimating the model (evaluating model fit, interpreting parameter estimates); (4) re-specification of the model (if necessary) based on statistical output and theoretical relevance; and (5) presentation of full results including model fit, parameter estimates, and conclusion drawn from comparison to given theories.

CHAPTER FOUR: RESULTS

This chapter presents the results of a secondary data analysis of the Maryland Child Welfare Workforce Retention study (Hopkins et al., 2007). The first section begins with a brief description of the data cleaning process (e.g., frequencies, means, and standard deviations). The second section provides the results of bivariate analyses (e.g., t-tests and Pearson's correlations). The final section describes the results of multivariate analyses (e.g., MLM, SEM).

4.1. Data Cleaning

To guarantee the quality of the data used for the analyses, several steps were performed. First, basic descriptive statistics for each of the variables were used to check for the normality assumption (e.g., skewness, kurtosis, and histogram). Second, any possible violations for multivariate analyses were also checked (e.g., multicollinearity, linearity, and heteroscedasticity). The normality and heteroscedasticity assumptions for residuals were examined by plotting the residuals against the predicted values for the independent variables. Pearson's correlations were conducted to check for multicollinearity between all continuous variables in the models. According to the histograms and measures of skewness and kurtosis, all continuous variables in the study were found to be normally distributed. All correlations for variables were found much lower than the 0.85 benchmark (Kline, 2011); therefore were no concerns about multicollinearity.

Missing data were examined carefully to determine whether there were any patterns. An overview of the missing data for this sample is presented in Table 5. The study followed Bennett’s recommendation of a cutpoint of 10% missingness as a benchmark, while Schafer indicated 5% as a desirable cutpoint to use. For most of the variables, the amounts of missing values were ignorable because they were below 10% of the sample (Bennett, 2001). However, the two variables, age and job satisfaction, exceeded 10% but were below 20% of the sample.

Table 5. *Frequency of Missing Data for Sample of Public Child Welfare Workers*

Variables	# of missing	Percentage
Gender	0	0
Race	50	9.2%
MSW degree	0	0
Age	73	13.4%
Salary	1	0.2%
Organizational inclusion	13	2.4%
Job satisfaction	88	16.2%
Organizational commitment	31	5.7%
Intention to turnover	33	6.1%

Note: N = 544.

To check for potential bias between respondents and non-respondents on these two variables, the reported scores of primary constructs in the study were compared using independent t-tests. The results show that respondents and non-respondents were not significantly different in these primary variables (see Table 6).

Table 6. *Comparison between Respondent and Non-respondents on Age and Job Satisfaction*

Constructs	Age			Job Satisfaction		
	Respondents (n=471) M (SD)	Non-respondents (n=73) M (SD)	<i>p</i>	Respondents (n=456) M (SD)	Non-respondents (n=88) M (SD)	<i>p</i>
Org. inclusion	3.17 (.68)	3.28 (.63)	.19	3.18 (.67)	3.22 (.65)	.61
Org. commitment	3.35 (.79)	3.38 (.75)	.74	3.35 (.77)	3.37 (.87)	.84
Job satisfaction	3.07 (.79)	3.02 (.85)	.67	-	-	-
Intention to leave	2.28 (1.12)	2.27 (1.09)	.92	2.27 (1.12)	2.33 (1.12)	.69

Note: To examine the difference between respondents and non-respondents on study constructs, *t*-tests were conducted; Org. is an abbreviation for organizational.

4.2. Results of Uni-and Bivariate Analyses

Respondents' Demographic Characteristics

A total of 544 surveys were completed in the original study for a response rate of 56.5%. An average of 22 members from each county responded ranging 1 to 116 with a standard deviation of 24. Table 7 presents participant's descriptive information, including age, gender, minority status, and salary. The sample has an average age of 41.5 (*SD* = 11.1) years; the majority of respondents were female (90%) and White (54.6%). Over

half (54.2%) of respondents had a Master’s degree in Social Work, and the average salary was \$43,737 ($SD = \$ 8,991$).

Table 7. *Descriptive Statistics of the Major Variables*

Variables	N (%)
Gender	
Male	52 (9.6%)
Female	492 (90.4%)
Race	
White	297 (54.6%)
Black	177 (32.5%)
Others	20 (3.7%)
Missing	50 (9.2%)
MSW degree	
Yes	295 (54.2%)
No	249 (45.8%)

Note: MSW is an abbreviation for Master’s degree in Social Work, N=544

Group Comparisons by Gender, Age, Minority Status, and Location

t-tests were conducted to examine differences in mean scores of primary constructs by individual diversity characteristics such as gender, age (dichotomized by a cutpoint of 45-years old based on Mor Barak et al.’s study), and minority status.

There were no gender differences with regard to perception of inclusion, attitudes about organizational commitment and job satisfaction, and turnover intention (see Table 8).

There were also no significant differences by age in mean scores of those constructs, except for that of turnover intention. That is, younger respondents who were less than 45 years of age were more likely to intend to leave their organizations than their counterparts who were more than 45 years of age [$t(442) = 3.245, p = .001$]. Interestingly, all of the mean scores for the study constructs differed significantly by respondents' racial/ethnic minority status. That is, respondents who were white were more likely than nonwhite respondents to perceive inclusion in decision making [$t(480) = 2.44, p = .015$], feel more committed to the organizations [$t(480) = 2.299, p = .022$] yet feel less satisfied with the organizations [$t(420) = -2.434, p = .015$], and they were less likely to intend to leave their organizations [$t(481) = -3.342, p = .001$]. Little is known about whether the factors that influence retention vary by geographical location (Aguiniga et al., in press).

Location was found to contribute to significant differences in the mean scores of organizational inclusion [$t(529) = 5.228, p = .001$], organizational commitment [$t(511) = 4.573, p = .001$], and intention to leave [$t(509) = -2.319, p = .021$], but not workers' job satisfaction. Specifically, workers who were employed in rural county agencies were more likely to perceive high inclusion, feel more committed to their organization and less likely to think about leaving than their counterparts in urban counties.

Table 8. *Workers' Perceptions and Behaviors by Gender, Age, and Race/Ethnicity*

	Inclusion <i>M (SD)</i>	OC (a) <i>M (SD)</i>	JS (b) <i>M (SD)</i>	IL (c) <i>M (SD)</i>
Total	3.19 (0.67)	3.06 (0.8)	3.35 (0.78)	2.29 (1.12)
Gender	<i>t</i> (529) = -.201	<i>t</i> (511) = -.008	<i>t</i> (454) = .326	<i>t</i> (509) = .295
Female	3.19 (0.67)	3.35 (0.77)	3.06 (0.8)	2.28 (1.10)
Male	3.17 (0.64)	3.35 (0.87)	3.10 (0.82)	2.33 (1.28)
Age	<i>t</i> (457) = .560	<i>t</i> (441) = -1.216	<i>t</i> (389) = -1.5	<i>t</i> (442) = 3.245**
Less than 45	3.19 (0.65)	3.31 (0.77)	3.02 (0.75)	2.43 (1.19)
More than 45	3.15 (0.71)	3.40 (0.82)	3.15 (0.86)	2.09 (0.99)
Minority Status	<i>t</i> (480) = 2.44*	<i>t</i> (480) = 2.30*	<i>t</i> (420) = -2.43*	<i>t</i> (481) = -3.342**
White	3.25 (0.64)	3.42 (0.76)	2.99 (0.75)	2.12 (0.99)
Non-white	3.09 (0.72)	3.25 (0.80)	3.18 (0.86)	2.48 (1.23)
Geographical location	<i>t</i> (529) = 5.228**	<i>t</i> (511) = 4.573**	<i>t</i> (454) = 1.839	<i>t</i> (509) = -2.319*
Urban	3.06 (0.64)	3.21 (0.75)	2.99 (0.80)	2.39 (1.15)
Rural	3.36 (0.67)	3.52 (0.79)	3.14 (0.79)	2.16 (1.06)

Note: (a) Organizational Commitment, (b) Job Satisfaction, (c) Intention to Leave; geographical location was dichotomized based on the number of employee in each county agency (e.g., urban: county agency with 100 employees or more, rural: less than 100 employees); * = $p < .05$, ** = $p < .01$.

Correlations among Continuous Predictor Variables and Outcome Variable

The simple bivariate correlations were also calculated among the continuous variables/predictors and outcome variable. There were some statistically significant associations among the variables of interest (see Table 11). For example, significant negative associations were found between organizational inclusion and intention to leave, job satisfaction and intention to leave, and organizational commitment and turnover intention. Annual salary was not significantly associated with turnover intention ($r = -$

.036, $p = .415$). All correlations were found in the expected direction, and most of the predictors were significantly correlated with individual worker's turnover intention.

Table 9. *Correlations among Continuous Predictor Variables and Outcome Variable*

	1	2	3	4	5	6
1. Age	1.0					
2. Salary	.323**	1.0				
3. Organizational inclusion	.001	.123**	1.0			
4. Organizational commitment	.084	.139**	.505**	1.0		
5. Job satisfaction	.108*	.102*	.481**	.548**	1.0	
6. Intention to leave	-.146**	-.036	-.331**	-.515**	-.404**	1.0

Note: Pearson correlations were calculated for continuous variables.

* = $p < .05$, ** = $p < .01$.

4.3. Results of Multi-level Models

Following the recommendations of Gelman and Hill (2003) and MacKinnon (2008), models were built and tested incrementally. A second level variable, organizational inclusion, was created by aggregating individual responses in each county and the aggregated organizational inclusion variable was included in the multilevel analyses. Therefore, to justify the data aggregation, a within-group consistency analysis using James et al.'s (1984) r_{WG} tests (i.e., r_{WG} index for measure with a single item; $r_{WG(J)}$ for multiple item measure) whether members in each of the county organizations agreed internally in their perceptions of organizational inclusion. This is a necessary

prerequisite for composing the individual-level responses to a higher-level (county organization) construct (Glisson et al., 2002). In addition to within-groups consistency, between-group differences among the county organizations on each construct were calculated using the intraclass correlation coefficient (ICC). This is important because within-group consistency can occur without between-group differences when there is a consistency in responses across larger organizational units, as well as within the organizations of interest.

Within-group Consistency Analysis

The r_{WG} index of within-group agreement (James et al., 1984) has become a popular research tool for justifying the use of aggregate measures as indicators of group-level properties (as in direct consensus and referent-shift consensus models; Chan, 1998). For these consensus models, a high level of agreement implies there is enough shared perception among group members that an average of individual responses can represent the group-level concept.

The range of indices and averages for each construct are displayed in Table 9. The $r_{WG(J)}$ coefficients for each construct for all county organizations ranged between 0.63 and 0.98 (except for job satisfaction), with an average between 0.82 and 0.95. These values indicate high within-group consistency of responses in the sample.

Table 10. *Within-group Consistency Analysis for 25 County and State Agencies*

Constructs	$r_{WG(J)}$		
	Minimum	Maximum	Average
Org. Inclusion	0.63	0.95	0.85
Org. Commitment	0.88	0.98	0.95
Job Satisfaction	0.32	0.98	0.91
Intention to Leave	0.63	0.95	0.82

Note: $r_{WG(J)}$ is within-group consistency index, $N=544$; 0.70 has been used as cut-point for establishing high versus low within-in group agreement (James et al., 1984)

Between-groups Analysis

Between-group differences were calculated using the intraclass correlation coefficient. The coefficients reported in Table 10 provide evidence of between-organization differences. The ICCs ranged from .07 to .148 (except for .022 for job satisfaction), which indicate that 7% to 14.8 % of the variability in the constructs of interest were attributable to differences between county agencies. The ICC computed via a random intercepts model indicates the proportion of total variance that is between organizations (Bliese, 2000). Although no absolute standard for aggregation based on the ICC has been established, Bliese (2000) suggested that ICC values exceeding 0.05 are considered sufficient to warrant aggregation.

Table 11. *Intraclass Correlation Coefficients (ICCs) for Inclusion, Organizational Commitment, Job Satisfaction, and Intention to Leave*

	Between-county variance	Within-county variance	ICC
Org. Inclusion*	0.031	0.413	0.070
Org. Commitment	0.094	0.540	0.148
Job Satisfaction	0.014	0.630	0.022
Intention to Leave	0.102	1.177	0.080

Note. *Org. Inclusion variable was the only variable which was aggregated for MLM analysis, but the other variables were also computed for reference information.

These results provide justification for aggregating individual-level responses to measure a county-level construct (e.g., organizational inclusion). Therefore, the organizational inclusion variable was created by aggregating the individual-level data so the analysis could be conducted at the organizational level (Krull & MacKinnon, 1999).

Regarding research Questions 1, 2, and 3, three-stage MLMs were constructed for the three dependent variables, turnover intention, and organizational commitment and job satisfaction in each analytical framework. In the first stage, only the organizational random effects were included (Model 1). In the second stage, individual-level demographic covariates (i.e., gender, age, minority status, education, and salary) and individual-level constructs (organizational commitment or job satisfaction) were added to control for any organization-related effects in these variables (Model 2). In the third stage, the organization-level construct (organizational inclusion) was included (Model 3).

The following section presents results from all primary models tested for Research Questions 1, 2, and 3.

Research Question 1: *What is the relationship between organizational inclusion and organizational outcomes (e.g., organizational commitment, job satisfaction, intention to leave)?*

The intraclass correlation (ICC) that includes only random intercept across counties showed that a fair proportion of the variance in organizational commitment was explained by county membership (14.84%; $[0.0941/(0.54 + 0.0941)] = 0.1484$) in Model 1 shown in Table 12. Table 12 shows that the individual-level demographic characteristics explained some proportion of the county-level variance in the individual-level organizational commitment. This was calculated by subtracting the county variance in Model 1 from the county variance in Model 2 with no covariates, and then dividing by the random county variance in the model 2 (18.18%; $[(0.11-0.09)/0.11]$). The county-level construct (organizational inclusion) in Model 3 accounted for all of the remaining county-level variance in organizational commitment (81.82%).

Additionally, Model 3 tested the relationship between organizational inclusion as a second level and organizational commitment as a first level variable in examining the impact of organizational inclusion as an independent variable on workers' turnover intention, while controlling other individual variables (e.g., gender, age, race/ethnicity, master's degree in SW, and salary) in the multilevel model. The results confirmed Hypothesis 1.1, which was "*inclusion perception is positively related to organizational commitment*" and are displayed in Table 12. The final model showed that the fixed-effects estimates of higher salary ($t = 2.091, p = .037$) in individual level and higher organizational inclusion in county level resulted in significantly higher levels of organizational commitment. That is, for every additional unit of workers' organizational

inclusion, on average, the mean organizational commitment scores increased by 1.11 points across counties ($t=4.99, p < .001$). Salary level was significantly associated with workers' commitment to their organizations.

Table 12. *Multilevel Model of Fixed and Random Effects for Organizational Commitment as a Dependent Variable (OI-OC)*

Parameter	Model 1	Model 2	Model 3
Fixed effects			
Intercept	3.44 (0.07)	3.44 (0.08)	3.34 (0.05)
Level 1 (individuals-specific)			
<i>Gender</i>		-0.09 (0.14)	-0.09 (0.14)
<i>Age</i>		0.01 (0.00)	0.01 (0.00)
<i>Minority status</i>		0.03 (0.09)	-0.04 (0.09)
<i>Salary</i>		0.0* (0.00)	0.0* (0.00)
<i>MSW</i>		-0.04 (0.09)	-0.03 (0.09)
Level 2 (county-level)			
<i>Organizational inclusion</i>			1.11** (0.22)
Random parameters			
<i>Residual variance</i>	0.54** (0.03)	0.53** (0.04)	0.54** (0.04)
<i>County variance</i>	0.09* (0.04)	0.11* (0.05)	0.02 (0.02)
Goodness of Model-fit			
<i>-2 log likelihood</i>	1174.7	985.4	970.9

Note: each parameter estimate's standard error (SE) was presented in parentheses; all reported coefficients were unstandardized estimated; estimates for salary were quite small such as 1.110699E-5 and 1.046048E-5, respectively, in models 2 and 3 because units of salary were measured in every one dollar.

*= $p < .05$; **= $p < .01$.

The multilevel model with another dependent variable, job satisfaction, showed a low level of ICC (2.22%; $[0.0143/(0.6296 + 0.0143)] = 0.0222$) in Model 1 shown in Table 13 and found that the fixed-effects estimates of workers' minority status ($t = 2.649$,

$p = .009$) in individual level and higher organizational inclusion in county level resulted in significantly higher levels of job satisfaction. That is, Model 3 tested the relationship between organizational inclusion as a second level and job satisfaction as a first level variable in examining the impact of organizational inclusion as an independent variable on workers' job satisfaction, while controlling other individual variables in the multilevel model. The results confirmed Hypothesis 1.2, which was "*inclusion perception is positively related to job satisfaction*" and are displayed in Table 13. Specifically, for every additional unit of workers' organizational inclusion, on average, the mean job satisfaction scores increased by 0.67 points across counties ($t = 3.194, p = .005$).

Table 13. *Multilevel Model of Fixed and Random Effects for Job Satisfaction (OI-JS) as a Dependent Variable*

Parameter	Model 1	Model 2	Model 3
Fixed effects			
Intercept	3.44 (0.07)	3.09 (0.06)	3.07 (0.05)
Level 1 (individuals-specific)			
<i>Gender</i>		0.09 (0.06)	0.08 (0.17)
<i>Age</i>		0.01 (0.00)	0.01 (0.00)
<i>Minority Status</i>		0.18 (0.09)	0.25** (0.09)
<i>Salary</i>		0.0 (0.00)	0.0 (0.00)
<i>MSW</i>		-0.04 (0.10)	-0.05 (0.09)
Level 2 (county-level)			
<i>Organizational Inclusion</i>			0.67** (0.21)
Random parameters			
<i>Residual variance</i>	0.62** (0.04)	0.60** (0.05)	0.59** (0.05)
<i>County variance</i>	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)
Goodness of Model-fit			
<i>-2 log likelihood</i>	1094.1	882.6	874.5

Note: * = $p < .05$; ** = $p < .01$

The multilevel model with the dependent variable, turnover intention, showed a relatively low level of ICC (7.87%; $[0.10/(1.17 + 0.10)] = 0.0787$) in Model 1 shown in Table 14 and found that the fixed-effects estimates of younger workers ($t = -.02, p < .01$) and white-workers ($t = -.28, p < .01$) in individual level and lower organizational inclusion in county level resulted in significantly higher levels of turnover intention.

Model 3 tested the relationship between organizational inclusion as a second level and turnover intention as a first level variable in examining the impact of organizational inclusion as an independent variable on workers' turnover intention, while controlling other individual variables (e.g., gender, age, race/ethnicity, master's degree in SW, and

salary) in the multilevel frameworks. The results confirmed Hypothesis 1.3, which was “inclusion perception is negatively related to turnover intentions.” For every additional unit of workers’ organizational inclusion, on average the mean turnover intention scores decreased by 0.89 points across counties ($t = -3.005, p = 0.011$).

Table 14. *Multilevel Model of Fixed and Random Effects for Turnover Intention as a Dependent Variable (Inclusion-Turnover)*

Parameter	Model 1	Model 2	Model 3
Fixed effects			
Intercept	2.23 (0.09)	2.24 (0.08)	2.29 (0.07)
Level 1			
<i>Gender</i>		-0.20 (0.20)	-0.19 (0.20)
<i>Age</i>		-0.02** (0.01)	-0.02** (0.01)
<i>Minority Status</i>		-0.35** (0.13)	-0.28** (0.12)
<i>Salary</i>		0.0 (0.00)	0.0 (0.00)
<i>MSW</i>		0.12 (0.13)	0.12 (0.12)
Level 2 (county-level)			
<i>Organizational Inclusion</i>			-0.89* (0.30)
Random parameters			
<i>Residual variance</i>	1.17** (0.08)	1.15** (0.08)	1.14** (0.08)
<i>County variance</i>	0.10 (0.06)	0.06 (0.06)	0.03 (0.04)
Goodness of Model-fit			
<i>-2 log likelihood</i>	1557.3	1293.8	1285.914

Note: * = $p < .05$; ** = $p < .01$

Research Question 2: *Are attitudinal variables (organizational commitment, job satisfaction) mediating the effect of inclusion perception on turnover intentions?*

Table 15 presents the results of the multilevel model, including individual-level covariates and individual-level organizational commitment, and county-level organizational inclusion. The fixed effects variances for individual-level covariates and organizational commitment, and county-level organizational inclusion showed that with increasing age ($t = -3.266, p = .001$), non-minority status ($t = 2.714, p = .007$), and higher organizational commitment ($t = -10.818, p < .001$), there were significantly lower levels of turnover intention.

Using MacKinnon's (2008) steps for testing the mediating effect, there is evidence that organizational commitment mediates the effect of organizational inclusion on turnover intention because county-level organizational inclusion was initially significantly associated with worker's turnover intention (see Table 14), but it was not significant after including individual-level organizational commitment in the model (see Table 15). That is, path estimate coefficients from organizational inclusion to turnover intention (see Figure 4) became non-significant (from $-.89$ to $-.19$). Therefore, organizational commitment is successfully mediating the relationship between organizational inclusion and turnover intention among workers. This result confirmed Hypothesis 2.1 (*“organizational commitment mediates the effect of organizational-level inclusion perception on individual-level turnover intentions”*).

Table 15. *Multilevel Model of Fixed and Random Effects for Turnover Intention as a Dependent Variable (OI-OC-Turnover)*

Parameter	Model 1	Model 2	Model 3
Fixed effects			
Intercept	2.23 (0.09)	2.25 (0.05)	2.27 (0.06)
Level 1			
<i>Gender</i>		-0.26 (0.18)	-0.26 (0.18)
<i>Age</i>		-0.02** (0.00)	-0.02** (0.01)
<i>Minority Status</i>		0.30** (0.10)	0.30** (0.11)
<i>Salary</i>		0.0 (0.00)	0.0 (0.00)
<i>MSW</i>		0.07 (0.11)	0.07 (0.11)
<i>Organizational</i>		-0.70** (0.06)	-0.69** (0.06)
Level 2 (county-level)			
<i>Organizational Inclusion</i>			-0.19 (0.26)
Random parameters			
<i>Residual variance</i>	1.18** (0.08)	0.89** (0.06)	0.89** (0.06)
<i>County variance</i>	0.10 (0.06)	0.01 (0.03)	0.02 (0.03)
Goodness of Model-fit			
<i>-2 log likelihood</i>	1557.3	1153.1	1153.9

Note: * = $p < .05$; ** = $p < .01$

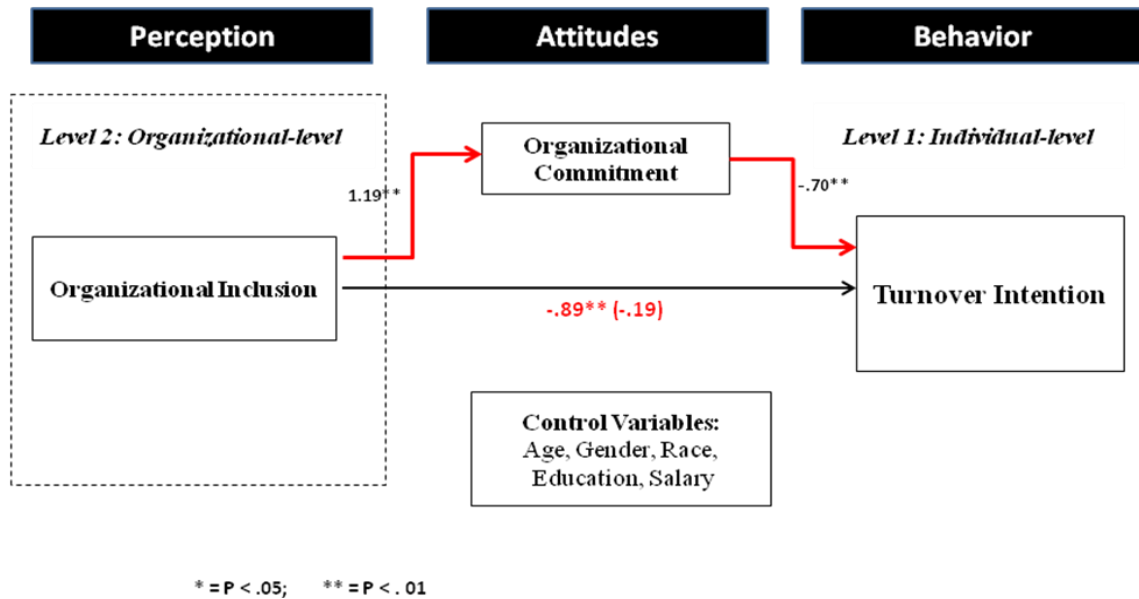


Figure 4. Finding of MLM with a Mediating Variable of Organizational Commitment

Table 16 shows the results of the multilevel model, including individual-level covariates and individual-level job satisfaction, and county-level organizational inclusion. The fixed effects variances for individual-level covariates and job satisfaction, and county-level organizational inclusion showed that with increasing age ($t = -2.712, p = .007$), non-minority status ($t = 3.703, p < .001$), higher job satisfaction ($t = -7.911, p < .001$), and greater organizational inclusion ($t = -2.455, p = .015$), there were significantly lower levels of turnover intention.

Table 16. *Multilevel Model of Fixed and Random Effects for Turnover Intention as a Dependent Variable (OI-JS-Turnover)*

Parameter	Model 1	Model 2	Model 3
Intercept	2.23 (0.09)	2.23 (0.06)	2.24 (0.05)
Level 1 (individuals-specific)			
<i>Gender</i>		-0.04 (0.22)	-0.02 (0.21)
<i>Age</i>		-0.01* (0.01)	-0.01** (0.01)
<i>Minority Status</i>		0.54** (0.11)	0.44** (0.12)
<i>Salary</i>		0.0 (0.00)	0.0 (0.00)
<i>MSW</i>		0.07 (0.12)	0.07 (0.12)
<i>Job Satisfaction</i>		-0.57** (0.07)	-0.54** (0.24)
Level 2 (county-level)			
<i>Organizational Inclusion</i>			-0.59 *(0.24)
Random parameters			
<i>Residual variance</i>	1.18** (0.08)	0.98** (0.08)	0.97** (0.07)
<i>County variance</i>	0.10 (0.06)	0.01 (0.02)	0.00 (0.00)
Goodness of Model-fit			
<i>-2 log likelihood</i>	1557.3	1034.5	1029.6

Note: * = $p < .05$; ** = $p < .01$

For testing the mediating effect, it is concluded that job satisfaction did not mediate the effect of organizational inclusion on turnover intention because county-level organizational inclusion was initially significantly associated with worker's turnover intention (see Table 14), and then it was still significant after including individual-level job satisfaction in the model (Table 16). That is, path *estimate coefficients from organizational inclusion to turnover intention* (see Figure 5) did not become non-

significant (from -.89 to -.59). Therefore, job satisfaction does not appear to play a significant mediating role in linking organizational inclusion to turnover intention among child welfare workers. This result did not confirm Hypothesis 2.2 (“*job satisfaction mediates the effect of inclusion perception on turnover intentions*”).

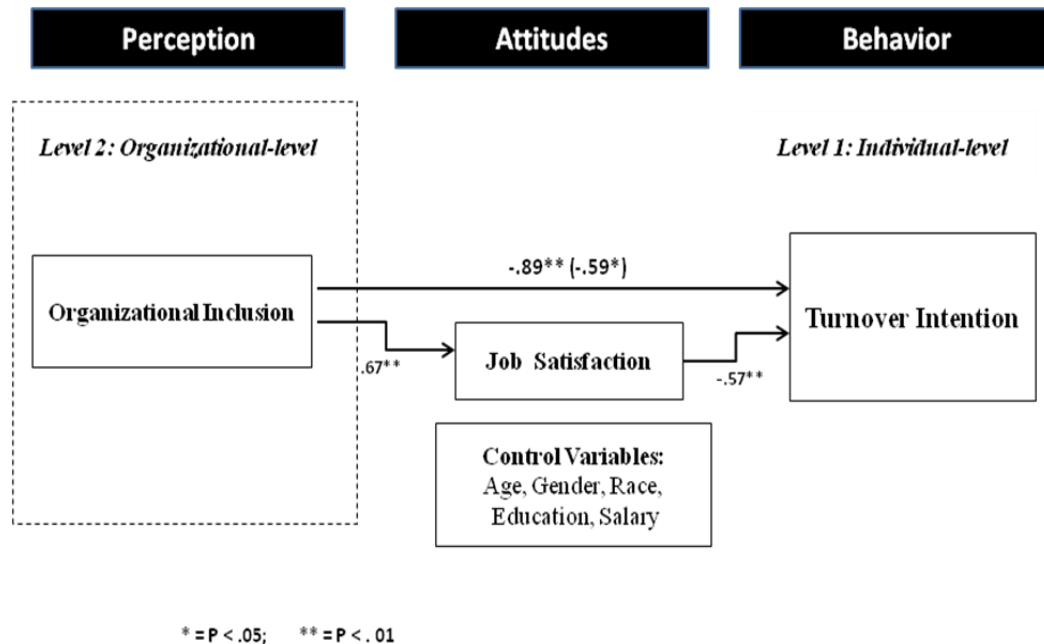


Figure 5. Finding of MLM with a Mediating Variable of Job Satisfaction

Research Question 3: *Are there cross-level interactions between organizational inclusion and individual attitudinal variables (e.g., commitment, job satisfaction) on turnover intention?*

With regard to a cross-level effect between individual- and county-level constructs, a multilevel model was constructed comprised of individual demographic covariates and organizational commitment, county-level organizational inclusion, and a cross-level interaction term for an individual-level construct (organizational commitment)

by a county-level construct (organizational inclusion). The MLM analysis examined the cross-level effects of organization-level inclusion and individual-level commitment, and turnover intention among child welfare workers. The results, shown in Table 17, did not confirm Hypothesis 3.1 (“*there is a cross-level interaction between organizational-level inclusion and individual-level commitment on turnover intention*”). There was no significant cross-level effect between organizational-level inclusion and individual-level commitment ($t = .642, p = .521$). However, in terms of the fixed effects estimates, increasing age ($t = -3.182, p = .002$), non-minority status ($t = 2.729, p = .007$), and higher individual-level organizational commitment were related to significantly lower levels of turnover intention among child welfare workers ($t = -10.829, p < .001$).

Table 17. *Multilevel Model of Fixed and Random Effects for Turnover Intention as a Dependent Variable Interacted with OC (The Cross-level Effect Model)*

Parameter	Model 1	Model 2	Model 3
Fixed effects			
Intercept	2.23 (0.09)	2.26 (0.05)	2.26 (0.06)
Level 1 (individuals-specific)			
<i>Gender</i>		-0.26 (0.18)	-0.26 (0.18)
<i>Age</i>		-0.02** (0.00)	-0.02** (0.00)
<i>Minority Status</i>		0.30** (0.10)	0.30** (0.11)
<i>Salary</i>		0.0 (0.00)	0.0 (0.00)
<i>MSW</i>		0.07 (0.11)	0.07 (0.11)
<i>Organizational Commitment</i>		-0.70** (0.06)	-0.70** (0.06)
Level 2 (county-level)			
<i>Organizational Inclusion</i>			-0.10 (0.27)
<i>OC × OI</i>			0.16 (0.25)
Random parameters			
<i>Residual variance</i>	1.18** (0.08)	0.89** (0.06)	0.89** (0.06)
<i>County variance</i>	0.10 (0.06)	0.01 (0.03)	0.02 (0.03)
Goodness of Model-fit <i>-2 log likelihood</i>	1557.3	1153.1	1154.4

Note: *= $p < .05$; **= $p < .01$

The MLM analysis examined the cross-level effects of organization-level inclusion and individual-level job satisfaction, and turnover intention among child welfare workers. The results (see Table 18) did not confirm Hypothesis 3.2 (“*there is a cross-level interaction between organizational-level inclusion and individual-level job satisfaction on turnover intention*”). There was no significant cross-level effect. However, in terms of the fixed effects estimates, increasing age ($t = -2.702, p = .007$), non-minority status ($t = 3.697, p < .001$), and higher individual-level job satisfaction ($t = -7.934, p < .001$) were significantly related to lower levels of turnover intention. Higher level of

organizational inclusion was also related to significantly lower levels of turnover intention among child welfare workers ($t = -2.369, p = .018$).

Table 18. *Multilevel Model of Fixed and Random Effects for Turnover Intention as a Dependent Variable Interacted with JS (The Cross-level Effect Model)*

Parameter	Model 1	Model 2	Model 3
Fixed effects			
Intercept	2.23 (0.09)	2.23 (0.06)	2.25 (0.05)
Level 1 (individuals-specific)			
<i>Gender</i>		-0.04 (0.22)	-0.01 (0.22)
<i>Age</i>		-0.01* (0.01)	-0.01** (0.01)
<i>Minority Status</i>		0.54** (0.11)	0.44** (0.12)
<i>Salary</i>		0.0 (0.00)	0.0 (0.00)
<i>MSW</i>		0.07 (0.12)	0.07 (0.24)
<i>Job Satisfaction</i>		-0.57** (0.07)	-0.54** (0.07)
Level 2 (county-level)			
<i>Organizational Inclusion</i>			-0.57*(0.24)
<i>JS × OI</i>			-0.20 (0.27)
Random parameters			
<i>Residual variance</i>	1.18** (0.08)	0.98** (0.08)	0.97** (0.07)
<i>County variance</i>	0.10 (0.06)	0.01 (0.02)	0.00 (0.00)
Goodness of Model-fit			
<i>-2 log likelihood</i>	1557.3	1034.5	1029.9

Note: * = $p < .05$; ** = $p < .01$

4.4. Results of Structural Equation Models

The study also tested a conceptual model, an integrative structural model of linking worker's diversity characteristics and perception of organizational inclusion, work-related effects (e.g., organizational commitment and job satisfaction), and turnover intention in public child welfare organizations.

Research Questions 4: *Is the structural model, explicating the relationship between diversity characteristics, employee perception of inclusion, organizational commitment (and job satisfaction), and intention to leave, psychometrically valid?*

In the hypothesized conceptual model, there were specified linkages among the variables of interest, which were supported in theory and prior research. Structural equation models were conducted to test the validity of these specified paths in the full SEM.

In this study, there were 4 latent constructs and 3 indicator variables (e.g., gender, age, and race/ethnicity). From the CFAs, final measurement models were retained and used in the structural model. The results of CFAs confirmed a 4-item one-factor structure for organizational inclusion, an 8-item one-factor structure for organizational commitment, and a 9-item single factor for job satisfaction (see Appendix B). Specifically, it should be noted that the one-factor structure of the organizational inclusion scale³, tapping only the concept of participative decision making, was used for further SEM analysis.

Second, the proposed structural equation model, which includes measurement and structural components, was tested. Once the measurement model was found to have adequate model fit, then several directional paths to test the full SEM model were applied, thus examining relationships among the latent constructs. With regard to evaluating

³ The organizational inclusion scale, developed by Mor Barak et al. (1998), originally consisted of three different subscales, each of them tapping on the concepts of work group involvement, participation in decision making, and access to information and resources, respectively. In the survey research, a short version of the scale, which consists of two subscales (participation in decision making, access to information and resources) was implemented. The final measurement model of a brief version of organizational inclusion, which consists of one-factor structure (participation in decision making), was used in SEM analysis because the second factor (access to information and resources) showed a low internal consistency reliability, and all factor loadings from each item were far below the criterion of 0.40 (Rogers et al., 1994).

model fit, it is recommended to use one fit index from each category of fit indices (e.g., absolute, parsimony adjusted, and comparative; Brown, 2006; Hu & Bentler, 1999) and to look at more than one fit index because they each calculate model fit in slightly different ways (Kline, 2011). Table 19 presents the fit indices used in this study as well as the type and acceptable range of values to indicate adequate or good fit for SEM models.

Table 19. *Fit Indices for Model Evaluation*

Index	Type/description	Range for adequate or good fit
Chi-square (χ^2 , χ^2/df)	Scaled as badness-of-fit statistic, Sample sized adjusted χ^2 statistic, used for comparison of nested models	Non-significant is good (it tells that the model is consistent with the covariance data but does not tell whether the model is correct or not)
Comparative fit index (CFI)	Incremental improvement in fit over baseline model improvement in fit	.95 or greater = good fit, .90-.95 = acceptable fit
Tucker-Lewis fit index (TLI)	Incremental fit index	.95 or greater = good fit, .90-.95 = acceptable fit
Root mean square error of approximation (RMSEA)	Absolute fit index	.06 or below = good fit; .06-.08 = adequate model fit; .08-.10 = mediocre fit; .10 or greater = poor fit
Standardized root mean square residual (SRMR)	Absolute fit index	.05 or less = good fit, .05-.08 = adequate fit

Sources: Brown (2006); Hu and Bentler (1999).

In the first stage, relationships among diversity characteristics (e.g., gender, age, and race/ethnicity), organizational inclusion, and turnover intention were defined. The full model (Model 1) fit the data adequately [χ^2 (310) = 719.355, p = .000, RMSEA = .056 (.050 - .061), CFI = .928, TLI = .920, and SRMR = .095]. Among diversity

characteristics, only minority status was significantly related to organizational inclusion. That is, nonwhites were less likely to perceive the workplace as inclusive than their counterparts ($\beta = -.240, p = .019$). Additionally, two significant indirect paths between inclusion and turnover intention via organizational commitment or job satisfaction were identified in the model. Therefore, in this model, organizational commitment appeared to have the significant relationship of individual level organizational inclusion to inclusion and, in turn, to turnover intention ($\beta = .508, p < .001, \beta = -.532, p < .001$); job satisfaction also showed a significant relations to inclusion and turnover intention ($\beta = .512, p < .001, \beta = -.184, p < .001$). This model accounted for 33% of the variance in turnover intention.

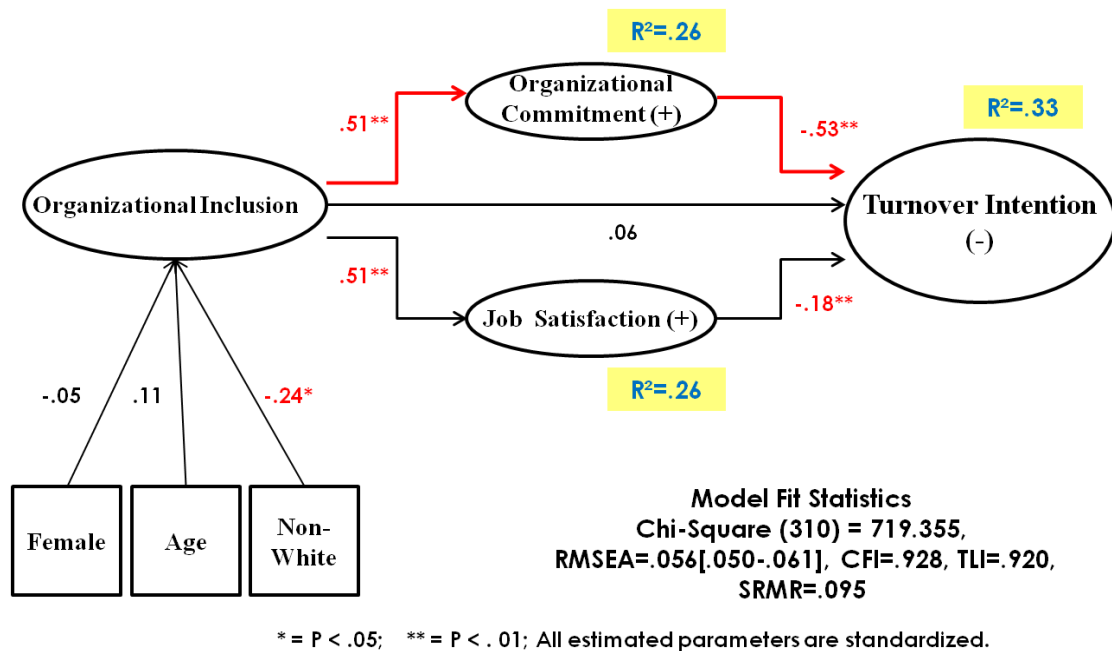


Figure 6. Initial Turnover Model with Standardized Estimates

In the second stage, a path (job satisfaction → organizational commitment) was added. The full model (Model 2) fit the data well [$\chi^2 (309) = 627.361, p = .000$ RMSEA = .049 (.044-.055), CFI = .944, TLI = .937, and SRMR = .048]. In terms of goodness-of-

fit indices, and based on the χ^2 difference test, Model 2 provided better model fit than Model 1. In the third stage, the original path was reversed (organizational commitment → job satisfaction) in Model 3. As a result, the two models (Models 2 & 3) yielded the same model fit indices; that is, they are referred to equivalent models (Kline, 2011). Given prior research, however, the model 2 was preferred over the model 3 as the study's final model. Most of prior research supported the directionality linking job satisfaction to organizational commitment in order (Currivan, 1999; Landsman 2008). It was built by Kline's (2011) suggestion that "the choice among equivalent models must be based on theoretical rather than statistical grounds" (p. 228).

Table 20. *Model Fit Comparison*

Models	χ^2 (df)	χ^2/df^*	$\Delta\chi^2$ (df)	RMSEA (90 % CI)	CFI	TLI	SRMR
Model 1	719.355 (310)	2.321	-	.056 (.050-.061)	.928	.920	.095
Model 2	627.361 (309)	2.030	91.99** (1)	.049 (.044-.055)	.944	.937	.048
Model 3	627.361 (309)	2.030	-	.049 (.044-.055)	.944	.937	.048

Note: *A good fit is generally understood to be a χ^2 with a probability greater than .05 and a χ^2/df ratio of 2.0 or less (Kline, 2011); **Critical value for $\Delta\chi^2$ (1) is 6.63 ($\alpha = .01$), there is a significant difference between Model 1 and Model 2.

The individual paths in the final SEM models (Model 2 & 3) were examined with respect to the hypotheses. The path diagrams appear in Figures 6 and 7 respectively.

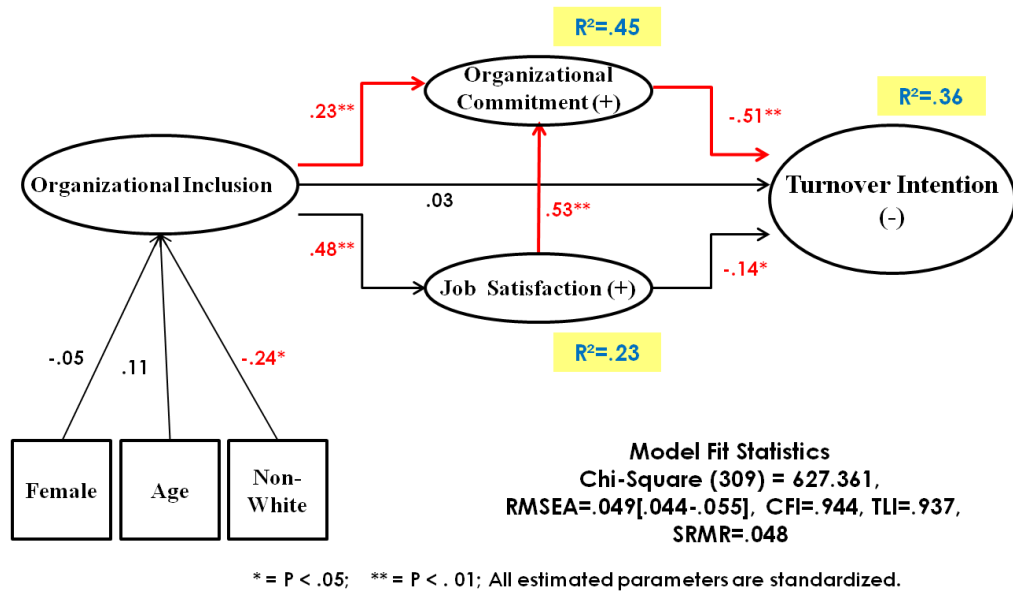


Figure 7. Final Turnover Model with Standardized Estimates with a Path from JS to OC

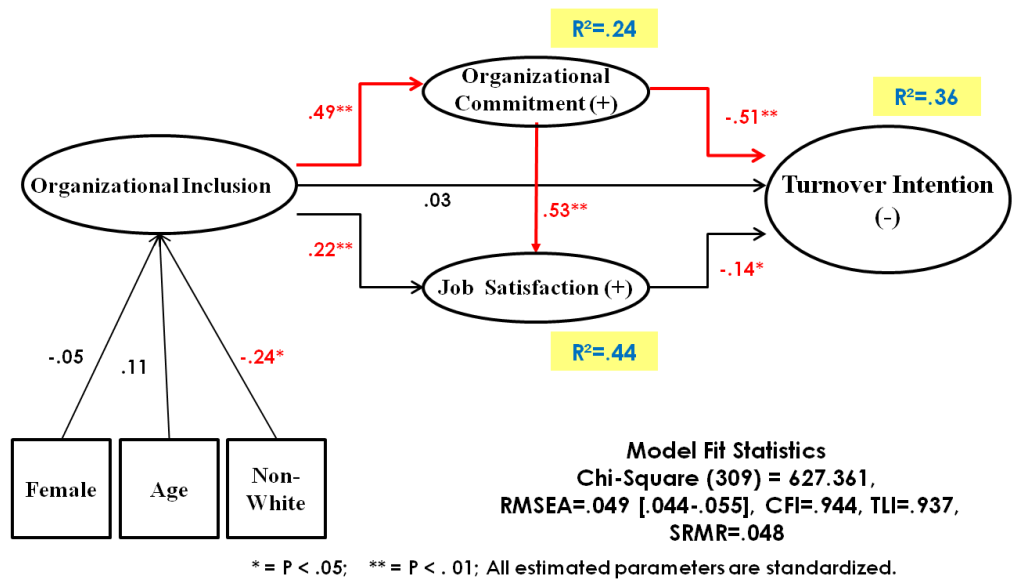


Figure 8. Final Turnover Model with Standardized Estimates with a Path from OC to JS

Table 21 provides unstandardized and standardized estimates for direct effects among the three diversity indicator variables and four latent constructs, and it also reports the squared multiple coefficients (R^2) reflecting the percentages (%) accounted for by

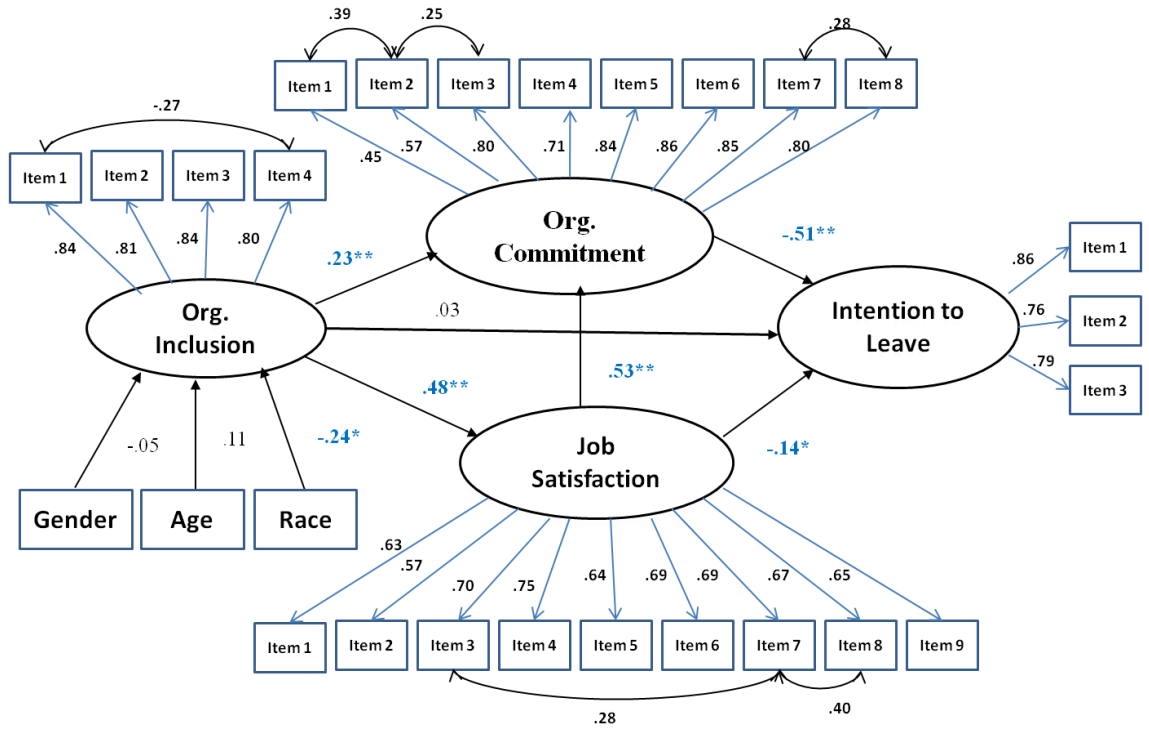
each model. There were significant and positive relationships between organizational inclusion and organizational commitment ($\beta = .234, p < .001$) and between organizational inclusion and job satisfaction ($\beta = .527, p < .001$). In addition, organizational inclusion was related to workers' intention to leave child welfare indirectly via either the variable of organizational commitment or job satisfaction, while it was not significantly related to intention to leave directly ($\beta = .034, p = .554$). Specifically, organizational inclusion was significantly and positively related to organizational commitment ($\beta = .234, p < .001$); organizational commitment, in turn, was significantly and negatively related to child welfare workers' intention to leave employment ($\beta = -.514, p < .001$). The R^2 for workers' intention to leave was .358 in the model. This means that the final SEM model combining diversity characteristics, job satisfaction, and organizational commitment explained 35.8% of the variance in workers' intention to leave in the public child welfare organizations.

Table 21. *Paths for the Final Model and Accounted for Variance*

Endogenous variables	← Exogenous variables	Unstandardized estimates (B)	Standardized path coefficient (β)	R ²
Org. inclusion	Gender	-.047	-.051	.017
	Age	.104	.112	
	Race/ethnicity	-.227	-.244*	
Job satisfaction	Org. inclusion	.346	.476**	.227
Org. commitment	Org. inclusion	.117	.234**	.450
	Job satisfaction	.360	.527**	
Turnover intention	Org. inclusion	.040	.034	.358
	Org. commitment	-1.205	-.514**	
	Job satisfaction	-.229	-.143*	

Note: *= $p < .05$; **= $p < .01$

The full SEM was identified with measurement and structural components in the following Figure 9.



Note: * = $p < .05$, ** = $p < .01$; all estimated parameters are standardized

Figure 9. Full SEM Model

4.5. Summary of Results

The multilevel analytic results indicated an indirect effect of the organizational inclusion construct on turnover intention via organizational commitment. The findings suggest that organizational inclusion as a second-level variable did not directly relate to workers' turnover intention in this sample. Rather, it was related to turnover intention through an indirect route. Thus, a work environment with higher levels of organizational inclusion was associated with workers' organizational commitment and, in turn, was associated with decreased turnover intention among child welfare workers.

With regard to the cross-level effects of organizational-level inclusion and individual-level commitment on turnover intention among child welfare workers, there was no significant effect in the model. Only individual-level variables (e.g., older, White,

higher organizational commitment) were linked to significantly lower levels of turnover intention in the multilevel modeling.

The proposed conceptual model explicating the linkage among individual characteristics, inclusion, organizational commitment (or job satisfaction), and individual turnover intention was found to be psychometrically validated by the study's SEM analysis. Specifically, among workers' diversity characteristics, only race/ethnicity was significantly and positively associated with workers' perception of organizational inclusion that was, in turn, associated with increased organizational commitment (or increased job satisfaction) and decreased intention to leave. The findings indicate that more engagement in decision-making and accessible information for workers who are Non-White was likely to link diversity (e.g., race/ethnicity) to other organizational outcomes (e.g., increased organizational commitment and job satisfaction, and reduced intention to leave).

Table 22. *Summary of Data Analyses*

Data analysis	Significant findings	
	Dependent variables	Independent Variables
<i>t-tests</i>	Intention to leave (-)	Age
	Inclusion (-), organizational commitment (-), job satisfaction (+), Intention to leave (+)	Non-white
	Inclusion (+), organizational commitment (+), intention to leave (-)	Rural location
<i>Correlations</i>	Intention to leave	Age (-), organizational inclusion (-), organizational commitment (-), job satisfaction (-)
<i>Multilevel modeling</i>	Organizational commitment	Salary (+), organizational inclusion (+)
	Job satisfaction	Non-white, organizational inclusion (+)
	Intention to leave	Age (-), non-white (-), organizational inclusion (-)
	Intention to leave†	Age (-), non-white (+), organizational commitment* (-)
	Intention to leave†	Age (-), non-white (+), job satisfaction (-), organizational inclusion (-)
	Intention to leave‡	Age (-), non-white (+), organizational commitment (-)
	Intention to leave‡	Age (-), non-white (-), job satisfaction (-)
<i>Structural equation modeling**</i>	Inclusion	Non-white (-)
	Organizational commitment	Inclusion (+), job satisfaction (+)
	Intention to leave	Organizational commitment (-), job satisfaction (-)

Note: “+” indicates positive relationships, while “-” indicate negative relationships; * indicates a significant mediating variable; ** the final SEM shows good model fit statistics [χ^2 (309) = 627.361, p = .000 RMSEA = .049 (.044-.055), CFI = .944, TLI = .937, and SRMR = .048]; † indicates multilevel mediation model; ‡ indicates multilevel model with cross-level effect

CHAPTER FIVE: DISCUSSION

This chapter has three purposes. First, it provides an overview of the study's findings. Second, it describes the strengths and limitations of the study. The chapter concludes with the implications of the study's findings for theory, social work practice and policy, and research.

5.1 Overview of Study Findings

This study investigated the effects of individual characteristics and organizational inclusion (e.g., participative decision-making, accessible information) on organizational outcomes, including organizational commitment, job satisfaction, and intention to leave, among public child welfare workers. Several theories (e.g., organizational culture, social identity, and social exchange theories) provided the framework for testing relational paths among constructs in the model.

Several significant pathways in the model were identified. Specifically, the results of MLM showed that the impact of different levels of perceived inclusion across organizations on turnover intention was mediated by individual workers' level of organizational commitment. The SEM analysis further supported the importance of inclusion in predicting workers' turnover intentions and validated the hypothesized paths. The study findings have some practical implications in general. To tackle the high turnover rate in child welfare organizations, administrators and leaders need to focus on enhancing workers' commitment, increasing opportunities for participation in decision making, and improving communication and access to information within the work

environment, thereby fostering a greater sense of inclusion in the daily life of the organization.

Impact of Organizational Inclusion as a Contextual Variable

Across all the models tested, organizational inclusion was found to be a substantial contextual variable. In a complex workplace, individual work attitudes and behaviors are not independent of the contextual environment. In this study, organizational inclusion was incorporated as a contextual variable by aggregating workers' inclusion level across county agencies. This organizational-level inclusion was significantly and positively related to individual-level organizational commitment and job satisfaction respectively. Organizational inclusion is manifested by the degree to which individual workers feel a part of critical organizational processes, such as decision-making and access to information and resources. The study found that perceptions of higher organizational level inclusion resulted in significantly higher levels of organizational commitment and job satisfaction.

Additionally, workers' perceptions of organizational inclusion showed a significant and negative relationship with their intention to leave in multilevel modeling, when other organizational variables (e.g., organizational commitment or job satisfaction) were not included. However, when other organizational variables were added in the model, the impact of organizational-level inclusion on turnover intention was reduced. Specifically, workers' individual-level organizational commitment mediated the impact of organizational-level perceptions of inclusion on their turnover intention; that is, organizational commitment played a role in significantly reducing the impact of organizational inclusion on workers' intention to leave among public child welfare

organizations. Thus, the findings suggest that addressing the high turnover problem in child welfare requires enhancing workers' sense of inclusion (e.g., by instituting a more participative decision-making structure) and their commitment to the organization. Both strategies are necessary for retaining quality workers. However, managers should be aware that providing more opportunities and instituting administrative policies to engage workers in key organizational processes are not always effective tools for retention when employees are not committed to the workplace. For example, "if participating in decision-making does not translate to sufficient changes in the workplace, then it could be perceived by workers as a futile waste of time" (Hopkins et al., 2010, p. 1386), thereby reducing commitment. Also, it could contribute to less retention among younger workers who may not have enough experience or understanding of the organization to take on decision making responsibilities. For example, if the organization's efforts for increasing their participations in decision-making are burdensome or ill-structured in a way that leads to problems, younger workers may perceive the inclusive organizational process as only a job-related stress rather than an opportunity for improving their sense of efficacy (Pasupuleti et al., 2009).

Alternative managerial practices may need to be implemented. With changing and innovating organizational structures to provide more worker inclusion, various efforts for increasing positive worker attitudes (e.g., organizational commitment and job satisfaction) should be pursued at the same time. For example, multiple forms of support (coworker support, supervisor support, instrumental support, and organizational support) can be utilized to link inclusive organizational procedures to higher organizational commitment among child welfare workers. This kind of comprehensive intervention is

consistent with Glisson's (2002) study that organizational culture is a significant contextual influence on employees' perceptions and emotional response to the workplace. It may be that just by increasing opportunities for meaningful inclusion, workers' commitment to the organization is thereby enhanced. This study's findings may provide some answers to Shore and her colleagues' (2011) research questions on how or why inclusion can influence positive individual and organizational outcomes.

Organizational Commitment and Job Satisfaction as a Mediating Variable

By using advanced statistical analysis, the study's findings build on and extend previous literature on organizational attitudinal variables (organizational commitment and job satisfaction) that contribute to retention/turnover in public child welfare organizations. In the analytical framework of SEM, the paths among individual characteristics, inclusion, organizational commitment (or job satisfaction), and individual turnover intention were discovered, and its conceptual model was validated. Additionally, in MLM analysis, only organizational commitment was found to be a significant mediating variable between organizational-level inclusion and individual-level workers' turnover intention. Compared to between-group variances for organizational commitment (14.8%), job satisfaction showed small between-group variances (2.2%) in the sample. This means that levels of job satisfaction did not present enough variability across local child welfare organizations for a multilevel analytical framework. This needs to be further investigated in other samples to strengthen the empirical evidence.

The causal ordering of organizational commitment and job satisfaction has been a subject of debate in organizational literature (Meyer et al., 2002), while it has become prominent that job satisfaction precedes organizational commitment in order (Landsman,

2008). Specifically, the study found that the path from job satisfaction to organizational commitment was validated in the structural model. It is consistent with prior research, which is the causal precedence of satisfaction over commitment (Currivan, 1999; Landsman, 2001, 2008). However, this result needs further empirical examination by conducting replication studies using other samples to better generalize from the evidence, in addition to intervention studies with an experimental design.

Effects of Diversity Characteristics

According to Mor Barak and her colleagues (2006), the diversity literature commonly divides the concept of diversity into two categories: visible diversity (e.g., gender, age, and race/ethnicity) and invisible diversity (e.g., education, tenure, and position). This study only included visible diversity characteristics in the structural model. Based on prior research, it has been generally found that women are more likely to leave than men (Weaver et al., 2007); younger workers are more likely than older workers to leave their jobs (Dickinson et al., 2009; Nissly et al., 2005; Strand et al., 2010); and minority status workers are more likely to leave their jobs than their counterparts in the child welfare workforce (Koeske & Kirk, 1995).

The results of this study concurred that child welfare workers who were nonwhite and younger were more likely to intend to leave their job. Specifically, nonwhite workers showed lower perceived organizational inclusion and commitment to the organization, as well as higher turnover intention to leave their organizations than their White counterparts. Further, the study examined some relational mechanism linking diversity characteristics to workers' turnover intention. Unlike the hypothesized paths (diversity characteristics → organizational inclusion → turnover intention), organizational

inclusion was not found as a significant potential construct between diversity characteristics (in particular, race/ethnicity) and turnover intention. Instead, diversity characteristics were significantly related to workers' turnover intention via the pathways of increased organizational inclusion, and increased organizational commitment (or job satisfaction). The results of the SEM analysis found that workers' minority status indirectly affected their turnover intention through the intervening variables of increased organizational inclusion and commitment. It is consistent with prior research suggesting that those individuals who are different from the majority in an organization tend to be less satisfied or less committed, and to be more likely to leave (Williams & O'Reilly, 1998). This suggests that the effect of workers' minority status on their turnover intention may be reduced when organizations institute various inclusive organizational procedures and individual workers feel more committed to their organizations or more satisfied with their job and work.

5.2 Strengths and Limitation

Strengths

The study has several strengths; the first of which is a contribution to narrowing the gap in the literature on this topic. This study investigated the impacts and outcomes of inclusion within the child welfare workplace as an important contextual variable, which has not been explored in detail in the social work literature, nor in other disciplines. The concept of inclusion is budding in the organizational literature (Roberson, 2006). As workplaces are becoming more demographically diverse, the notion of inclusion is getting attention as "a focal point for understanding and managing" the diversified

workforce (Findler et al., 2007, p. 85). Only Mor Barak and her colleagues (1998, 2002, and 2006) have studied inclusion in decision-making as a predictor of intention to leave among child welfare workers. This study's findings will contribute to further constructing the concept of inclusion and its theoretical underpinnings.

Second, a conceptual model was tested, integrating three distinct organizational theories. Each of the current theoretical perspectives framing turnover research in the child welfare workforce - social identity theory, social exchange theory, and organizational culture framework - appear to be complement each other sufficient for providing an even better picture of the epidemic issue of high turnover.

Third, advanced statistical analyses such as MLM were employed to attain multilevel perspectives rather than only individual level perspectives. Little research has adopted this multilevel analytic framework in the organizational literature. Thus, the study will potentially provide an opportunity to understand how individuals interact with and across their organizational environments.

Fourth, the study contributes to a better understanding of organizational culture and climate in child welfare organizations by evaluating and validating a conceptual model, linking diversity characteristics and organizational inclusion, organizational commitment, and turnover intention.

Finally, SEM analysis provided more accurate testing of the proposed theory-based conceptual model, thereby extending and refining Mor Barak's prior studies. The identified significant paths in the model offers a greater potential to understand the relationships between a series of independent and dependent variables that were hypothesized to be significantly related. Because SEM analysis enables the examination

of the interdependent relationships among variables simultaneously and controls for measurement error while maximizing explained variance (Kline, 2011), it allows equations to be estimated simultaneously rather than in a series of regression equations (Wilke & Speer, 2011). As a result, the study has potential for being replicated by other researchers in the future based on the study's evaluation of the conceptual model.

Limitations

There are several limitations of the study. First, the research design is cross-sectional; therefore, no causal inference can be drawn from the findings. Although SEM allowed for the testing of a conceptual model, indicating causal paths linking several latent variables to dependent variables, it only represents the hypothesized relationships among variables; that is, it did not demonstrate actual causality because of the non-experimental design. For evidence of true causality, replications of the study across different samples should be conducted (Kline, 2011), especially using longitudinal data collected through experimental research because causal inferences in non-experimental designs are unwarranted (Kline, 2011, p. 99).

Second, this study has a limited second-level sample size. Although a multilevel SEM would be ideal given the nested data in this study, the second level sample size was too small for this analysis. Therefore, this study conducted single-level SEM analysis only. The most common rule of thumb with regard to sample size for multilevel models is at least 30 groups and 30 observations per group (Hox, 2002). However, it is also acceptable to get at least 20 groups and 30 observations per group (Heck & Thomas, 2000). The study attained 25 groups (counties and state offices) with an average of 22 observations per group.

Third, this study used secondary data analysis only. Thus, the measures and data available for the study are limited in meeting the researcher's expectations. Ideally, questions would have included all three organizational inclusion subscales, if employee perception of inclusion were to be fully assessed, as in Mor Barak and Cherin's (1998) original study. Instead, the child welfare study employed a short version of the inclusion scale, which consists of two subscales (e.g., employee perception of being involved in organizational decision-making process and accessibility to information and resources), in MLM analysis. Furthermore, one subscale of the scale, participation in decision-making, was identified with a good-fit measurement model and used for the SEM analysis instead of the two-subscales' measurement model because of the second subscale's (access to information and resources) low internal consistency reliability and low factor loadings scores. This, unfortunately, limited the complete meaning of organizational inclusion, which was supposed to capture Mor Barak et al.'s conceptualization of inclusion (1998).

Fourth, the study sample was drawn from one state. Thus, the findings should be cautiously generalized to other geographical locations.

Fifth, there may be another limitation in the degree of diversity across counties because some counties were more diverse in race/ethnicity than others. The impact of this variation in diversity among counties on organizational inclusion needs to be further explored. For example, there were more African-American employees in child welfare agencies located in urban areas than in rural areas, and so perception of inclusion may be quite different for black employees in urban agencies than for black employees in rural

agencies where there are fewer in number. This needs to be considered in future organizational-level analyses in which employees' perceptions are aggregated.

Sixth, the data for this study were collected via self-report measures. Self-report can be influenced by social desirability, the tendency of respondents to provide information in the socially desirable direction. Social desirability effects are common in personal inventories and some have demonstrated these effects in organizational research. Rather, social desirability contamination effects tend to be small and not very widespread in organizational research (Donaldson et al., 2002). Perhaps the more critical issue is the appropriateness of the self-report measures for the variables in the questionnaire (Lance, 1991). In the original survey, valid and reliable measures of variables were used. Even so, self-report questionnaire responses may reflect respondents' perception, not actual target characteristics. Therefore, this study's findings on work-related affects and work environment perceptions on precursors to voluntary turnover may not be entirely accurate in the real world.

It should be noted that the study focused on 'undesirable turnover'⁴, meaning competent and qualified workers' turnover. However, there was limited information to judge whether an individual worker was qualified (or competent) or not in the organization. Most turnover-related research has explored undesirable turnover because it does directly affect service quality for client and organizational effectiveness (Shim, 2010). Other types of turnover (desirable and unpreventable turnover) were of no interest

⁴ In general, three types of turnover have been identified as follows: first, 'desirable turnover' takes place when workers ill-suited for the job, the work, the organization or its surrounding community leave (e.g., incompetents, malcontents, etc.); second, 'unpreventable turnover' occurs when something inevitable happens which make workers leave (e.g., illness, family move, retirement, etc.); lastly, 'undesirable turnover' is when workers leave due to preventable individual or organizational issue such as high job stress or burnout, low self-efficacy, lack of supervision, poor organizational support, high caseloads, job stress and low job satisfaction, etc.

to the study because they may not cause any harm to organizational culture and climate (e.g., other workers, and the employing organization, clients).

5.3 Implications for Theory, Practice and Policy, and Future Research

Theory

The results from this study reflect the need to examine organizational complexity from a multilevel perspective and various theoretical frameworks. Many researchers have emphasized that organizational culture theory is the best theoretical framework for understanding the child welfare workforce (Glisson et al., 2006; Lee et al., 2011; Yoo et al., 2007). The study supported some theoretical explanations as to how individuals interact with their organizational environments within organizational culture frameworks using multilevel modeling. For example, it found that the more individual workers felt engaged in organizational decision-making and work processes, the more they felt a part of or committed to the organization; then, the workers' psychological bonds (process) may lead to reduced turnover. This has not been examined by prior research. This study also reinforced the importance of the organizational culture that contributes to levels of organizational commitment, and in turn, turnover intention among child welfare workers.

In this study, social identity theory also provided a theoretical explanation about the psychological connection for those who are not in the dominant group in terms of gender, age, and race/ethnicity. Especially, the theory helped to delineate the connection between individual identity and social structures through the meanings people attach to their membership in identity groups such as racial/ethnic groups. The study found that people of color reported they had less say in agency decisions were less heard by the

organizations and administration and had less access to information and resources than their counterparts, and had more intention to leave their jobs. The results supported the importance of social identity theory in previous child welfare workforce literature and the need for further research, even though child welfare researchers have not often adopted the theory.

The study also reveals that social exchange theory has a promising contribution to the child welfare workforce retention/turnover research. Given the results of MLM and SEM analyses, organizational commitment was identified as a significant mediating variable between organizational-level inclusion and individual-level turnover intention. This finding extends Smith's (2005) research that higher levels of perceived organizational support have an effect of increased organizational commitment leading to reduced job turnover. This is also consistent with others who have concluded that building a positive organizational climate is critical to the creation of effective organizational outcomes (Lansman, 2001; Smith, 2005; Strand et al., 2010). This study's findings also have some practical implications for organizational interventions (e.g., staff or management training, supervisory mentorship training, etc.), which focus on changing organizational climate.

Finally, in order to build and link the theoretical components needed to inform organizational and management practice, more attention is needed to synthesize the relevant and emerging organizational theories. Managers need conceptual tools to use in assessing a wide array of forces inside and outside their organizations (Austin & Kruzich, 2004) coupled with skill development. While individuals teaching management skills in business have developed multiple models for providing management education that

addresses knowledge and skill acquisition, social work administration educators have been slow to have a sustained discussion on this topic (Bigelow et al., 1996).

Practice and Policy

Given the study's findings, practice and policy must also address various strategies to solve the current national high turnover rate of child welfare workers. The study provides further support for recommendations for administrative practice and policy in three key areas: (1) the organizational culture/conditions, including organizational inclusion in management practice, is related to worker's turnover intention; (2) the importance of being listened to, heard, and understood by supervisors and administrators is related to enhanced organizational commitment and improved job satisfaction; (3) the importance of comprehensive approaches to change and innovation in organizations so that child welfare workers perceive a better workplace on a daily basis; and (4) a "one size fit all" approach to organizational practice may not suffice.

The importance of creating an inclusive workplace (e.g., being listened to and understood by supervisors and administrators) was confirmed by testing the conceptual model. According to this research, actions to enhance inclusion and retention, such as instituting a more participative decision-making structure, are natural targets of organizational intervention but they are not sufficient to retain quality workers in the organizations. To prevent high worker turnover rates, administrators and leaders also need to focus on fostering more positive work attitudes (e.g., higher organizational commitment and job satisfaction). For example, managers could experiment with organizational practices that foster workers' development, consultation, ability to influence organization/work decisions, and receipt of meaningful feedback and input to

encourage workers' commitment. Organizations could also conduct on-going training for supervisors and managers focused on enhancing inclusion. Administrators may need to evaluate current lines of communication to ensure that all workers have access to agency policies and procedures, which is a part of being an inclusive workplace.

With its emphasis on cultural sensitivity and its ethical approach to diversity in organizations, the social work profession is well positioned to contribute to a theoretical framework for diversity management (Mor Barak, 1999). Diversity management practices particular to race/ethnicity, such as coworker support groups and mentoring programs⁵ (Strand et al., 2010), fair treatment initiatives and collaborative work arrangements⁶ (Roberson, 2006), multicultural development (MD)⁷ (Hyde, 2004), and employment-based social capital⁸ (Boyas et al., 2012) in the child welfare workforce may be combined with constructing inclusion practices to increase commitment and decrease workers' turnover intentions.

⁵ The mentoring program was designed to provide career and psychological mentoring (Strand et al., 2010). As early as 1994, Collin found that child welfare staffs that were mentored, or served as mentors, had higher satisfaction and career success than those who did not. Recently, Strand et al. found that the strength of the mentoring program was striking because it helped child welfare workers become more committed by providing professional development opportunities and the chance for personal growth (2010).

⁶ Fair treatment initiatives and collaborative work arrangements were designed to involve all employees in organizational decision-making process. As such, these organizational procedures may be considered identity-blind practices, which were designed to ensure that decision-making processes are the same for each individual regardless of group identity,

⁷ Multicultural development (MD) is also referred to as multicultural organizational development (MCO) and it was originally initiated to make a fundamental transformation of an organization's culture and it is a long-term, complex organizational change process that "aims at a reduction in the patterns of racism and sexism [and other oppressions] that prevails in most U.S. institutions and organization" (Hyde, 2004, p.7). In general, MD is broad in scope and encompasses a range of intervention models (e.g., legal compliance, prejudice reduction, intercultural awareness, management diversity, valuing differences, and anti-racism (Inglehart, 2000).

⁸ The importance and defining characteristics of employment-based social capital was articulated by Nahapiet and Ghoshal (1998) and incorporated into the field of social work by Javier Boyas and her colleagues. Specifically, they tested and validated the model of employment-based social capital through consecutive studies (Boyas & Wind, 2010; Boyas et al., 2012). The conceptual model was incorporated with several aspects of cognitive organizational social capital dimensions such as trust/cooperation, social relations with coworkers and supervisor, organizational commitment, communication, influence, and fairness.

Specifically, interventions designed to change organizational structure and culture in the child welfare workforce should be tailored to suit the various needs at both individual and organizational levels. As a strategy, for example, the multicultural development (MD) efforts may be more effective when this integrates various initiatives such as organizational diversity assessment, policy changes, team building, mentoring programs, and inclusion of underrepresented groups on governance bodies.

Future Research Directions

Given the findings of the study, a set of directions for future research are proposed to complement and facilitate the process of developing a better workplace in child welfare organizations. First, some organizational intervention research could build on the study's findings. Rooted in better scientific methods, effective managerial practices can be better positioned to solve the problem of high worker turnover. Intervention research could provide empirical evidence on steps taken in child welfare agencies to improve organizational culture and further identify various causal mechanisms to worker turnover behaviors.

Second, in order to build a solid knowledge base, a follow-up qualitative analysis could be conducted using the focus group interview data collected at the same time of the survey data. The qualitative data analysis will complement and cross-validate the quantitative data with more in-depth illustrations. Also, interpreting qualitative data would provide a deeper level of understanding as to why the organizations differ in terms of workers' perceptions and behaviors.

Third, exploring other constructs related to retaining quality workers may be suggested. Supportive supervision is a critical construct and has been considered as an

important mediating variable and organizational intervention tool (Landsman, 2008; Smith, 2005). Within the context of supportive supervision, innovative organizational practices related to instituting more inclusive structures can be reinforced through both supervisor-worker and peer-to-peer interactions, as well as through team and group supervision formats (Poertner & Rapp, 2007). Administrative practices that can bolster supportive supervision (i.e., supervisors remain accessible to workers for frequent consultation) could provide sufficient direction for workers' progress and success in the workplace.

It is clear from this and other research that there is an under-development of measurement tools to capture the nuance of worker's engagement in order to understand the impact of such inclusion on the work environment. Future research in this area should focus on refining measures of organizational inclusion that are meaningful to workers in organizations, and include multiple perspectives and experiences of worker's involvement including frontline workers, supervisors, and administrators. Future research should focus on further development and validation of the Organizational Inclusion Scale. The scale can be improved by extending the existing definition and exploring a more comprehensive meaning of organizational inclusion (e.g., fair employment treatments, collaborative work arrangements, shared information system). Inclusion could play a role of a "bridge concept in integrating diverse individuals in organizations and have practical implications to enhance work processes and organizational mechanisms that foster the value of diversity in work organizations (Shore et al., 2011). As defined by Wasserman et al. (2008), a culture of inclusion prevails when "people of all social identity groups have the opportunity to be presented, to have their

voices heard and appreciated, and to engage in core activities on behalf of the collective” (p. 176). There also needs to be a further exploration of perceived organizational inclusion on intention to leave or actual turnover in other human service settings because the study population was only limited to public child welfare workers.

5.4 Conclusion

This study provides an important contribution to the field by addressing research questions that are timely and relevant to the current public child welfare phenomenon of high turnover. Since 2000, there has been a consistent and purposeful shift in research to a new emphasis on the contribution of organizational culture to child welfare workforce retention and turnover (Collins-Camargo, 2012; Glisson, 2007; Glisson et al., 2002). In line with this research trend, the study investigated the impact of organizational inclusion as a contextual variable, which has been given little attention throughout prior research, from the multilevel perspective. The study brought into sharp focus various organizational constructs - inclusion, commitment, and job satisfaction, which are associated with reduced turnover intention for child welfare workers. Several pathways were identified using advanced statistical analyses. The study provides added evidence for previous research (e.g., Landsman, 2001; Lance, 1991; Mor Barak et al., 2006) indicating that workers who perceived a high sense of inclusion were more likely to be happy with their jobs, feel more committed to the organization, and less likely to leave the child welfare organizations. The findings of the study suggest the need for integrative and comprehensive organizational interventions within child welfare organizations to

enhance inclusion, commitment, and job satisfaction. Results are consistent with Glisson et al.'s (2006) study that organizational culture can effectively impact workers' attitudes.

Appendix A. Updated Review on the Literature on Turnover and Retention from The Zlotnik et al.'s (2005) Systematic Review

Lead Author	Research Design	Data Analyses	Study Subjects	Sample size/ Response rate	DV(s)	Significant Factors
Faller (2010)	Longitudinal study (baseline, 6-, 12-, 18-month)	Multiple regression	327 (public agency), 134 (private agency); workers of color (163/35.4%); female worker (378/82.2%); child protection worker (206/44.8%), foster care worker (217/47.2%); master's degree (133/18.9%)	460/n.a.	Commitment to current job, child welfare; actual turnover and retention	<u>Personal</u> Race (worker of color) to commitment (+) <u>Organizational</u> 78 turnover (18.5%); realistic job preview video, supervisory support, job satisfaction, commitment to retention (+)
Strolin-Goltzman (2010)	Longitudinal design/intervention research (building on organizational learning theory)	Repeated measures MANOVA; Principal component analysis; Structural equation modeling (SEM)	Intervention participants selected from all levels (caseworker, supervisor, and management) and units (CPS, foster care prevention) of the agency; 42 years of average age, 82% female, 98% white, 29% supervisor.	T1 (275)/T2(251); T1-T2 (82/30%)	Intention to leave with one item	<u>Personal</u> Perception of burnout (+), role clarity (-), job satisfaction (-), agency commitment (-), and salary and benefit (-) <u>Organizational</u> Intention to leave was reduced by 26% in intervention group while it is increased in comparison group/ 25% turnover rate; Professional resources (supervisor support, technological resources) were identified as a key mediator (-)
Shim (2010)	Cross-sectional	Logistic regression	Child welfare workers from 25 counties out of 62 counties in New York	781/na	Intention to leave	<u>Personal</u> Age(-), female (-), race, salary (-), master in social work (-), White (+) <u>Organizational</u> Emphasis on rewards (-), emotional exhaustion (-)
Hopkins (2010)	Cross-sectional web survey	Multiple regression/logistic regression	Employees in public child welfare agencies in Maryland	544/56.5%	Job withdrawal, work withdrawal, job search behaviors, and <u>job exit</u>	<u>Personal</u> Master in social work (-) <u>Organizational</u> Morale, job satisfaction and commitment (-), Inclusion in decision making (+), Job stress (+)
Lee (2011)	Cross-sectional	SEM and Confirmatory factor analysis (CFA)	Public child welfare workers in a state; 83 (supervisors and administrators), 234 (frontline workers), 95% female, 61% African-American, 77% social work degree, 10% master's degree	317/63.4%	Intent to remain employed (IRE)	<u>Personal</u> Salary (+), length of work experience (+), control coping skills as a mediator(positive thinking, +) <u>Organizational</u> Professional organizational culture (supportive supervision, +)

Lead Author	Research Design	Data Analyses	Study Subjects	Sample size/ Response rate	DV(s)	Significant Factors
Nissly (2005)	Cross-sectional	Multiple regression	Caseworkers in an urban agency, 66% with graduate degree	418/n.a.	Turnover-intended to leave	<u>Personal</u> Age (-), having a graduate degree (+), Agency position (-) <u>Organizational</u> co-worker support (-), supervisory support (-), organizational stress (+), work-family conflict (+)
Ellett (2009)	Cross-sectional	Principal components analyses (PCA), bivariate correlations, discriminant function analyses (DFA)	Public child welfare staff from two different states, Louisiana, Arkansas (n=2140); female, 83%, male 16.7%; 65.3% white, 31.9% African American.	946/44.2 %	Intention to remain employed (IRE)	<u>Personal</u> Self-efficacy (+), human caring (+) <u>Organizational</u> Professional organizational culture (Quality of administrative support, professional sharing and support, +)
Strand (2010)	Cross-sectional web survey	Factor analysis, Multiple regression	Hispanic (T1, 14%; T2 12%), MSW (T1, 23%; T2, 19%)	T1 (927/44%); T2 (810/39%)	Job satisfaction, organizational commitment, plan to leave	<u>Personal</u> Age (-), job tenure (-) <u>Organizational</u> 15% (T1), 18% (T2) report intention to leave in one year; job satisfaction (-), organizational commitment (-), personal safety (-), communication (-)
Yankeelov (2009)	Non-experimental and prospective research design/pre-training questionnaire and post employee retention records	MANOVA	New employees hired by a agency between the years of 1996 and 1999	448 (stayers); 275(leavers)/n.a.	Actual turnover/exit	<u>Personal</u> Rural region (-), emotional exhaustion (+) <u>Organizational</u> Supervisor support (-), highest risk of turnover at the 3 rd year of employment
Mor Barak (2006)	Cross-sectional/mixed methods (Sequential Quantitative-qualitative methods)	CFA/Constant comparative method for content analysis	Average age of 39, 77% women, 36% Latino, 32% Caucasian, 19% African-American, 60% master's degree, 88% direct service provider, 62% job tenure over 5 years	418/80%/38 in-depth interviews	Intention to leave	<u>Personal</u> Age (-), stress (a significant mediator, -) <u>Organizational</u> Job satisfaction (significant mediator, -), organizational commitment (-), participative decision-making (-)
Curry (2005)	Longitudinal study (7 years follow-up)	ANOVA, Logistic regression	CPS case workers from 14 counties; 83.5% female, 85% white, 13.5% African-American	598/96%	Employment status (still employed, left agency, and retired) in seven years	<u>Personal</u> Age (-), work experience year (-), caseload size (+), female (+), education (-) <u>Organizational</u> 51% left, 47% still employed, 2% retired, supervisory support (-)

Lead Author	Research Design	Data Analyses	Study Subjects	Sample size/ Response rate	DV(s)	Significant Factors
Smith (2005)	Longitudinal study (15-17 month follow-up)/social exchange theory	Multilevel logistic regression models	296 child welfare employees from 12 counties	296/71%	Job retention	<u>Personal</u> Job alternative (-), job tenure (+), SW degree (-), caseload size (-) <u>Organizational</u> Work-life balance (+), supervisory support (+)
Tham (2009)	Cross-sectional	Logistic regression	Child welfare workers from County of Stockholm, 48% less than 5-yr experiences, 86% female, 95% at least BSW degree, 2% MSW,	309/na	Intention to leave	<u>Personal</u> n.a. <u>Organizational</u> Human resource orientation (-), fair leadership (-), supervisor support (-), social climate (-), role conflicts (+)
Strolin-Goltzman (2007)	Cross-sectional	Logistic regressions	25 systems in a Northwestern state, 20 rural systems (394), 4 suburban (207), 1 large urban system (219), 80.2% female	820/67%	Intention to leave	<u>Personal</u> n.a. <u>Organizational</u> [Rural agency]Life-work fit (-), efficacy and job satisfaction (-); [suburban agency] efficacy and job satisfaction (-); life-work fit (-), efficacy and job satisfaction (-), job tenure (-), social work degree (+)
Weaver (2007)	Longitudinal design	Multiple regression/Logistic regression	36 months responders' mean job tenure	519/34%	Intention to leave, actual turnover	<u>Personal</u> Male (+), commitment to public child welfare (-) <u>Organizational</u> 27% actual turnover rate (16 months median time on the job), job satisfaction (turnover intention only)
Jacquet (2007)	Cross-sectional/mixed methods	Logistic regressions	679 female, 284 white, 114 African-America, Hispanic 186	765 (survey, 51.1%)/435 (phone interview, 56.8%)	Retention/intention to leave	<u>Personal</u> n.a. <u>Organizational</u> 633 retention (82.7%) retention, 132 turnover (17.3%) , supervisory support (-), satisfaction with caseload size (-), county employment (-)
Glisson (2006)	Longitudinal design/intervention research	Multilevel analysis	26 case management teams from 25 counties; 78.8% female, 15.7% minority, 79.6% B.A. degree (Baseline); 78.8% female, 18.3% minority, 80.6% B.A. (follow-up)	T1(235)/T2 (210)	Actual turnover/exit, organizational climate, organizational culture	<u>Personal</u> n.a. <u>Organizational</u> 50% turnover rate, (39%, experimental group vs. 65%, control group), role conflict (+), role overload (+)
Dickinson (2009)	Longitudinal design/intervention	Cox regression survival analysis/multile	34 project teams randomly were selected from 100 DSS; the 34	356(baseline)/157(final)	Intent to leave/Actual exit	<u>Personal</u> Age (-) <u>Organizational</u>

Lead Author	Research Design	Data Analyses	Study Subjects	Sample size/ Response rate	DV(s)	Significant Factors
	research with experimental design	level modeling	teams were again randomly assigned to both 17 intervention groups and 17 control groups; 89.2% female, 70.7% white, 36% age	stage)		[Cox regression] Supervisor practice support (-), BSW degree (vs. MSW, -), BA degree(MSW, -) significant relationship between IL and actual exit (+); [MLM results] role clarity (-), supervisor practice support (-), organizational commitment (-), self-efficacy (+), growth and advancement opportunity (+)
Strolin-Goltzman (2008)	Cross-sectional	Multiple regression/Logistic regression	Case workers and front-line supervisors from 24 agencies; 12 from high turnover rate (more than 25%) and 12 from low turnover rate (less than 17%)	668/71%	Intention to leave	<u>Personal</u> Salary and benefits (-) <u>Organizational</u> Job clarity (-), lack of job options (-), work-life fit (-)
Renner (2009)	Longitudinal design	Repeated mean imputation	88.9% female, 86.6% white, 9.4% African-American (workers); 88.4% white, 9.1% African-American; 20.6% 3-5 job tenure, 66.2% B.A degree	Over 6 years, average 868 (workers, 59%)/153 (supervisor, 68%)	Retention rate	<u>Personal</u> n.a. <u>Organizational</u> Retention rate: worker (73.9-82.2%), supervisor (86.6-90.6%); Supervisory strategic plan (supervisor skills, training, support)
Cahalane (2008)	Cross-sectional	Logistic regression	381 alumni were selected from Different graduate cohorts over four years; 36-40 mean age range, 78% white, 86% female, 6-10 years job tenure	305/81%	Actual turnover	<u>Personal</u> Emotional exhaustion (+) <u>Organizational</u> 60 (20%) turnover, Job satisfaction (-), personal accomplishment (+)
Agbenyga (2009)	Cross-sectional/social exchange and organizational culture theories	Logistic regression/path analysis	A faith-based child welfare agency in the Midwest in 2004; 74% female, 74% white, 6.5% African-American, 35.9% master's degree, 36% frontline worker, 52.2 over 4 years' job tenure	92/n.a.	Retention/intent to remain	<u>Personal</u> Age (retention, +) <u>Organizational</u> Job satisfaction (intent to remain, +)
McGowan (2009)	Cross-sectional	ANOVA, logistic regression, SEM	657 child welfare employee in 13 public child welfare agencies in New York; 12 rural and one urban agency	447/68%	Intent to leave	<u>Personal</u> n.a. <u>Organizational</u> Career satisfaction (-), paper work (+)
Rosenthal (2006)	Retrospective cohort design	Cox survival analysis	Child welfare professional enhancement program (CWPEP) graduate social worker, 79% of	839/na	Retention; supervisory performance	<u>Personal</u> Hispanic and Asian-American workers related to lower performance and less

Lead Author	Research Design	Data Analyses	Study Subjects	Sample size/ Response rate	DV(s)	Significant Factors
			CWPEP graduate were placed in child welfare			retention; women related with better retention <u>Organizational</u> IV-E program graduates are much less likely to leave their job by 50% comparing to non-participant group
Boyas (2012)	Cross-sectional	Path analysis model	Statewide child protection workers	209/67%	Intent to leave	<u>Personal</u> Age (-), job stress (+), emotional exhaustion (+) <u>Organizational</u> organizational commitment (-)
Collins-Camargo (2012)	Cross-sectional	Principal component analysis, ANOVAs	83% female, 88% White, 9 % African-American	680/47%	Intent to remain employed	<u>Personal</u> Rural (+) <u>Organizational</u> supervision (+), organizational culture (+)
Claiborne (2011)	Cross-sectional	Structural equation modeling (SEM)	66.7% female, 78.8% White; 13.3% African-American; 38.2% married	643/85%; 441 direct service workers	Intention to leave (55%)	<u>Personal</u> n.a. <u>Organizational</u> organizational commitment (-), agency investment (-)
Lambert (2012)	Cross-sectional	Multiple regression	Social work employee in public and nonprofit agencies, 41 median age, 7.4 years mean tenure, 84% white, 12% African-American, 61% married, 40% supervisor position	255/51%	Turnover intention	<u>Personal</u> Age (-), tenure (-), supervisory status (-) <u>Organizational</u> Organizational commitment (-), pay/benefit satisfaction (-)
Levy (2012)	Cross-sectional	Multiple regression	3 large private CW agencies, CW caseworkers/family support workers, 93% female, 88% white, 6% African-American, 34 median age, 6.5 years CW experience, 35% BSW, 20 MSW	152/44%	Intention to quit	<u>Personal</u> n.a. <u>Organizational</u> Work-family conflict (+), job satisfaction (-)
Schudrich (2012)	Cross-sectional	Structural equation modeling (SEM)	202 voluntary agencies in the city, 3 voluntary agencies, 71% prevention workers, 29% child care workers	760/33.1 %	Intent to leave	<u>Personal</u> Child welfare workers <u>Organizational</u> Commitment to the field
Smith (2011)	Cross-sectional	Logit model	MSW graduates of public CW Title IV-E program	1001/51%	Turnover/job exit, burnout	<u>Personal</u> Cohort status (+), relations with client (-), Hispanic status (+) <u>Organizational</u> Supervisor support (-)
Williams (2011)	Cross-sectional/mixed method design	Univariate analysis	Public CW workers in a state of Georgia	260	Intention to leave (50%)	<u>Personal</u> Professional commitment (-) <u>Organizational</u> Coworker support (-)

Note: “+” indicates positive relationships, while “-” indicate negative relationships.

Appendix B. Testing the Measurement Model using Confirmatory Factor Analysis

Inclusion

After exploring the best model fit of the scale, three different CFA models were identified. The first CFA model analyzed the 8-item one-factor structure with two error correlations (i.e., items 5 and 8, and items 6 and 7). The second CFA model analyzed an 8-item two-factor structure, which was used in prior research (Mor Barak et al., 1999) with the same error correlations of the previous model. Then, a 4-item one factor structure model with one error correlation (items 1 and 4) was analyzed as a final model. Table 23 displays goodness-of-fit indices resulting from all the CFAs.

The Model 1 (one-factor structure) yielded good model fit indices ($\chi^2 = 55.763$, $df = 18$, $\chi^2/df = 3.098$, $p = .000$, RMSEA = 0.062, CFI = 0.975, TLI = 0.961). The Model 2 (two-factor structure)'s CFA also produced good fit indices ($\chi^2 = 53.323$, $df = 17$, $\chi^2/df = 3.098$, $p = .000$, RMSEA = 0.063, CFI = 0.976, TLI = 0.960). Finally, Model 3 (the one-factor with only four-item) produced good fit indices ($\chi^2 = 1.173$, $df = 1$, $\chi^2/df = 1.173$, $p = .279$, RMSEA = 0.018, CFI = 1.0, TLI = 0.999).

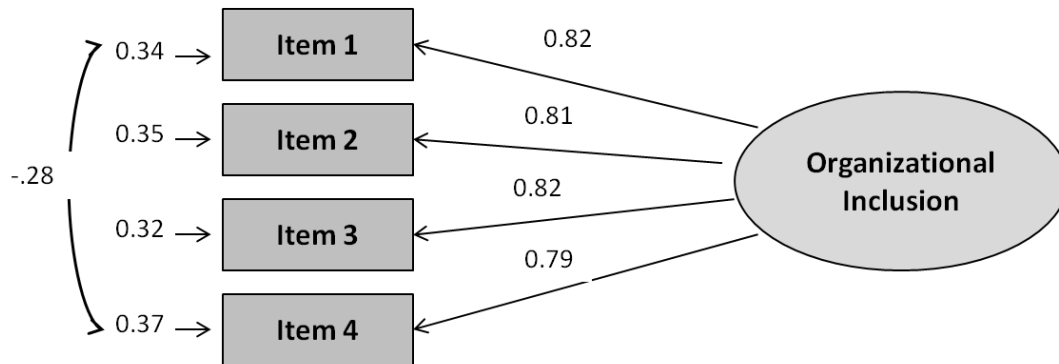
To investigate a better model from these three models, χ^2 difference test were used. These three models were compared by computing the χ^2 value difference among the nested models. Firstly, the χ^2 difference between Models 1 and 2 was not significant. However, the χ^2 difference in two nested models (Models 2 & 3) appears to be significant. That is, the study retained a 4-item one-factor structure for further SEM analyses because the other second factor, which consists of 4 items (access to information and resources), revealed poor consistent reliability ($\alpha = .56$) and all items showed low factor loadings which were below the recommended cutpoint of .40 (Rogers et al., 1994).

Table 23. *Inclusion Scale Goodness-of-Fit Indices*

Models	Cronbach's α	χ^2 (df)	χ^2/df	RMSEA (90 % CI)	CFI	TLI	SRMR
Model 1: One-factor model	0.77	55.763 (18)	3.09 8	0.062 (0.044-0.081)	0.975	0.961	0.041
Model 2: Two-factor model	Factor 1: .88; Factor 2: .56	53.323 (17)	3.13 7	0.063 (0.044-0.082)	0.976	0.960	0.038
$\Delta \chi^2$		2.44 (1)					
Model 3: One-factor (with 4- item only)	.88	1.173 (1)	1.17 3	0.018 (0.0-0.117)	1.0	0.999	0.005
$\Delta \chi^2$		52.15* (16)					

Note: *Critical values for $\Delta\chi^2$ (1) and $\Delta\chi^2$ (16) are 3.841 and 26.296 ($\alpha=.05$) respectively, there is a significant difference between two nested models, Model 2 and Model 3.

The estimates of significant correlations can be found in Table 24. It shows the standardized regression weights and squared multiple correlations of each item.



Chi-Square (1) = 1.173, $p = .279$, RMSEA = 0.018, CFI = 1.0, TLI = 0.999, SRMR = 0.005

Figure 10. Confirmatory Factor Analysis of Organizational Inclusion with 1 Error Covariance and Standardized Estimates

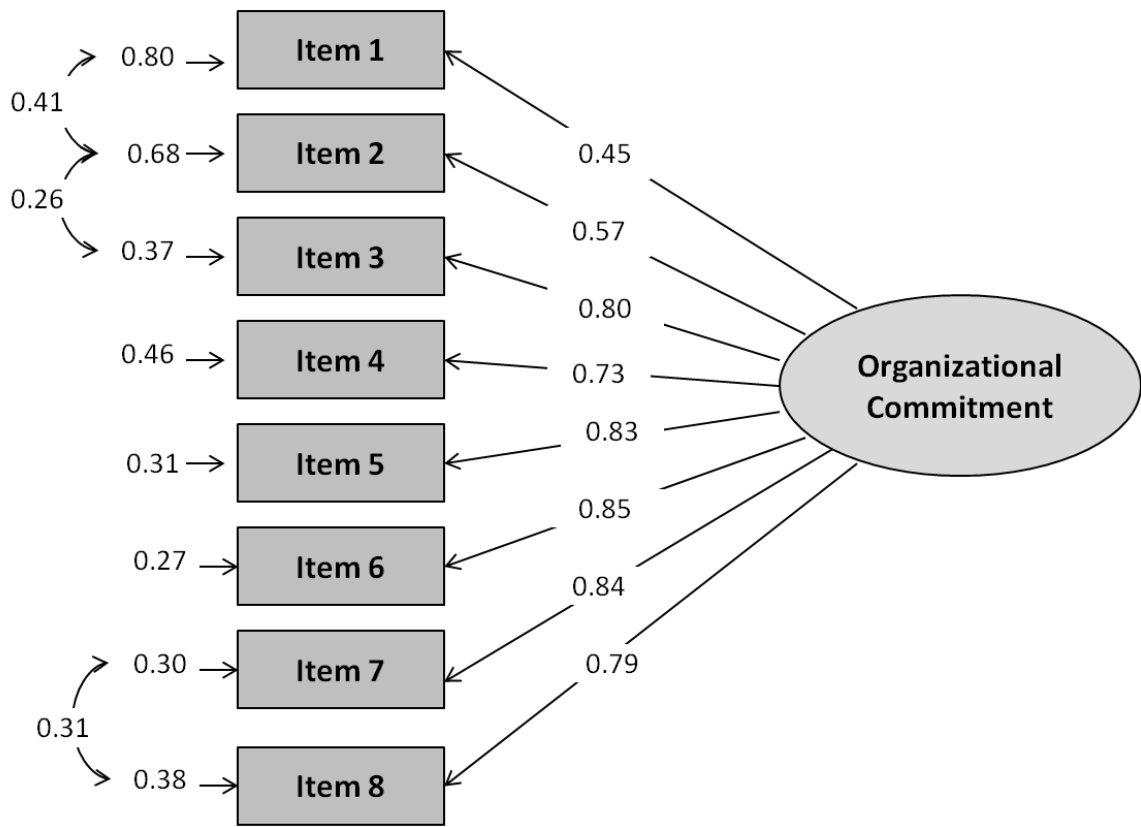
Table 24. *Descriptive Summary of Confirmatory Factor Analysis for Organizational Inclusion*

Items	β	R^2
1. I am able to influence agency decisions	.815	.664
2. I am able to influence work assignment decisions	.807	.652
3. I am consulted about important project decisions	.824	.679
4. I have a say in the way work is performed	.797	.635
5. I am provided feedback by my boss	.318*	.101
6. I don't have access to training I need®	.141*	.020
7. I have all the materials I need to do my job	.309*	.095
8. I rarely receive input from my supervisor®	.060*	.004

Note. * Factor loading scores (from each item to a common factor) were below the criterion of 0.40 (Rogers et al., 1994) or 0.50 (Kline, 2011); and these items were excluded in the SEM analysis.

Organizational Commitment

Confirmatory Factor Analysis of Organizational Commitment with one factor model fit the data adequately ($\chi^2 = 86.967$, $df = 17$, $p = .000$, $\chi^2/df = 5.116$, RMSEA = 0.089, CFI = 0.973, TLI = 0.956, SRMR = 0.034). The estimates of significant correlations were found in Table 25. The table shows the standardized regression weights and squared multiple correlations of each item.



Chi-Square (17) = 86.97, RMSEA = 0.089 [0.071-0.108],
CFI = 0.973, TLI = 0.956, SRMR = 0.034

Figure 11. Confirmatory Factor Analysis of Organizational Commitment with 3 Error Covariances and Standardized Estimates

Table 25. *Descriptive Summary of Confirmatory Factor Analysis for Organizational Commitment*

Items	β	R^2
1. I really care about the fate of this agency	.446	.199
2. I am willing to put in a great deal of effort in order to help this agency be successful	.567	.321
3. I am proud to tell others that I am part of this agency	.797	.635
4. I find that my values and the agency's values are very similar	.734	.539
5. I talk up this agency to my friends as a great agency to work for	.832	.692
6. This agency really inspires the very best in me in the way of job performance	.852	.726
7. I am extremely glad that I chose to work for this agency	.836	.700
8. For me this is the best of all possible agencies to work for	.787	.620

Job Satisfaction

The CFA for Job Satisfaction with one factor structure model showed an acceptable fit with the data ($\chi^2 = 139.04$, $df = 25$, $\chi^2/df = 5.562$, $p = .000$, $RMSEA = 0.093$, $CFI = 0.944$, $TLI = 0.920$, $SRMR = 0.043$). The estimates of significant correlations can be found in Table 26. It shows the standardized regression weights and squared multiple correlations of each item.

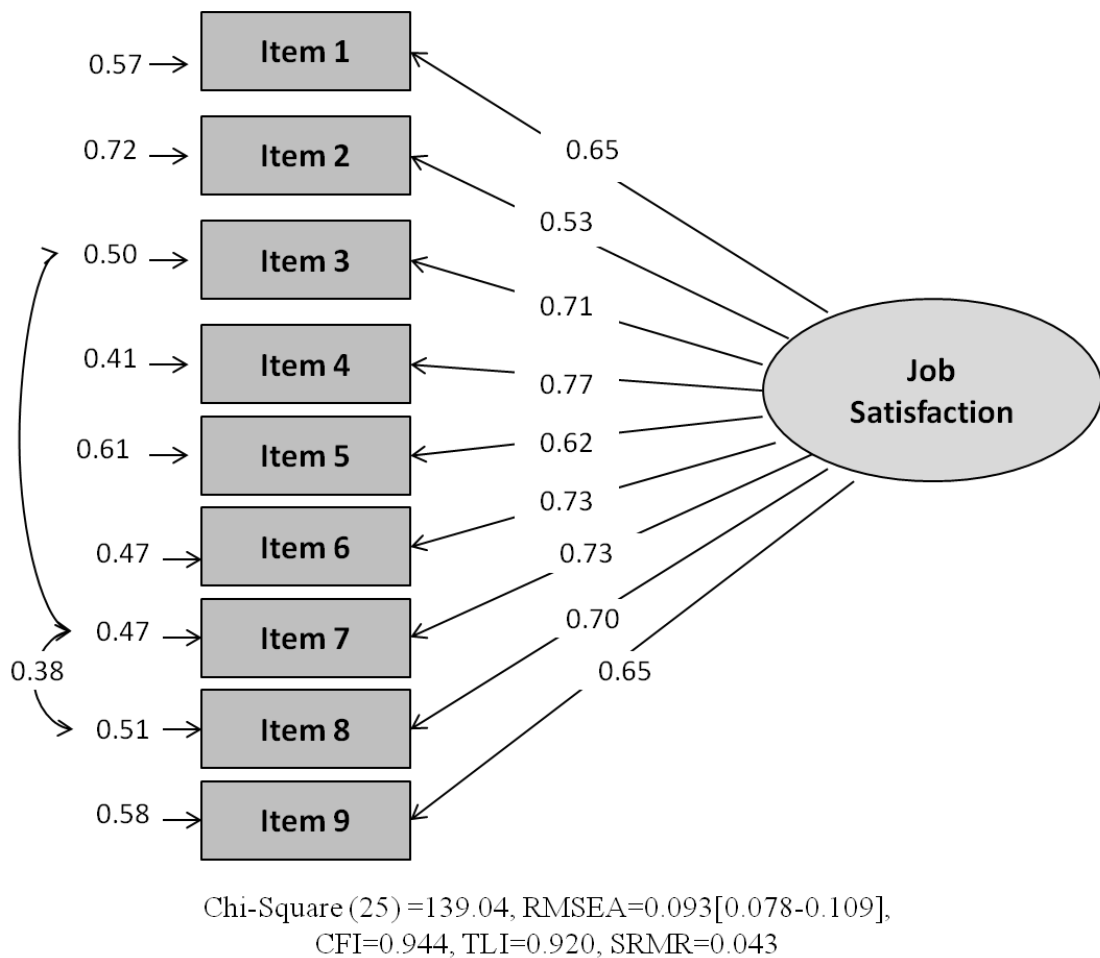


Figure 12. Confirmatory Factor Analysis of Job Satisfaction with 2 Error Covariances and Standardized Estimates

Table 26. *Descriptive Summary of Confirmatory Factor Analysis for Job Satisfaction*

Items	B	R²
1. How satisfied are you with the chance to do something that makes use of your abilities?	.653	.426
2. How satisfied are you with the chances for advancement?	.526	.276
3. How satisfied are you with the freedom to use your own judgment?	.711	.505
4. How satisfied are you with the feeling of accomplishment you get from your job?	.769	.591
5. How satisfied are you with the prestige your job has within the community?	.622	.387
6. How satisfied are you with being able to do things the right way?	.729	.531
7. How satisfied are you with the chance to try your own approaches to working with clients?	.732	.535
8. How satisfied are you with the chance to do things for clients?	.702	.493
9. How satisfied are you with the recognition you get for doing a good job?	.650	.423

Appendix C. Web Survey Instrument

This survey asks questions about your experiences working at the Department of Social Services. If you do not find the exact answer that fits your situation, please mark an answer that comes closest to it. The information that you provide will remain confidential at all times. Thank you for your participation!

Please indicate your work status.

1. Part-time employee
2. Full-time employee

What is your current job classification?

1. Case worker specialist
2. Case worker I
3. Case worker II
4. Case worker III
5. Family support worker I
6. Family support worker II
7. Family support worker III
8. Social services adm. I
9. Social services adm. II
10. Social services adm. III
11. Social worker I
12. Social worker II
13. Social work supervisor - Family Services
14. Social work therapist - Family Services
15. Other _____

What is your current program assignment?

1. Adoption
2. Child protective services
3. Family services
4. Family preservation
5. Foster care
6. Placement/resources
7. Other _____

What was your average monthly caseload during the past six months? (numbers only)

--

Are you a county or state employee?

1. County Employee
2. State Employee

If you are a supervisor, please indicate the average number of employees supervised monthly, during the past six months?

How long have you been supervised by your current immediate supervisor or manager? (years/months)

How long have you been supervised by your current immediate supervisor or manager?

1. 3 months or less
2. 6 months or less
3. 9 months or less
4. 1 year or less
5. 2 years or less
6. 3 years or less
7. 4 years or less
8. 5 years or less
9. 6 years or less
10. 7 years or less
11. 8 years or less
12. 9 years or less
13. 10 years or less
14. 11 years or less
15. 12 years or less
16. 13 years or less
17. 14 years or less
18. 15 years or less
19. 16 years or less
20. 17 years or less
21. 18 years or less
22. 19 years or less
23. 20 years or more

Section I. The next set of questions asks you about your experience at the agency. Please indicate your level of agreement or disagreement with each statement.

	(1)strongly disagree	(2)disagree	(3)neutral	(4)agree	(5)strongly agree
I am able to influence agency decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am able to influence work assignment decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am consulted about important project decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have a say in the way work is performed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am provided feedback by my supervisor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I dont have access to training I need.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have all the materials I need to do my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I rarely receive input from my supervisor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section II. The following are statements regarding how you feel about your job. Please indicate the extent to which it describes your experience at your agency? If you are a supervisor or manager who does not have a client caseload, please select N/A for any of the following questions that relate to clients.

	not at all	a slight extent	a moderate extent	a great extent	a very great extent	N/A
How satisfied are you with the chance to do something that makes use of your abilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How satisfied are you with the chances for advancement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How satisfied are you with the freedom to use your own judgment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How satisfied are you with the feeling of accomplishment you get from your job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How satisfied are you with the prestige your job has within the community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How satisfied are you with being able to do things the right way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How satisfied are you with the chance to try your own approaches to working with clients?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How satisfied are you with the chance to do things for clients?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How satisfied are you with the recognition you get for doing a good job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can easily create a relaxed atmosphere with the clients I serve.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel exhilarated after working closely with the clients I serve.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have accomplished many worthwhile things in this job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I deal very effectively with the problems of the	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

clients I serve.						
I feel I'm positively influencing other people's lives through my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In my work, I am calm in dealing with the emotional problems of others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel I treat some of the clients I serve as impersonal objects.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have become more callous towards people since I took this job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Its hard to feel close to the clients I serve.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I worry that this job is hardening me emotionally.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At times, I find myself not really caring about what happens to some of the clients.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel like Im at the end of my rope.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel fatigued when I get up in the morning and have to face another day on the job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel used up at the end of the workday.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel burned out from my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel emotionally drained from my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel I'm working too hard on my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section III. The following are questions regarding how you feel about your agency. Please indicate your level of agreement or disagreement with each statement.

	(1)strongly disagree	(2)disagree	(3)neutral	(4)agree	(5)strongly agree
I really care about the fate of this agency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am willing to put in a great deal of effort in order to help this agency be successful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am proud to tell others that I am part of this agency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I find that my values and the agency's values are very similar.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I talk up this agency to my friends as a great agency to work for.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This agency really inspires the very best in me in the way of job performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am extremely glad that I chose to work for this agency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For me this is the best of all possible agencies to work for.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When someone criticizes this agency, it feels like a personal insult.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am very interested in what others think about this agency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When I talk about this agency, I usually say we rather than they.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This agency's successes are my successes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When someone praises this agency, it feels like a personal compliment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If a story in the media criticized this agency, I would feel embarrassed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section IV. The following statements ask you to estimate how often you think of or engage in certain behaviors in relation to your current job at DSS. The response options are different for every question.

	never(1)	(2)	(3)	(4)	constantly(5)
How often do you think about resigning from your current job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	very unlikely(1)	(2)	(3)	(4)	very likely(5)
How likely is it that you will resign from your current job in the next six months?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	very undesirable(1)	(2)	(3)	(4)	very desirable(5)
All things considered, how desirable for you would resigning from your current job be?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I am actively looking to move to another work assignment:

	never(1)	(2)	(3)	(4)	constantly(5)
a: within this local DSS.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b: within another local DSS.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain why you are actively looking to move to another work assignment?

	strongly disagree(1)	disagree(2)	neutral(3)	agree(4)	strongly agree(5)
As soon as I can find a better position, I will change to it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	very undesirable(1)	(2)	(3)	(4)	very desirable(5)
How desirable is transferring to a different position at the agency to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How desirable is it for you to be late for work or scheduled work assignments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	very difficult(1)	(2)	(3)	(4)	very easy(5)
How easy or difficult is it for you to arrive on-time to work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	never(1)	(2)	(3)	(4)	constantly(5)
How often do you think about being absent from your work when you are scheduled to be there?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	very difficult(1)	(2)	(3)	(4)	very easy(5)
How easy or difficult is it for you to attend work when you are scheduled to be there?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	very unlikely(1)	(2)	(3)	(4)	very likely(5)
In a typical month, how likely is it that you will be absent from work at least once when you are supposed to be there?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	very undesirable(1)	(2)	(3)	(4)	very desirable(5)
How desirable is it for you to be absent from work or scheduled work assignments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section V. On the following scale where 1 represents never and 5 represents constantly, please mark the number of the response that best represents how often you engage in each of the following behaviors at work.

	never(1)	(2)	(3)	(4)	constantly(5)
Fail to attend scheduled meetings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drink alcohol or use drugs after work primarily because of things that occurred at work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tamper with equipment so that I cannot get work done.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Constantly look at my watch or clock when at work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Let others do my work for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neglect those tasks that will not affect my performance appraisal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Take frequent or long coffee or lunch breaks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Make excuses to go somewhere to get out of work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use equipment for personal purposes without permission.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Think about quitting my position because of work-related issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please indicate your level of agreement or disagreement with each statement.

	(1)strongly disagree	(2)disagree	(3)neutral	(4)agree	(5)strongly agree
I rarely seek out information about my job opportunities with other employers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are few chances that I will search for a job with other employers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I almost always follow up on job leads with other employers that I hear about.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Within the next year, I intend to search for a job with other employers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please answer the following questions.

	very difficult(1)	(2)	(3)	(4)	very easy(5)
How easy would it be for you to find a job with another employer in this geographical area that is as good as the one you now have?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How easy would it be for you to find a job with another employer in this geographical area that is better than the one you now have?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How easy would it be for you to find a job with another employer in this geographical area that is much better than the one you now have?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section VI. This section of the survey is meant to provide the researchers with useful information on the general characteristics of those participating in the survey. All information will remain confidential.

Educational level: (Baccalaureate degree with a major in)

- 4 Arts & Humanities
- 5 Business
- 6 Education
- 7 English/Foreign Languages
- 8 General Studies
- 9 History/Political Science
- 10 Math
- 11 Physical/Biological Sciences
- 12 Psychology
- 13 Social Work
- 14 Sociology
- 15 Other (please specify) _____

Educational level: (Masters degree in)

- 4 Social Work
- 5 Other (please specify) _____

Educational level: (Doctorate degree in)

- 4 Social Work
- 5 Other (please specify) _____

What year did you get your highest degree? (yyyy)

What social work licensure do you have?

- 4 LGSW
- 5 LCSW
- 6 LCSW-C
- 7 none

Are you a current student of the Title IV-E program?

- 4 Yes
- 5 No

Are you a graduate of the Title IV-E program?

- 4 Yes
- 5 No

If yes, please check all that apply.

- 4 BSW level
- 5 MSW level
- 6 Other (please specify) _____

Did you participate in an internship at DSS as part of your educational training?

- 4 Yes
- 5 No

What was your starting salary when you were first hired with the State? (if you are not a state employee, but a county employee, please use that salary)

What was your starting salary when you were first hired with this local DSS? (numbers only)

Was this job in child welfare? (if yes, please skip the next two questions)

- 4 Yes
- 5 No

What was your starting gross annual salary when you were hired for your first job in child welfare? (numbers only)

What is your current gross annual salary range?

- 4 \$20,000 - \$29,999
- 5 \$30,000 - \$39,999
- 6 \$40,000 - \$49,999
- 7 \$50,000 - \$59,999
- 8 \$60,000 - \$69,999
- 9 \$70,000 – and above

What best describes your current gross annual household income range?

- \$20,000 - \$29,999
- \$30,000 - \$39,999
- \$40,000 - \$49,999
- \$50,000 - \$59,999
- \$60,000 - \$69,999
- \$70,000 – and above

How would you describe yourself?

1. White
2. Black
3. Hispanic
4. Asian
5. Native American
6. Other _____

If there are any comments you'd like to add, please feel free to add them here.

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*indicates peer reviewed publication for review on turnover literature in child welfare