FISEVIER

Contents lists available at ScienceDirect

Children and Youth Services Review

journal homepage: www.elsevier.com/locate/childyouth



Impacts of transformational leadership on turnover intention of child welfare workers



Taekyung Park^{a,*}, Barbara Pierce^b

- ^a University of Nebraska Kearney, Social Work Department, United States
- b Indiana University School of Social Work. United States

ARTICLE INFO

Keywords: Child welfare worker turnover Transformational leadership Organizational culture Organizational climate

ABSTRACT

The high turnover rate among child welfare workers is a constant, well-documented issue. This study aimed to examine how organizational factors, particularly leadership, affect child welfare worker turnover intentions in order to help child welfare agencies establish a practice model that prevents the turnover of qualified workers. In order to do so, it is important to examine the effects of organizational commitment on employees' turnover intentions.

A cross-sectional survey was distributed among workers in public child welfare agencies in a Midwestern state in the United States (N=214). A path model was developed to test the direct and indirect effects of transformational leadership on the turnover intentions of child welfare workers using STATA. The survey results indicated that the transformational leadership styles of local office directors had direct and negative effects on child welfare workers' turnover intentions. Therefore, this study recommends that child welfare services provide local office directors with leadership training in order to reduce the preventable turnover of child welfare workers

1. Introduction

The quality of child welfare services provided to clients significantly depends on the person who delivers the services and the stability of the child welfare service workforce (National Association of Social Work 2016; Schweitzer, Chianello, & Kothari, 2013). Researchers who study child welfare worker turnover identified the negative effects of other factors that affect children and families and thus cause poor child welfare outcomes (Griffiths & Royse, 2017; Healy, Meagher, & Cullin, 2007; National Child Welfare Workforce Institute, 2016; Schweitzer et al., 2013; Strolin, McCarthy, & Caringi, 2007). In addition, Healy et al. (2007) took the existing research one step further and identified the negative effects of these factors on the social work profession. Because the employee turnover rate is higher in social work than in other industries (Tham, 2007; The British Association of Social Workers, 2012), the consequences of child welfare worker turnover on the social work profession were also considered.

Despite the importance of the workforce in child welfare services, the average rate of worker turnover in child welfare organizations varies from 20% up to 57% annually (Burstain, 2009; Child Welfare League of America, 2008; Healy & Oltedal, 2010; Mack, 2001; Mor Barak, Nissly, & Levin, 2001; National Child Welfare Workforce

Institute, 2011), and some studies claim 100% annual turnover (see Mor Barak et al., 2001; Fulcher & Smith, 2010). Because child welfare agencies suffer from higher staff turnover rates than other human services do, turnover and retention of child welfare workers at every level have been extensively studied for decades (Mor Barak, Levin, Nissly, & Lane, 2006; Ellett, 2009; Ellett, Ellis, Westbrook, & Dews, 2007; Fulcher & Smith, 2010; General Accounting Office, 2006; Hwang & Hopkins, 2012)

High turnover rates among child welfare workers have not decreased despite the long history and large amount of research addressing this issue (Fulcher & Smith, 2010; Popa & Andenoro, 2009; Potter, Leake, Longworth-Reed, Altschul, & Rienks, 2016). It also seems that numerous variables have been added to turnover models over time. For example, Wilke et al. (2018) reviewed the literature on child welfare worker turnover and proposed a "multi-level conceptual model of child welfare workforce turnover" (p. 205). Their model consisted of 5 dimensions, including organizational influences; administrative leadership and organizational climate and culture are sub-categories of organizational influences. A qualitative study found that child welfare workers left due to "poor leadership at the state level (p. 81)" (Griffiths & Royse, 2017); however, most of the previous studies on the relationship between leadership styles and worker turnover measured the

E-mail address: parkt2@unk.edu (T. Park).

^{*} Corresponding author.

leadership styles of supervisors and/or immediate leaders. It has also been suggested that organizational culture and climate are shaped by the leader's help and vice versa (Avolio, 2007; Bass & Avolio, 1993; Bass & Riggio, 2006; Chemers, 2016; Schein, 2010; Zaccaro & Klimoski, 2002). Bass and Avolio (1993) recommend that transformational leaders develop and change the organizational culture. Some studies found that transformational leadership in human service organizations had a positive influence on building supportive organizational cultures and climates and that those relationships affected organizational commitment (Caillier, 2016; Green, Miller, & Aarons, 2011; Rittschof & Fortunato, 2016; Tafvelin, Hyvönen, & Westerberg, 2012). Therefore, this study proposes integrating organizational culture and climate into distant leadership in order to address the child welfare worker turnover issue. This model should guide child welfare agencies in developing and adopting a successful workforce management strategy, particularly in terms of transformational leadership style, which previous research has

The purpose of this research is to examine the relationship between the transformational leadership style of distant leaders and employee turnover intention through the mediating effects of organizational culture, climate, and commitment. In particular, a literature review suggests that transformational leadership creates a positive, supportive culture and organizational climate for employees (Caillier, 2016; Green et al., 2011; Rittschof & Fortunato, 2016; Tafvelin et al., 2012). Furthermore, the organizational culture and climate constructed by transformational leadership should contribute to employees' positive organizational commitment. Finally, positive organizational commitment is expected to reduce employees' turnover intentions. The model that is examined in this study is expected to help with the human resource management of child welfare organizations. Eventually, a stable child welfare workforce should contribute to providing consistent, high-quality social services to vulnerable populations.

1.1. Transformational leadership

Leadership theory has evolved from the trait approach of charismatic leadership to the dimensions of leadership: (1) contingency, (2) transactional, (3) transformational, and (4) distributed leadership (Grint, 2011; Yukl & Heaton, 2002). The term 'transformational leadership' was first defined by Downton in 1973 (Northouse, 2001); however, Burns (1978) initiated the use of the term as an important approach to leadership theory by proposing two kinds of leaders: (1) transactional and (2) transformational. Transactional leadership is associated with exchange because the followers of a leader have expectations (to some extent) and the leader will meet the followers' needs, whereas transformational leadership is concerned with the motivation and morality of the followers.

Transformational leadership is a leadership behavior that influences followers to transcend their individual self-interests for the collective good of their organizations and "help followers reach their fullest potential (Northouse, 2001, p.131)" through paying attention to individual needs. Transformational leadership is theorized in four dimensions: (1) idealized influence; (2) inspirational motivation; (3) intellectual stimulation; and (4) individual consideration. Idealized influence describes the charismatic behaviors and attitudes that followers identify as associated with leaders. A leader who has these features presents a vision and acts as a powerful role model for followers, i.e., followers want to emulate their leaders (Gellis, 2001). Inspirational motivation is the degree to which a leader articulates a vision that inspires followers. Leaders with inspirational motivation communicate and share their visions in their organizations and motivate followers to build confidence and commit to their visions (Gellis, 2001; Northouse, 2001). Intellectual stimulation is the degree to which the leader's actions challenge followers to think creatively and take risks. Followers will be encouraged to be creative and innovative and challenged to break from their past beliefs and values (Northouse,

2001). Individualized consideration is the degree to which leaders attend to the needs and concerns of the individual follower and then help them to develop themselves; it is related to the supportive environment. Leaders who have this feature will treat followers with care and concern. As a result, transformational leadership expects the successful performance of followers as a consequence of the functions of the four factors (Gellis, 2001). Den Hartog, House, Hanges, Ruiz-Quintanilla, and Dorfman (1999) stated that there is plenty of empirical evidence that shows that transformational leadership is more effective than other leadership models.

Transformational leadership is positively correlated with organizational cultures in which the leaders and followers share goals, visions. and values (Jaskyte, 2004; Schein, 1990). However, the transformational leadership model is relatively new in social work, and only a few empirical studies have demonstrated the effectiveness of leadership in social work and human service organizations, including child welfare organizations (Gellis, 2001; Mary, 2005; Medley & Larochelle, 1995). Kays (1993) examined the relationship between the transformational leadership model and employee job satisfaction in child aid and mental health centers (cited by Mary, 2005); the study found that the two variables are significantly and positively correlated. Then, Mary (2005) also demonstrated that transformational leadership is related to positive leadership outcomes in human service organizations. The study revealed that transformational leadership resonated with social work values. Additional empirical studies have shown the effects of transformational leadership on job satisfaction, role clarity, commitment, and co-worker support in human service organizations, including child welfare agencies (Caillier, 2016; Green, Miller, & Aarons, 2011; Rittschof & Fortunato, 2016; Tafvelin, Hyvönen, & Westerberg, 2012). However, to the authors' knowledge, one study found that the transformational leadership style of immediate supervisors had direct, negative effects on the job burnout and turnover intentions of child protective service providers (Rittschof & Fortunato, 2016). The aforementioned studies on the relationship between transformational leadership, organizational culture, climate, job attitudes, and turnover intention in child welfare examined the immediate leaders, not top managers.

1.2. Organizational climate and culture

According to organizational theory, the organizational climate is created earlier than the organizational culture and has been studied extensively with respect to organizational behavior and effectiveness (Glisson et al., 2008; Schein, 1990). The organizational climate consists of employees' psychological perceptions of the work environments that have an impact on their well-being (Forehand & Von Haller, 1964; Hemmelgarn, Glisson, & James, 2006; James & Jones, 1974). Organizational culture is developed later than organizational climate and refers to the norms, values, expectations, and perceptions shared by workers of an organization (Glisson et al., 2008; Hasenfeld, 2000; Hemmelgarn et al., 2006; Schein, 1990). While organizational climate is considered a surface observation of the workplace environment, organizational culture is defined as the patterns of norms and attitudes shared and established by the members and given groups (Hemmelgarn et al., 2006; Schein, 1990; Tham, 2007).

Most of the studies concerning organizational culture and climate have been related to job satisfaction, stress, and organizational commitment (Bednar, 2003; Glisson & James, 2002; Lloyd, King, & Chenoweth, 2002). Glisson and James (2002) discovered an interesting result in which organizational climate was a mediator in the relationship between organizational culture and work attitudes, such as organizational commitment, although most studies are in agreement with respect to the indirect roles of the relationship between the two factors. Later, Aarons and Sawitzky (2006) supported the previous research findings by examining the concurrent impact of organizational culture and climate on work attitudes and their subsequent impact on turnover.

In their study, the researchers found that organizational culture directly influenced work attitudes in addition to indirectly affecting the organizational climate. The study also showed that a constructive culture had a positive relationship with positive work attitudes and a defensive culture had a negative relationship with positive work attitudes (Aarons & Sawitzky, 2006). In recent studies, organizational culture and climate were used as indirect predictors or mediating factors of worker turnover through job satisfaction (Aarons & Sawitzky, 2006; Hwang & Hopkins, 2012; Mor Barak et al., 2006). As indirect factors, both organizational culture and climate influence work attitudes and these attitudes then influence the employee's decision of whether or not to leave or remain in the organization.

While several studies examined the mediating effects of organizational culture and climate, Glisson et al. (2008) studied therapist turnover in mental health clinics by examining the function of organizational culture and climate as direct factors. In that study, the researchers found that only organizational climate was significantly correlated with therapist turnover (Glisson et al., 2008); however, Tham (2007) stressed that organizational culture is the most important factor for social worker turnover intention in a study of the organizational factors for turnover intention among social workers in child welfare agencies.

1.3. Organizational commitment

Organizational commitment in employee turnover studies is a psychological state that characterizes the relationships between individuals and organizations, which translate into behavior (Meyer & Allen, 1991). Organizational commitment is mostly measured according to workers' contributions, attachment, and loyalty to, identification with, and involvement in the organization (Mor Barak et al., 2006; Kim & Stoner, 2008; Lambert, Cluse-Tolar, Pasupuleti, Prior, & Allen, 2012; O'Reilly & Chatman, 1986). The more attached to the organization workers are, the lower their intentions to leave (Lambert et al., 2012). In a test of turnover that placed organizational commitment as a direct factor that was influenced by job satisfaction, organizational structure, and personal characteristics, the study found that these three factors affected workers' commitment to the organization and therefore whether social workers tended to seriously consider leaving the organization or not (Lambert et al., 2012).

Numerous studies have indicated that organizational commitment is a direct factor in social worker turnover (Aarons & Sawitzky, 2006; Carmeli & Freund, 2009; Hwang & Hopkins, 2012; Hwang & Hopkins, 2015; Kim & Kao, 2014; Williams & Hazer, 1986) or an indirect factor of turnover (Boyas, Wind, & Kang, 2012; Freund, 2005; Lee, Mitchell, Sablynski, Burton, & Holtom, 2004). A study that examined organizational commitment and job satisfaction as factors of social worker turnover intentions designed a model in which job satisfaction was a direct predictor and commitment was an indirect factor that influenced workers' satisfaction with the job (Freund, 2005). The study results supported their conceptual model of turnover intention among welfare workers. In addition, Mor Barak et al. (2006) analyzed the relationship between job satisfaction and organizational commitment in their study that modeled the turnover intention of child welfare workers and found that the two factors influenced each other and that each factor had a direct impact on worker turnover. Furthermore, research has focused on the causes of organizational commitment, which in turn, result in worker turnover (Aarons & Sawitzky, 2006). The factors that affect organizational commitment are mostly linked to organizational structure, culture, and climate (Moon, 2000). Overall, high scores in organizational commitment are correlated with low turnover intentions among child welfare workers.

Based on a review of the relevant theories and previous research findings, a conceptual model was proposed and is diagrammed in Fig. 1. The current study investigates the relationship between the transformational leadership style of distance leaders and worker turnover

intentions through organizational culture, climate, and commitment in child welfare organizations while controlling for age, gender, and social work degrees. Therefore, we hypothesized that the transformational leadership of local office directors has a direct, negative relationship with child welfare worker turnover intention. We also predict that organizational commitment has a direct negative relationship with turnover intention. Finally, we hypothesized that organizational culture, climate, and commitment mediate between transformational leadership of local office directors and turnover intention.

2. Material and methods

A cross-sectional survey research design was appropriate for investigating the research questions and the hypotheses formed from the conceptual model, which concerns the relationship between transformational leadership styles in child welfare organizations and worker turnover intentions. The questionnaire was launched on Qualtrics and administered online. The research received Institutional Review Board approval from the researchers' university.

2.1. Participants and data collection

The survey participants were recruited through local directors with the help of the deputy director's office in the Department of Child Services of a Midwest State. The data were collected as part of a state project on leadership development among child welfare service providers. The project provided local office directors with leadership training in state-administered child welfare agencies. The local office directors in the state where this study was conducted oversee county agencies staffed with family case managers and supervisors. They are middle managers in the entire state child welfare system. The survey was conducted by two groups of child welfare workers: those who were led by local office directors who took the leadership training and those whose directors who did not take the training. The agencies had similar characteristics in terms of the numbers of child welfare workers and geographic areas. Thirty-two local office directors (16 in each group) were identified for the survey with the help of the Deputy Director of the Department of Child Services (DCS).

The survey links were created in Qualtrics, a web-based survey tool that allowed the creation of multiple links. The survey links were distributed three times in total and included two reminder emails from April 26 to May 10 in 2017. The survey links were closed on May 17, 2017. Because there was constant turnover among child welfare workers (i.e., quitting and hiring), we were not able to determine the exact number of employees during the survey. The estimated target participant population was approximately 1048 according to the Deputy Director's office. The overall response rate was around 25% (n = 264). There were six local offices in which no child welfare workers took the survey. Only 214 participants fulfilled the study criteria.

The majority of respondents in the study sample were female (83.6%), between 20 and 39 years of age (69.2%), and case workers (81%). About 78% of the sample had bachelors' or masters' degrees in disciplines other than social work, and 28% indicated that they had received a social work degree. Most of the respondents had worked less than five years in their current positions (87.4%) and in the DCS (80.8%). Approximately 5% of the participants received leadership training for supervisory positions; however, a person misunderstood the question that was only for supervisors and reported that he or she received leadership training. Therefore, the total responses to the leadership training question outnumbered the total number of supervisors. Table 1 presents the demographic characteristics of the study participants.

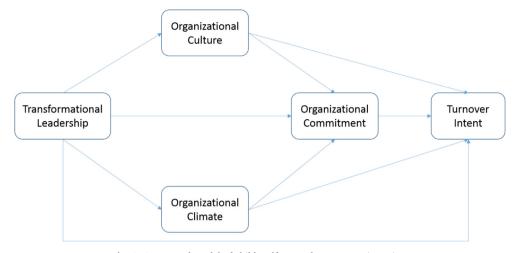


Fig. 1. Conceptual model of child welfare worker turnover intention.

Table 1
Descriptive statistics of study participants

Variables		N	%
Gender	Female	179	83.6
	Male	28	13.1
	Other	5	2.3
	Missing	2	0.9
Age	20–29	80	36.9
	30–39	69	32.3
	40–49	31	14.5
	50–59	16	7.5
	> 60	4	1.9
Degrees	BSW Other Bachelor's degree Missing for Bachelor's Degree MSW Other Master's Degree Social Work Degree in either BSW or MSW	49 145 20 12 22 61	22.9 67.8 9.3 5.6 10.3 28.5
Leadership Training for	Yes	11	33.3
Supervisor	No	22	66.7
Job Title	Caseworker	153	81
	Supervisor	32	16.9
	Missing	25	11.7
Years in Current Position	Less than 1 1-5 6-10 11-15 16-20 21-25 26-30	46 113 11 6 1 3	25.3 62.1 6 3.3 0.5 1.6 0.5
Years of Working in DCS	< 1	42	21.2
	1-5	118	59.6
	6-10	24	12.1
	11-15	3	1.5
	16-20	2	1.0
	21-25	3	1.5
	26-30	5	2.5
	31-35	1	0.5

2.2. Measures

2.2.1. Turnover intention

Turnover intention was the full endogenous variable in the current study and intentions to quit were used to measure turnover intention. A six-item scale that assessed employees' intentions to resign from their current organizations was developed by Crossley, Grauer, Lin, and Stanton (2002). This scale focused on measuring an individual's

intention to resign from an organization and was designed to avoid overlap with the factor of searching for another job (Crossley et al., 2007). Each item was graded on a seven-point scale (which ranged from 1 = strongly disagree to 7 = strongly agree) based on five statements: (1) "I intend to leave this organization soon"; (2) "I plan to leave this organization in the next little while"; (3) "I will quit this organization as soon as possible"; (4) "I do not plan on leaving this organization soon" (reverse scored); or (5) "I may leave this organization before too long (Crossley et al., 2007, p. 1035)." The study showed that this scale had a Cronbach's alpha of 0.89, which indicates strong internal reliability and consistency (Crossley et al., 2007). This study also used Cronbach's alpha to test the scale and confirmed that the scale showed good internal consistency and reliability (alpha = 0.84); scores > 0.80 are considered to be highly reliable (Abu-Bader, 2010).

2.2.2. Transformational leadership

The four dimensions of transformational leadership were measured with 20 items from the Multifactor Leadership Questionnaire (MLQ Form 5X; Avolio, Bass, & Jung, 1999). The MLQ Form 5X is the revised version of the MLQ that measures the full range of leadership factors. Avolio et al. (1999) developed a six-factor leadership model to find the best fit for the MLO survey. They started with 80 items for six leadership factors and then determined a final set of leadership factors with 36 items through confirmatory factor analyses (Avolio et al., 1999). Of the 36 items of the MLQ, 20 items (four items each for intellectual stimulation, inspirational motivation, and individualized consideration and eight items for idealized influence) specifically measure transformational leadership's four dimensions. In the original development of MLQ Form 5X, the transformational leadership factor showed discriminant validity. This finding was supported by a study that evaluated the structural validity of MLQ Form 5X through confirmatory factor analyses, which found that the instruments were able to capture the full range of leadership factors (Muenjohn & Armstrong, 2008). The Cronbach's alpha values produced in that study were 0.86 for the English version and 0.87 for the one translated into Thai. Most studies that evaluated transformational leadership via MLQ Form 5X showed strong internal reliability, i.e., a Cronbach's alpha value > 0.80 (Alsayed, Motaghi, & Osman, 2012; Avolio, Zhu, Koh, & Bhatia, 2004; Piccolo &

This study measured transformational leadership with the 20 items of MLQ Form 5X. Transformational leadership was measured by child welfare workers at the individual level because this study aimed to capture individual perceptions of organizational leadership. Each item was scored using a five-point scale. The example items for each dimension consisted of several parameters: (1) "seeks different views" for intellectual stimulation; (2) "articulates a compelling vision of the

future" for inspirational motivation; (3) "individualized attentions" for individualized consideration; and (4) "goes beyond self-interests" for idealized influence. The acquired Cronbach's alpha value confirmed that the scale showed good internal consistency and reliability with the scores (alpha = 0.98).

2.2.3. Organizational culture

Organizational culture refers to the norms, values, expectations, and perceptions shared by members of an organization (Glisson et al., 2008; Hasenfeld, 2000; Hemmelgarn et al., 2006; Schein, 1990). This study measures organizational culture with an existing scale that was invented by Shim (2010) and used to examine the effect of organizational culture on child welfare worker turnover intentions. The study found that organizational culture was a predictor of worker turnover in child welfare agencies and the measurement model was determined to be valid and reliable. The scale consists of 32 items rated by five Likert-type scales. Two example items: (1) there are clear measures of success and progress indicators for work with clients and (2) my work uses client-focused interventions. The determined Cronbach's alpha value confirmed that the scale showed good internal consistency and reliability (alpha = 0.92).

2.2.4. Organizational climate

Organizational climate refers to the employees' psychological perceptions of an organization and work environments that impact workers' behaviors (Aarons & Sawitzky, 2006; James & Jones, 1974; James & Sells, 1981). This study measured organizational climate with an existing scale that was invented by Shim (2010) and used to examine organizational climate's effect on child welfare worker turnover intentions. The study found that the organizational climate was a predictor of worker turnover in child welfare agencies and the measurement model was determined to be valid and reliable. However, a few items were reworded in order to avoid confusing the participants after consultation with DCS employees. The scale consists of 26 items rated by five Likert-type scales. Two example items: (1) there are clear measures of success and progress indicators for work with clients and (2) my work uses client-focused interventions. The Cronbach's alpha value confirmed that the scale showed good internal consistency and reliability (alpha = 0.92).

2.2.5. Organizational commitment

In this study, organizational commitment refers to employees' attachment to their current organizations (Landsman, 2001; Mowday, Steers, & Porter, 1979). Various instruments for organizational commitment exist (Landsman, 2001; Mowday et al., 1979); this study used an organizational commitment scale developed by Mowday et al. (1979) that consisted of 15 items. This scale is one of the earliest instruments developed to measure the affective dimension of organizational commitment (WeiBo, Kaur, & Jun, 2010) and is the most frequently used and validated instrument in child welfare workforce research (Hwang & Hopkins, 2012). An example item: "I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful." The Cronbach's alpha value confirmed that the scale showed good internal consistency and reliability (alpha = 0.86).

2.2.6. Control variables

Based on the findings from previous studies, gender, age, and educational background (social work degrees) were selected as control variables (Crossley, Bennett, Jex, & Burnfield, 2007; Landsman, 2001; Maertz, Griffeth, Campbell, & Allen, 2007; Nissly, Barak, & Levin, 2005). A child welfare workers' gender was coded as a binary variable (1 = female; 0 = male), and their age was self-reported. The workers' educational background was measured by a binary variable (1 = social work degrees at the master's and/or bachelor's level; 0 = master's and/or bachelor's degrees in other disciplines).

2.3. Analyses

The statistical analyses used in this study involved the following steps and were conducted using STATA ver. 15. First, the descriptive statistics for the sample were computed. Second, the reliability was tested for (1) turnover intention, (2) organizational commitment, (3) transformational leadership, (4) organizational culture, and (5) organizational climate. Third, summary statistics, e.g., frequency distribution, means, and bivariate correlations, among the study variables were computed after several items were removed based on the results of exploratory factor analyses. Finally, path analysis based on a maximum likelihood estimation was used to estimate a series of mediated models of the relationships among the observed variables. The overall model fit was evaluated by multiple statistical indexes of model fit because the chi-squared test contradicted the large sample size, which is required for SEM (Lei & Wu, 2007). This study used the minimal set of fit indices recommended by Kline (2005): "model chi-squared, Steiger-Lind root mean square error of approximation (RMSEA), the Bentler comparative fit index (CFI), Non-normed fit index (NNFI), and the standardized root mean square residual (SRMR) (Kline, 2005, p.134)". Researchers have recommended reporting not only chi-squared results, but also SRMR along with one of the other fit indices (Albright & Park, 2009; Hooper, Coughlan, & Mullen, 2008; Lei & Wu, 2007).

3. Results

Overall, the mean scores of all of the study variables were higher than the middle points of the individual instruments. Child welfare workers in this sample reported moderate turnover intent (M = 17.3 ± 4.8). The mean scores for the independent and mediating variables were 75.4 out of 100 for transformational leadership (SD = 18.2), 73.5 out of 105 for organizational commitment (SD = 18.2), 110.1 out of 160 for organizational culture (SD = 16.8), and 89 out of 130 for organizational climate (SD = 14.9).

3.1. Bivariate analysis results

Bivariate analyses among the measurement variables confirmed that turnover intention was negatively correlated with transformational leadership (r = -0.36; p < 0.001), organizational commitment (r = -0.51; p < 0.001), organizational culture (r = -0.37;p < 0.001), and organizational climate (r = -0.37, p < 0.001). Transformational leadership was significantly associated with organizational commitment (r = 0.41; p < 0.001), organizational culture (r = 0.49; p < 0.001), and organizational climate (r = 0.43;p < 0.001). Significant correlations were found between organizational commitment and organizational culture (r = 0.64; p < 0.001) and organizational climate (r = 0.63; p < 0.001). In addition, the correlation between organizational culture and climate was very strong (r = 0.87; p < 0.001). However, all three control variables (age, gender, and educational degrees) were not significantly correlated with turnover intention, transformational leadership, organizational commitment, organizational culture, or organizational climate. Table 2 displays the correlation coefficients matrix for the study variables.

3.2. Path analyses

This study tested a path model that connected worker perceptions of leadership, organizational culture, organizational climate, organizational commitment, and turnover intention in public child welfare organizations while controlling for the effects of gender, age, and social work degrees on turnover intentions. This study used two major methods to identify multicollinearity among the independent variables. The cutoff values for both methods were variance influence factor (VIF) values > 10 and Tolerance < 0.1, as proposed by Abu-Bader (2010) and Cohen, Cohen, West, and Aiken (2003), who used these values for

Table 2 Correlations among measurement and control variables (N = 214).

	TI	TL	OCM	OCU	OCL	Age	Gender	SW.D
Turnover Intention (TI)	1							
Transformational Leadership (TL)	-0.36***	1						
Organizational Commitment (OCM)	-0.51***	0.41***	1					
Organizational Culture (OCU)	-0.37^{***}	0.49***	0.64***	1				
Organizational Climate (OCL)	-0.37***	0.43***	0.63***	0.87***	1			
Age	-0.03	-0.13	0.00	0.01	0.01	1		
Gender	-0.08	-0.02	-0.03	0.00	-0.09	0.02	1	
Social Work Degrees (SW.D)	0.04	-0.02	0.00	-0.02	0.02	-0.14	0.01	1

^{***} $P \le 0.001$.

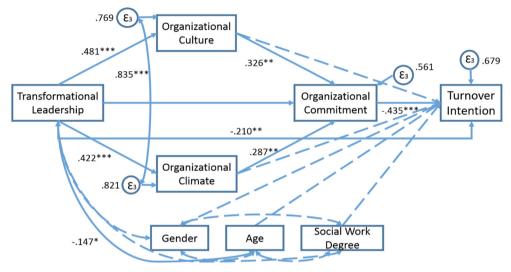


Fig. 2. Standardized path coefficients. Note: Solid Line = Statistically Significant, Dashed line = Statistically Insignificant. *** = $P \le 0.001$, ** = $P \le 0.05$.

their research on workforce issues and human behaviors. The tolerance and VIF values of all the independent variables were within acceptable ranges.

3.2.1. Direct, Indirect, and total effects of structural paths

Fig. 2 displays the diagram of standardized path coefficients for the path model. Overall, the total effect of transformational leadership on turnover intention through organizational culture, organizational climate, and organizational commitment was -0.391 (p ≤ 0.001). The total effect of transformational leadership on organizational commitment through organizational culture and organizational climate was 0.406 (p ≤ 0.001). However, the total effects of organizational culture $(\beta = -0.100; p \ge 0.05)$ and organizational climate $(\beta = -0.182,$ $p \ge 0.05$) on turnover intention through organizational commitment were not significant. In terms of direct effects, organizational commitment was positively associated with transformational leadership $(\beta = 0.128; p \le 0.05)$, organizational culture ($\beta = 0.326; p \le 0.01$), and organizational climate ($\beta = 0.287$; p ≤ 0.01). Transformational leadership had direct relationships with organizational culture $(\beta = 0.481; p \le 0.001)$ and organizational climate $(\beta = 0.422;$ $p \le 0.001$). Turnover intention was also directly predicted by organizational commitment ($\beta = -0.435$; p ≤ 0.001) and transformational leadership ($\beta = -0.210$; p ≤ 0.01). In contrast, turnover intention was not directly predicted by organizational culture ($\beta = -0.042$; $p \ge 0.05$) or organizational climate ($\beta = -0.057$; $p \ge 0.05$) in this model. No significant relationship between the control variables and turnover intention was found. Finally, the model's R² value of 0.3030 indicated that the model seemed to fit the data well (x^2) (22) = 557.057, RMSEA 95% confidence interval [CI] = 0.000 (0.000-0.056), CFI = 1.000, NNFI = 1.017, and SRMR = 0.026),

based on the proposed cutoff criteria.

4. Discussion

The objective of the study was to examine both the direct and indirect effects of transformational leadership, as perceived by child welfare workers in public child welfare agencies, on turnover intentions. In order to investigate both the direct and indirect effects of the transformational leadership of local office directors, this study tested the relationship between transformational leadership and child welfare worker turnover intentions through mediating variables, such as organizational commitment, organizational culture, and organizational climate. A structural path model was also examined.

One of the key findings in this study was that the transformational leadership style of local office directors had a negative and direct impact on the turnover intentions of child welfare workers. This finding supports our first research hypothesis. In addition, organizational commitment partially mediated the effects of transformational leadership on turnover intention. This result is consistent with previous research and the proposed theory of the relationship between transformational leadership and work attitudes, including turnover intention and organizational commitment in human service organizations (Mary, 2005; Rittschof & Fortunato, 2016). The proposed theory indicates that child welfare workers that work under leaders with higher scores in transformational leadership characteristics are more likely to show organizational commitment and less likely to willingly resign from their jobs than those under directors with lower scores. Very little research has examined the effects of transformational leadership on worker turnover intentions in child welfare settings. In particular, it is very difficult to find any research that tests the mediating factors between transformational leadership and the turnover intentions of child welfare workers. Control variables (age, gender, and social work degrees) were not significantly related to turnover intentions in the proposed model. This finding is inconsistent with previous studies regarding the effect of social work degrees on child welfare worker turnover (intentions) (Griffiths & Royse, 2017; Potter et al., 2016; Wilke et al., 2018); in previous studies, child welfare staff with social work degrees were more likely to stay in their current jobs.

The second key finding was the direct and negative impact of organizational commitment on the turnover intentions of child welfare workers. This supports our second research hypothesis and is consistent with previous research on and theories of the relationship between organizational commitment and turnover intentions (Boyas et al., 2012: Burstain, 2009; Hwang & Hopkins, 2015; Mowday et al., 1979). Organizational commitment showed the full mediating effects of both organizational culture and organizational climate on turnover intentions. In other words, the significant direct relationships between organizational culture, organizational climate, and turnover intention disappeared due to the effects of organizational commitment. These results reflect several different types of studies on the relationship between organizational conditions (culture and climate) and turnover intention: (1) direct and negative effects between them (Shim, 2010); (2) indirect effects through organizational commitment between organizational conditions and turnover intention (Lambert et al., 2012); and (3) direct and positive relationships between organizational conditions and organizational commitment (Glisson & James, 2002). However, none of the previously described research studies examined the complete mediating effects of organizational commitment on the relationship between organizational conditions and organizational commitment.

The third key finding was that the transformational leadership of local office directors had positive and direct effects on building positive work conditions, organizational culture, and organizational climate. In addition, organizational conditions directly predicted the organizational commitment of child welfare workers. The results are consistent with previous research on the roles of transformational leadership in building positive organizational cultures and organizational climates in private sector and nonprofit organizations (Jaskyte, 2004; Sarros, Cooper, & Santora, 2008). The direct and positive relationship between organizational conditions and organizational commitment was also widely studied in the private sector (Joo & Park, 2010; O'Reilly, Chatman, & Caldwell, 1991). This finding leads to our fourth key finding of this study: organizational culture and organizational climate have partial mediating effects on the positive relationship between transformational leadership and turnover intention, which partially supports our third research hypothesis. However, the total effects of the transformational leadership of local office directors on turnover intentions, through organizational culture and organizational climate, should be carefully interpreted because organizational conditions partially mediated the relationship between transformational leadership and organizational commitment in the model. The authors are unaware of empirical studies that examined the mediating roles of organizational conditions in the relationship between transformational leadership and organizational commitment in the child welfare setting; however, as previously mentioned, some research findings support the idea that there are positive relationships between organizational culture and climate and organizational commitment (Joo & Park, 2010; O'Reilly

Lastly, the study found that the transformational leadership of local office directors had positive direct and indirect effects on organizational commitment. This finding was consistent with a study that found a direct and positive effect of transformational leadership on organizational commitment in the child welfare workforce field (Rittschof & Fortunato, 2016). To the authors' knowledge, that study was the only research study conducted in the child welfare setting that evaluated transformational leadership and organizational commitment. However, other studies observed direct relationships between the leadership

behaviors (including transformational leadership behaviors) perceived by workers and organizational commitment in the social work, human services agency, public, and business sectors (Caillier, 2016; Chen, Chen, & Chen, 2010; Glisson & Durick, 1988; Jaskyte, 2004; Walumbwa, Orwa, Wang, & Lawler, 2005). Child welfare workers with local office directors who were perceived as transformational leaders were more likely to commit to their organizations than those who identified their directors as having less transformational leadership.

To summarize, the transformational leadership style of local office directors played key roles in child welfare workers' intentions to leave their agencies. In other words, despite the mediating roles of organizational commitment and workplace conditions, leadership styles were the most significant predictor of turnover intention in this dataset. Therefore, the findings in this study strongly support the theoretical framework of the relationship between transformational leadership and turnover intention in the child welfare workforce.

4.1. Limitations of the study and directions for future research

This cross-sectional study has several limitations that require special precautions with respect to interpreting the results. First, this study did not randomly select the sample due to the feasibility of the research. The data collection was a part of a Workforce Excellence Project in a state that purposely selected their study participants because of their previous participation in leadership training. This may raise concerns with respect to the study's generalizability in other states and to all public child welfare agencies. Therefore, the findings of this study cannot accurately represent the perceptions of the child welfare workers. However, the selected local offices were widely spread throughout the state and child welfare workers from 27 local offices out of 89 (over 30%) responded to the survey. Future research on this subject could design a random sampling strategy to be able apply the findings to the entire population.

Second, the measurement tools used in this study raise some concerns. Because this study used existing scales for both independent variables and a dependent variable, this study ran reliability tests but not factor analyses. Even though the reliability values were higher than acceptable levels, some of the results raised some concerns about the actual differences between organizational culture and organizational climate. While previous research proved that the two variables measured different scopes of organizational conditions and tested them in child welfare settings, this study's results seemed to reveal that they had considerable similarity in some common aspects (Shim, 2010). However, this issue did not seriously affect the main hypothesis of the current research. Nevertheless, future research should test factor analyses for organizational culture and organizational climate.

Third, transformational leadership is a relatively new concept in social work, including child welfare, and training has not kept pace with the theory. Training provided to the local office directors by the National Child Welfare Workforce Institute was aimed at adaptive leadership theory, which incorporates some transformational constructs. Moreover, child welfare lacks research on the roles of distant leaders in turnover intention. However, this study chose a specific leadership style, transformational leadership, in order to test the effects of leaders on turnover intention. Therefore, rather than using one specific leadership style, a future study could compare the effects of multiple leadership styles on the turnover intentions of child welfare workers. Then, future research can identify the leadership style that best fits child welfare agencies.

Finally, independent variables, such as leadership and organizational conditions, are organizational-level data for which multilevel analysis would have been more appropriate. However, this study ran individual-level analyses because the preliminary analysis showed that the model was not nested. The preliminary analysis found that the independent variables were nested in the organizational level. The findings might have been due to the small sample size. Therefore, future

research should benefit from a multilevel analysis for a more complete understanding of the effects of organizational-level variables, such as leadership styles, organizational culture, organizational climate, and organizational commitment.

4.2. Implications

The major finding of the current study is the significance of the transformational leadership style of local office directors in child welfare agencies. Regardless of the mediating factors of organizational conditions, transformational leadership related to child welfare workers' intentions to leave their agencies showed the same degree of strength. The study implies that worker turnover intentions could be influenced not only by their immediate leaders/supervisors, but also by their distant leaders, such as local office directors. Most of the previous studies examined the leadership styles of immediate leaders or supervisors as a predictor of turnover intentions in child welfare agencies (Claiborne et al., 2014; Collins-Camargo & Royse, 2010; Ellett, Ellett, & Rugutt, 2003; Lee, Forster, & Rehner, 2011; Smith, 2005). However, this study indicated that local office directors could also play an instrumental role in discouraging or promoting worker commitment to their agencies and workers' intentions to leave the agency. In addition, this study implies that distant leaders can play a key role in building work environments, such as organizational cultures and organizational climates. Leadership studies in child welfare did not seriously consider the critical roles of distant leaders. Recently, the child welfare workforce field started paying attention to the development of leadership competencies at all agency levels (Bernotavicz, McDaniel, Brittain, & Dickinson, 2013); this study supports these recent trends.

While child welfare agencies cannot intervene in workers' personal factors, such as age, gender, and education, agencies can take actions to improve the issues of leadership styles and workplace conditions in order to prevent workers from leaving. According to the study findings, organizational interventions can be undertaken to improve worker commitment to the agencies and prevent workers from thinking of leaving their agencies. The transformational leadership theory proposes that leader behaviors and skills are not innate characteristics, but can be learned through training (Avolio et al., 1999; Bass & Riggio, 2006). Thus, child welfare agencies can engage in two techniques to promote transformational leadership styles. First, child welfare agencies can hire leaders who demonstrate transformational leadership styles and they can establish and apply standards that reflect the four characteristics of transformational leadership. Second, child welfare agencies can provide current leaders with training concerning transformational leadership styles. The state in which the current study was conducted has provided multiple leadership training sessions for the different levels of leadership roles, such as regional managers, executive staff, local office directors, and supervisors from child welfare agencies. Therefore, the state may be able to revisit and update the curricula of its training programs by adding the four dimensions of transformational leadership. In particular, transformational leadership theorists recommend that style for every employee level (Bass & Riggio, 2006). Therefore, it is recommended that the state encourage its child welfare agencies to provide training on transformational leadership at the employee level.

CRediT authorship contribution statement

Taekyung Park: Conceptualization, Methodology, Formal analysis, Investigation, Writing - original draft, Writing - review & editing, Project administration. **Barbara Pierce:** Methodology, Investigation, Writing - review & editing, Supervision, Project administration.

Declaration of Competing Interest

None.

Appendix A. Supplementary material

Supplementary data to this article can be found online at https://doi.org/10.1016/j.childyouth.2019.104624.

References

- Aarons, G. A., & Sawitzky, A. C. (2006). Organizational climate partially mediates the effect of culture on work attitudes and staff turnover in mental health services. Administration and Policy in Mental Health and Mental Health Services Research, 33(3), 289–301
- Abu-Bader, S. H. (2010). Advanced and multivariate statistical methods for social science research with a complete SPSS guide. Lyceum Books, Incorporated
- Albright, J. J., & Park, H. M. (2009). Confirmatory factor analysis using amos, LISREL, Mplus, and SAS/STAT CALIS. Working Paper. The University Information Technology Services (UITS) Center for Statistical and Mathematical Computing, Indiana University." Retrieved from < http://www.indiana.edu/~statmath/stat/all/cfa/index.html > .
- Alsayed, A. K., Motaghi, M. H., & Osman, I. B. (2012). The use of the multifactor leadership questionnaire and communication satisfaction questionnaire in Palestine: A research note. *International Journal of Scientific and Research Publications*, 2(11), 1–9.
- Avolio, B. J. (2007). Promoting more integrative strategies for leadership theory-building. American Psychologist, 62(1), 25.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership. *Journal of Occupational and Organizational Psychology*, 72(4), 441–462.
- Avolio, B. J., Zhu, W., Koh, W., & Bhatia, P. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behavior*, 25(8), 951–968.
- Bass, B. M., & Avolio, B. J. (1993). Transformational leadership and organizational culture. *Public Administration Quarterly*, 17(1), 112–121.
- Bass, B. M., & Riggio, R. E. (2006). Transformational leadership. Mahwah, NJ: L. Erlbaum
- Bednar, S. G. (2003). Elements of satisfying organizational climates in child welfare agencies. Families in Society: The Journal of Contemporary Social Services, 84(1), 7–12.
- Bernotavicz, F., McDaniel, N. C., Brittain, C., & Dickinson, N. S. (2013). Leadership in a changing environment: A leadership model for child welfare. *Administration in Social* Work, 37(4), 401–417.
- Boyas, J., Wind, L. H., & Kang, S. Y. (2012). Exploring the relationship between employment-based social capital, job stress, burnout, and intent to leave among child protection workers: An age-based path analysis model. *Children and Youth Services Review*, 34(1), 50–62.
- Burns, J. M. (1978). Leadership. New York: Harper & Row.
- Burstain, J. (2009). A better understanding of caseworker turnover within child protective services. Austin, Texas: Center for Public Policy Priorities Retrieved from http://library.cppp.org/files/4/364%20DFPS%20workforce.pdf.
- Caillier, J. G. (2016). Do transformational leaders affect turnover intentions and extrarole behaviors through mission valence? The American Review of Public Administration, 46(2), 226–242.
- Carmeli, A., & Freund, A. (2009). Linking perceived external prestige and intentions to leave the organization: The mediating role of job satisfaction and affective commitment. *Journal of Social Service Research*, 35(3), 236–250.
- Chemers, M. (2016). An integrative theory of leadership. Mahwah, NJ: Lawrence Erlbaum Associates.
- Chen, L. T., Chen, C. W., & Chen, C. Y. (2010). Are educational background and gender moderator variables for leadership, satisfaction and organizational commitment? *African Journal of Business Management*, 4(2), 248–261.
- Child Welfare League of America. (2008). National fact sheet: 2008. Retrieved from < http://www.cwla.org/advocacy/nationalfactsheet08.htm > .
- Claiborne, N., Auerbach, C., Lawrence, C., McGowan, B., Lawson, H., McCarthy, M., & Caringi, J. (2014). Design teams as an organizational intervention to improve job satisfaction and worker turnover in public child welfare. *Journal of Family Strengths*, 14(1), 1–24.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple correlation/regression analysis for the social sciences*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Collins-Camargo, C., & Royse, D. (2010). A study of the relationships among effective supervision, organizational culture promoting evidence-based practice, and worker self-efficacy in public child welfare. *Journal of Public Child Welfare*, 4(1), 1–24.
- Crossley, C. D., Bennett, R. J., Jex, S. M., & Burnfield, J. L. (2007). Development of a global measure of job embeddedness and integration into a traditional model of voluntary turnover. *Journal of Applied Psychology*, 92(4), 1031–1042.
- Den Hartog, D. N., House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., & Dorfman, P. W. (1999). Culture specific and cross-cultural generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed? *The Leadership Quarterly*, 10(2), 219–256.
- Ellett, A. J. (2009). Intentions to remain employed in child welfare: The role of human caring, self-efficacy beliefs, and professional organizational culture. *Children and Youth Services Review*, 31(1), 78–88.
- Ellett, A. J., Ellett, C. D., & Rugutt, J. K. (2003). A study of personal and organizational factors contributing to employee retention and turnover in child welfare in Georgia: Final project report. Athens, Georgia: University of Georgia.
- Ellett, A. J., Ellis, J. I., Westbrook, T. M., & Dews, D. (2007). A qualitative study of 369 child welfare professionals' perspectives about factors contributing to employee

- retention and turnover. Children and Youth Services Review, 29(2), 264-281.
- Forehand, G. A., & Von Haller, G. (1964). Environmental variation in studies of organizational behavior. *Psychological Bulletin*, 62(6), 361.
- Freund, A. (2005). Commitment and job satisfaction as predictors of turnover intentions among welfare workers. *Administration in Social Work*, 29(2), 5–21.
- Fulcher, G. M., & Smith, R. J. (2010). Environmental correlates of public child welfare worker turnover. Administration in Social Work, 34(5), 442–457.
- Gellis, Z. D. (2001). Social work perceptions of transformational and transactional leadership in health care. Social Work Research, 25(1), 17–25.
- General Accounting Office (2006). Child welfare: HHS could play a greater role in helping child welfare agencies recruit and retain staff. Retrieved from < http://www.gao.gov/products/GAO-03-3573 > .
- Glisson, C., & Durick, M. (1988). Predictors of job satisfaction and organizational commitment in human service organizations. Administrative Science Quarterly, 33(1), 61–81
- Glisson, C., & James, L. R. (2002). The cross-level effects of culture and climate in human service teams. *Journal of Organizational Behavior*, 23(6), 767–794.
- Glisson, C., Schoenwald, S. K., Kelleher, K., Landsverk, J., Hoagwood, K. E., Mayberg, S., ... & Research Network on Youth Mental Health. (2008). Therapist turnover and new program sustainability in mental health clinics as a function of organizational culture, climate, and service structure. Administration and Policy in Mental Health and Mental Health Services Research, 35(1-2), 124–133.
- Green, A. C., Miller, E. A., & Aarons, G. A. (2011). Transformational leadership moderates the relationship between emotional exhaustion and turnover intention among community mental health providers. *Community Mental Health Journal*, 49(4), 373–379.
- Griffiths, A., & Royse, D. (2017). Unheard voices: Why former child welfare workers left their positions. *Journal of Public Child Welfare*, 11(1), 73–90. https://doi.org/10. 1080/15548732.2016.1232210.
- Grint, K. (2011). A history of leadership. In A. Bryman, & B. Jackson (Eds.). *The Sage handbook of leadership* (pp. 3–14). Thousand Oaks, CA: Sage Publications.
- Hasenfeld, Y. (2000). Social welfare administration and organizational theory. In R. J. Patti (Ed.). The handbook of social welfare management (pp. 89–112). Thousand Oaks, CA: Sage Publication.
- Healy, K., Meagher, G., & Cullin, J. (2007). Retaining novices to become expert child protection practitioners: Creating career pathways in direct practice. *British Journal of Social Work*, 39(2), 299–317.
- Healy, K., & Oltedal, S. (2010). An institutional comparison of child protection systems in Australia and Norway focused on workforce retention. *Journal of Social Policy*, 39(2), 255–274.
- Hemmelgarn, A. L., Glisson, C., & James, L. R. (2006). Organizational culture and climate: Implications for services and interventions research. *Clinical Psychology: Science and Practice*, 13(1), 73–89.
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: Guidelines for determining model fit. The Electronic Journal of Business Research Methods, 6(1), 53–60.
- Hwang, J., & Hopkins, K. (2012). Organizational inclusion, commitment, and turnover among child welfare workers: A multilevel mediation analysis. Administration in Social Work, 36(1), 23–39.
- Hwang, J., & Hopkins, K. M. (2015). A structural equation model of the effects of diversity characteristics and inclusion on organizational outcomes in the child welfare workforce. Children and Youth Services Review. 50, 44–52.
- James, L. R., & Jones, A. P. (1974). Organizational climate: A review of theory and research. Psychological Bulletin, 81(12), 1096–1112.
- James, L. R., & Sells, S. B. (1981). Psychological climate: Theoretical perspectives and empirical research. In Magnusson, D., & Magnusson, D. (Eds.). (1981). Toward a psychology of situations: An interactional perspective, (pp. 275–295). Hillsdale, NJ: Lawrence Erlbaum Associates, Incorporated.
- Jaskyte, K. (2004). Transformational leadership, organizational culture, and innovativeness in nonprofit organizations. Nonprofit Management and Leadership, 15(2), 153–168
- Joo, B. K., & Park, S. (2010). Career satisfaction, organizational commitment, and turnover intention: The effects of goal orientation, organizational learning culture and developmental feedback. *Leadership & Organization Development Journal*, 31(6), 482-500
- Kays, D. (1993). An investigation of transformational and transactional leadership styles in personal social service organizations. (Unpublished doctoral dissertation). Waterloo, Ontario. Retrieved from: < http://scholars.wlu.ca/etd/205 > .
- Kim, H., & Kao, D. (2014). A meta-analysis of turnover intention predictors among US child welfare workers. Children and Youth Services Review, 47, 214–223.
- Kim, H., & Stoner, M. (2008). Burnout and turnover intention among social workers: Effects of role stress, job autonomy and social support. Administration in Social Work, 32(3), 5–25.
- Kline, R. B. (2005). Principles and practice of structural equation modeling. NY: Guilford Publications.
- Lambert, E. G., Cluse-Tolar, T., Pasupuleti, S., Prior, M., & Allen, R. I. (2012). A test of a turnover intent model. Administration in Social Work, 36(1), 67–84.
- Landsman, M. J. (2001). Commitment in public child welfare. Social Service Review, 75(3), 386–419.
- Lee, J., Forster, M., & Rehner, T. (2011). The retention of public child welfare workers: The roles of professional organizational culture and coping strategies. *Children and Youth Services Review*, 33(1), 102–109.
- Lee, T. W., Mitchell, T. R., Sablynski, C. J., Burton, J. P., & Holtom, B. C. (2004). The effects of job embeddedness on organizational citizenship, job performance, volitional absences, and voluntary turnover. Academy of Management Journal, 47(5), 711–722
- Lei, P. W., & Wu, Q. (2007). Introduction to structural equation modeling: Issues and

- practical considerations. *Educational Measurement: Issues and Practice, 26*(3), 33–43. Lloyd, C., King, R., & Chenoweth, L. (2002). Social work, stress and burnout: A review. *Journal of Mental Health, 11*(3), 255–265.
- Mack, K. (2001). Working Around a Crisis. Children's Voice, 10(5), 20-22.
- Maertz, C. P., Griffeth, R. W., Campbell, N. S., & Allen, D. G. (2007). The effects of perceived organizational support and perceived supervisor support on employee turnover. *Journal of Organizational Behavior*, 28(8), 1059–1075.
- Mary, N. L. (2005). Transformational leadership in human service organizations. Administration in Social Work, 29(2), 105–118.
- Medley, F., & Larochelle, D. R. (1995). Transformational leadership and job satisfaction. Nursing Management, 26(9) 64JJ–64NN.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. Human Resource Management Review, 1(1), 61–89.
- Moon, M. J. (2000). Organizational commitment revisited in new public management: Motivation, organizational culture, sector, and managerial level. *Public Performance & Management Review*, 24(2), 177–194.
- Mor Barak, M. E., Levin, A., Nissly, J. A., & Lane, C. J. (2006). Why do they leave? Modeling child welfare workers' turnover intentions. *Children and Youth Services Review*, 28(5), 548–577.
- Mor Barak, M. E., Nissly, J. A., & Levin, A. (2001). Antecedents to retention and turnover among child welfare, social work, and other human service employees: What can we learn from past research? A review and metanalysis. Social Service Review, 75(4), 625–661.
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14(2), 224–247.
- Muenjohn, N., & Armstrong, A. (2008). Evaluating the structural validity of the Multifactor Leadership Questionnaire (MLQ), capturing the leadership factors of transformational-transactional leadership. Contemporary Management Research, 4(1), 3–13
- National Child Welfare Workforce Institute. (2011). Child welfare workforce demographics (2000–2010): Snapshot of the frontline child welfare caseworker. Retrieved from < https://ncwwi.org/files/Workforce_Demographic_Trends_May2011.pdf > .
- National Child Welfare Workforce Institute. (2016). Why the Workforce Matters Retrieved from < https://ncwwi.org/files/Why_the_Workforce_Matters.pdf >
- Nissly, J. A., Barak, M. E. M., & Levin, A. (2005). Stress, social support, and workers' intentions to leave their jobs in public child welfare. Administration in Social Work, 29(1), 79–100.
- Northouse, P. G. (2001). Leadership: Theory and practice. Thousand Oaks, CA: Sage Publications.
- O'Reilly, C. A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*, 71(3), 492.
- O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. Academy of Management Journal, 34(3), 487–516.
- Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal*, 49(2), 327–340
- Popa, A. B. & Andenoro, A. C. (2009) "The Perceived Relationship Between Leadership Practices and Job Attitudes In Human Service organizations," Journal of Business & Leadership: Research, Practice, and Teaching (2005-2012) 5(2), 56–97.
- Potter, C. C., Leake, R., Longworth-Reed, L., Altschul, I., & Rienks, S. (2016). Measuring organizational health in child welfare agencies. *Children and Youth Services Review*, 61, 31–39.
- Rittschof, K. R., & Fortunato, V. J. (2016). The influence of transformational leadership and job burnout on child protective services case managers' commitment and intent to quit. *Journal of Social Service Research*, 42(3), 372–385.
- Sarros, J. C., Cooper, B. K., & Santora, J. C. (2008). Building a climate for innovation through transformational leadership and organizational culture. *Journal of Leadership* & Organizational Studies, 15(2), 145–158.
- Schein, E. H. (1990). Organizational culture. American Psychological Association109. Schein, E. H. (2010). Organizational culture and leadership. San Francisco: Jossey-Bass.
- Schweitzer, D., Chianello, T., & Kothari, B. (2013). Compensation in Social Work: Critical for Satisfaction and a Sustainable Profession. Administration in Social Work, 37(2), 147–157.
- Shim, M. (2010). Factors influencing child welfare employee's turnover: Focusing on organizational culture and climate. *Children and Youth Services Review*, 32(6), 847–856.
- Smith, B. D. (2005). Job retention in child welfare: Effects of perceived organizational support, supervisor support, and intrinsic job value. Children and Youth Services Review, 27(2), 153–169.
- Strolin, J. S., McCarthy, M., & Caringi, J. (2007). Causes and effects of child welfare workforce turnover: Current state of knowledge and future directions. *Journal of Public Child Welfare*, 1(2), 29–52.
- Tham, P. (2007). Why are they leaving? Factors affecting intention to leave among social workers in child welfare. *British Journal of Social Work, 37*(7), 1225–1246.
- The British Association of Social Workers. (2012). The State of Social Worker 2012. Retrieved from < http://cdn.basw.co.uk/upload/basw_23651-3.pdf > .
- Tafvelin, S., Hyvönen, U., & Westerberg, K. (2012). Transformational leadership in the social work context: The importance of leader continuity and co-worker support. *British Journal of Social Work*, 44(4), 1–19.
- Walumbwa, F. O., Orwa, B., Wang, P., & Lawler, J. J. (2005). Transformational leadership, organizational commitment, and job satisfaction: A comparative study of Kenyan and US financial firms. Human Resource Development Quarterly, 16(2), 235–256
- WeiBo, Z., Kaur, S., & Jun, W. (2010). New development of organizational commitment:

- A critical review (1960–2009). African Journal of Business Management, 4(1),
- Wilke, D. J., Radey, M., King, E., Spinelli, C., Rakes, S., & Nolan, C. R. (2018). A multi-level conceptual model to examine child welfare worker turnover and retention decisions. Journal of Public Child Welfare, 12(2), 204-231.
- Williams, L. J., & Hazer, J. T. (1986). Antecedents and consequences of satisfaction and commitment in turnover models: A reanalysis using latent variable structural
- equation methods. *Journal of Applied Psychology, 71*(2), 219–231.

 Yukl, G. A., & Heaton, H. (2002). Leadership in organizations. *Nonprofit Management &* Leadership, 17(2), 179–194.

 Zaccaro, S. J., & Klimoski, R. J. (Eds.). (2002). The nature of organizational leadership:
- Understanding the performance imperatives confronting today's leaders (Vol. 12). San Francisco: Jossey-Bass.