



Developing an Ecological Model of Turnover Intent: Associations Among Child Welfare Caseworkers' Characteristics, Lived Experience, Professional Attitudes, Agency Culture, and Proclivity to Leave

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Abstract

Almost a quarter of the child welfare workforce leaves their job each year, and despite clarion calls over the decades, our insights into dynamics underlying turnover remain limited. Using survey data from 276 caseworkers in a midwestern state, this analysis explores an array of personality, stress, attitudinal, and perception measures and their association with three measures of turnover intent: thinking about quitting, intending to search, and intent to leave. Findings indicate that controlling for demographic factors, burnout, and confidence in decision support from agency leadership had consistent and strong associations with all three outcomes (positive for burnout; negative for decision support). In contrast, associations between conscientiousness, open-mindedness, secondary traumatic stress, and attitudes favoring family preservation over child safety varied in their significance, orientation, and strength depending on the outcome in question. Given that the most powerful and consistent predictors of turnover intentions are potentially malleable, these findings indicate that these are two important areas for agencies to consider developing interventions. Moreover, despite the commonalities, the finding that the three outcomes examined were associated with different predictors, suggests they may be distinguishing phases of contemplation and action along a pre-turnover continuum. Future research will explore the relative predictive validity of these scales.

Keywords Personality · Stress · Adverse childhood experiences (ACEs) · Agency culture · Child welfare caseworkers · Turnover intentions

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Purpose

Child welfare work is difficult. Caseworkers must respond to and assess reports of child abuse and neglect, determine whether and what interventions are warranted, and, at times, make heart-wrenching decisions, including whether to place a child in out-of-home care. Such decisions are not always clear cut and are commonly infused with concerns about misjudging the presence or absence of safety, risk, or protective factors. Concerns about the consequence of fundamentally altering the trajectory of people's lives and introducing an unnecessary iatrogenic effect, or the potential for retributory violence, adds further stress to the work. Moreover, child maltreatment can involve terrible circumstances, and, in the course of their work, caseworkers may bear witness to these situations repeatedly.

It should be no surprise then that U.S. child welfare caseworkers experience high rates of attrition and job turnover (Barbee et al., 2018; USGAO, 2003). Despite this, few national studies have been conducted to assess turnover rates, and the field lacks a common definition of how to calculate turnover (Paul et al., 2022). For example, in the large midwestern state in which this research took place, an annualized attrition rate (defined as the percentage of trainees and caseworkers at the beginning of the month who were no longer in their role a year later) was as high as 32% in late 2016, a figure well above even the most recent estimated average of 22% of caseworkers nationally (Edwards & Wildman, 2018). Conceptual and comprehensive models of turnover have recently been proposed (Wilke et al., 2018), and as a foundational step towards developing a more robust understanding of factors associated with turnover, we here employ an Ecological Model of Turnover Intent for caseworkers which incorporates demographic and personality characteristics, work-related stress, experiences of childhood adversity, casework attitudes, and perceptions of agency culture into a comprehensive explanation for turnover intentions. While it is well established that stress and burnout fuel the turnover intentions in child welfare (Middleton & Potter, 2015), less is understood about other dynamics of and between caseworker characteristics and attitudes that may increase or reduce one's propensity towards turnover. Moreover, this work is intended to lay the groundwork for future inquiries examining actual turnover and the extent to which three indicators of turnover intentions (contemplation, search efforts, and plans) are predictive of actual turnover.

Theory

Our research employs an Ecological Model of Turnover Intent (EMTI) that is based on the Decision-Making Ecology (DME; Baumann et al., 2014). The DME is an organizing framework that enables the isolation and examination of how a variety of contextual variables may have an association with decisions and outcomes, whether it is staying at or leaving a job, substantiating a maltreatment report, or placing a child in out-of-home care. Generally, the DME posits that four

main groups of factors may influence decisions. These include *case* (risk factors, prior history), *organizational* (agency policies, perceptions of culture or climate), *external* (community or state characteristics), and *decision-maker* factors (age, attitudes, personal, and professional experiences). DME research has largely been used to explore child welfare case outcomes (Graham et al., 2015; Hollinshead et al., 2021; Lwin et al., 2018), but its application has broader use. In extending this work to turnover intentions, our modeling takes a deeper dive into dynamics between decision-maker (i.e., caseworker) characteristics and their perceptions of organizational culture and three measures of turnover intentions: thinking about quitting, intending to search, intending to leave. While future work can explore how omitted elements such as case factors (e.g., a caseworker's degree of case acuity, or the cumulative impact of adverse events such as multiple failed reunifications over time) and external factors (e.g., poverty or crime rates in the community in which a caseworker works) may also contribute to turnover intentions, the results shared here are important if we are to understand the interplay between personality characteristics, attitudes, personal and professional experiences, and perceptions of agency culture and the decision to leave.

Factors Related to Turnover Intentions

Personality Characteristics

Personality factors may affect a caseworker's experience of child welfare work and their turnover intentions and actions, but in the child welfare field there has been little research examining such associations, even using measures commonly utilized in studies of turnover in other work environments (Rubenstein et al., 2018). Three primary areas of inquiry include fundamental personality characteristics, as reflected in the extra-short Big Five (Soto & John, 2017a, 2017b), the Grit-O (Duckworth & Quinn, 2009; Duckworth et al., 2007), and the Difficulties in Emotion Regulation (Victor & Klonsky, 2016) scales.

The Big Five is a widely used measure that characterizes patterns of thinking, feeling, and behaving into five personality trait domains including extraversion, agreeableness, conscientiousness, negative emotionality, and open-mindedness (Soto & John, 2017a). While the literature examining associations between these personality characteristics and turnover is vast, to date, we could find only one example of the use of Big Five in studies of turnover dynamics in child welfare workforce populations. Here, in a study of child welfare trainees in Kentucky, Yankeelov et al. (2009) found no association between any of the domains and turnover. Still, a recent meta-analysis conducted using data from 316 studies in an array of organizational contexts (e.g., hospitals, banking, manufacturing) found that of the five domains, conscientiousness had the strongest inverse effect on turnover ($\rho = -0.16$); as one's conscientiousness increases, one's likelihood of leaving a job decreased. Furthermore, it found that staff who are more open-minded are more likely to depart their jobs ($\rho = 0.14$; Rubenstein et al., 2018).

As the high turnover rates indicate, not all people share an interest in complex, stressful work, or in persevering with a job that commonly exposes one to extreme, traumatic circumstances. Therefore, in an effort to identify staff who are more likely to remain with an agency, we administered Duckworth et al.'s (2007) Grit-O scale which uses 12 items to explore the extent to which respondents demonstrate traits of perseverance of effort and consistency of interest. No published studies appear to have associated the Grit-O scale with child welfare caseworker turnover intentions and actions. However, other studies have found that controlling for other factors (including Big Five personality characteristics), West Point cadets who scored higher on Grit-O were less likely to drop out during their first summer and adults with higher Grit-O were less likely to change careers (Duckworth et al., 2007).

When confronted with difficult situations, some people rise to the occasion while others have more difficulty navigating them. Child welfare work is emotionally draining, stressful, and taxing, so the ability to regulate one's emotional reactions to experiences could serve to buffer the impact of these dynamics, and thus enhance the likelihood that staff remain with an agency. One scale measuring this quality is the Difficulties in Emotion Regulation (DERS-18) scale (Victor & Klonsky, 2016), an 18-item scale in which higher scores are associated with more challenges with emotional regulation. To date, it appears no studies have examined the association between the DERS-18 and turnover or contemplation of turnover.

Stress, Burnout, and Resilience

Secondary traumatic stress (STS) describes the psychological impact from indirect knowledge of or exposure to traumatic events by hearing about a significant person's life events, seeing the impact of those events, or both (Bride et al., 2004). Such secondary exposure to trauma is prevalent within the child welfare workforce (Molnar et al., 2020). Increases in STS among caseworkers have also been linked to childhood adversity (Nelson-Gardell & Harris, 2003). Closely associated with (but distinct from) secondary traumatic stress is the concept of burnout. Burnout refers to the psychological impact of workplace stress that is not due to trauma exposure, but rather to workplace characteristics such as workload, governing policies, and relationships with colleagues (Maslach, 1998). Burnout is common in the field of child welfare, with one study in Norway finding that nearly 70% of child welfare workers had moderate levels of burnout (Baugerud et al., 2018). Among child welfare workers, workload, work-family conflict, and role conflict are major predictors of burnout (Hazen et al., 2020; Travis et al., 2016). Although burnout is a concern among social workers in general, child welfare workers tend to show higher levels of burnout than social workers who do not have child welfare duties (Baldschun et al., 2019). Burnout has been associated with higher levels of withdrawal from work and exit behavior, and this association becomes stronger over time (Travis et al., 2016). Finally, resilience is one quality that allows a person to cope with life stressors and to thrive in the face of adversities (Connor & Davidson, 2003). Both burnout and STS are negatively correlated with resilience (Harker et al., 2016; McFadden et al., 2019). In one study of human service professionals (e.g., counselors, foster care and other

youth workers), higher levels of resilience also predict lower levels of both burnout and STS (Harker et al., 2016).

Childhood Adversity

It is unclear if experiencing adverse events as a child may influence child welfare caseworkers' propensity to leave. Since Felitti and colleagues' groundbreaking 1998 study, which examined adults' exposure to eight adverse childhood experiences (ACEs; e.g., physical or sexual abuse, living in a household with a substance abuser) and their associations with poor health outcomes and risky behaviors, ACEs have become a common measure to explore these findings in different populations. Still, Felitti et al. (1998) found that more than half (52%) of their respondents indicated experiencing at least one ACE, and 6.2% indicated experiencing four or more ACEs. They also identified a graded, dose–response relationship between ACE experiences and a variety of health risk factors or disease conditions in adulthood. For example, respondents with four or more ACEs had a 4–12-fold increase in risk of alcoholism, drug abuse, depression, and suicide attempts (Felitti et al., 1998).

An array of studies have also been conducted to examine childhood trauma and adverse experiences of social work students (Copeland et al., 2021; Rompf & Royce, 1994; Sellers & Hunter, 2005; Steen et al., 2021; Thomas, 2016), and child welfare staff (Black et al., 1993; Esaki & Larkin, 2013; Hiles Howard et al., 2015; Lee et al., 2017) and each of these studies have found that social work students and human service professionals have, on average, a higher prevalence of ACEs in their study samples compared to those identified in national studies (Esaki & Larkin, 2013; Gudmunson et al., 2013; Hiles Howard et al., 2015) or with student cohorts outside of social work (Black et al., 1993). For example, Lee et al. (2017) surveyed 108 foster care workers in Iowa and found that just 22.6% reported no ACEs, 25% reported one ACE, 21.4% reported two or three ACEs, and 31% reported four or more. In contrast, a study using data from 211,376 survey participants in 34 states found that 43% of respondents indicated they had never experienced an ACE. The percentage of respondents that reported 1, 2, 3, or 4 or more ACEs, was 22.9%, 12.8%, 8.2%, and 13.3% respectively (Giano et al., 2020).

Child welfare staff not only report higher ACEs in general, but there is also evidence that child welfare caseworkers with higher ACEs make different decisions on cases. One study found that workers with higher ACEs are less likely than their co-workers with fewer ACEs to place children in out-of-home care (Vanderloo, 2017), suggesting perhaps that ACEs may be associated with a greater tolerance for adverse case circumstances. However, the association between ACEs and prospective or actual turnover has yet to be explored in the child welfare literature.

Caseworker Attitudes

Variation in caseworkers' attitudes toward their work also may contribute to explaining turnover. We first consider a caseworker's preference or orientation favoring child safety versus family preservation; an attitude measured using the Dalgleish

Scale (Dalglish, 2010; Dettlaff et al., 2015; Fluke et al., 2016; Nikolova et al., 2016). As discussed, child welfare work inherently involves weighing what can at times be two polar directions, preserving a family or keeping a child safe. While there are certainly ways to pursue both simultaneously, decisions are commonly made when there is ambiguity about on which side one should err. Staff also vary in the degree to which they prefer actions supporting one extreme or the other (Fluke et al., 2016). In a study examining placement decision-making in a southeastern state ($n=267$, $\alpha=0.648$) results identified that, controlling for case characteristics, gender, and perceptions of agency support and using 95% confidence intervals, staff indicating a strong orientation towards family preservation compared to child safety were associated with lower odds of placing children into out-of-home care (aOR: 0.58 [0.42–0.81]; Hollinshead et al., 2021). To date, no research has associated such attitudes with turnover intentions; therefore, we do not know if staff with a particular orientation have a higher tolerance for child welfare casework or not.

Caseworker Perceptions of Agency Culture

Caseworker perceptions of agency culture (defined by Williams & Glisson [2014] as “shared behavioral norms and expectations,” p. 757) may also contribute to intentions to leave. Generally, research has found that child welfare workers in more supportive environment are more likely to stay in their jobs (Johnco et al., 2014; Williams & Glisson, 2013). Perceptions of agency culture are generally treated as an agency factor since measures of culture are difficult if not impossible to objectively measure and must often rely on staff perceptions of it (Fluke et al., 2016). Some research has examined caseworker concerns about supervisor and administrative leadership support for their casework decisions if a child on one of their cases is harmed (known as “Consensus over Liability”; Dettlaff et al., 2015; Graham et al., 2015). Factor analyses conducted in prior uses of this scale identified a subscale, called support ($\alpha=0.72$), that assesses the degree of anticipated support and due process that would be provided by the agency leadership if an adverse event occurred on one of their cases (Dettlaff et al., 2015, 2020). In the southeastern state study described above, higher levels of perceived leadership support were associated with lower out-of-home placement rates, suggesting that caseworkers working in supportive environments may be more comfortable with tolerating more risk than their counterparts working in environments perceived to be less supportive (Hollinshead et al., 2021). While the Rubenstein et al., (2018) meta-analysis found that a similar concept called higher levels of justice (defined as “experience of fairness within one’s work,” p. 30) were associated with lower likelihoods of turnover, associations between this child welfare-specific measure and turnover intentions has yet to be explored.

Child Welfare Workforce Turnover

Child welfare agencies have historically struggled with workforce recruitment, retention, and turnover (APHSA, 2005; Bernotavicz, 2000; USGAO, 2003). The most

recent examination of turnover in child welfare agencies across the nation between 2003 and 2015 revealed an average 21% turnover rate among both frontline staff and supervisors (Edwards & Wildeman, 2018). A study using self-report data on actual turnover (not turnover intentions) among graduates of a Title IV-E program found a somewhat lower rate of turnover, with about 15% having left their position by 2.5 to 3 years after completion of their degree (Benton, 2016). Turnover intentions in child welfare agencies may be prompted by multiple factors such as lack of organizational commitment (Boyas et al., 2012), supervisory support (e.g., Yankeelov et al., 2009), or higher levels of stress or burnout (e.g., Boyas et al., 2013; Kim & Mor Barak, 2015) or secondary trauma (Barbee et al., 2018). Actual turnover is associated with both child outcomes (Williams & Glisson, 2013) and additional costs to the agency (Graef & Hill, 2000; Dorch, et al., 2008). Such expenses reduce funding for services to help children and families achieve safety, permanency, and well-being. Turnover also contributes to higher caseloads for the staff who remain, further exacerbating turnover (Barbee et al., 2009, 2018).

Still, while there is little research in the child welfare field comparing the phenomena, research examining the predictive validity of child welfare worker turnover intentions measures has found mixed results, indicating an intent to leave does not always convert into an actual departure (Barbee et al., 2009; Weaver et al., 2007; Yankeelov et al., 2009). This dearth of research is not unique to the child welfare literature. Indeed, a 2022 systematic review of a century of turnover research covered in over 1300 articles across multiple sectors found that despite the perceived relationship between turnover intentions and actual turnover, the majority of studies (66%) in the past 15 years focused on intent to leave (Bolt et al., 2022). They also found that “there is little interaction between the (turnover intentions and actual turnover research) streams resulting in fragmented body of knowledge.” (p. 2). Still, as they note, some “employees may desire to leave but intend to stay as they are locked into the organization, or desire to stay but intend to leave because of some discord or external factors” (p. 12, Bolt et al., 2022). Indeed, findings from studies of non-child welfare workforce communities indicate that while common factors exist, the presence of job alternatives may mediate the relationship between turnover intent and actual turnover (Vandenberg & Nelson, 1999). By exploring three nuanced measures of turnover intentions, this study adds insights into distinguishing dynamics associated with each of the intention measures while also laying the ground for future efforts to understand similarities and differences in child welfare workers’ turnover intent and actual turnover. Thus, these findings will contribute not only to the child welfare workforce literature, but ultimately to the field of workforce turnover research in general.

Methods

Three hundred and eighty-nine caseworkers and supervisors across the state were eligible for a workforce outcomes study associated with the Children’s Bureau Quality Improvement Center on Workforce Development (QIC-WD). Of these, 333 were case-carrying caseworkers and 56 were supervisors. Data were collected from the

276 case-carrying caseworkers who also completed a worker baseline survey administered approximately six weeks after study enrollment. We also collected measures related to demographics, personality, work-related stress (secondary traumatic stress, resilience and burnout), childhood adversity, and casework work-related attitudes and perceptions. The University of Louisville Institutional Review Board (UL IRB) acted as the sIRB for this multi-site project. The UL IRB approved the above-named researchers to obtain and analyze data associated with this manuscript.

Listwise deletion was used for missing scale values, but a participant was not listwise deleted for a missing item; thus, as Table 2 indicates, sample sizes vary by study measure. Note, however, that for the summed ACEs measure, if an item was skipped that the respondent did not get an ACE score.

Measures

Demographics

We collected the following demographic measures for the caseworkers in this study: *gender* (male, female, prefer not to say), *race and ethnicity* (Latinx, African American, Indigenous/Pacific Islander, Asian, White, non-Latinx multi-race or other), *self-identify as LGBT* (LGBT yes/no), *marital status* (single/never married, cohabitating, married, remarried, divorced, other), *highest level of education* (Bachelors, Masters, Doctorate), *wage earner status* (primary household wage earner, one of multiple earners), and *age* (in years). We also collected *years of child welfare experience* and *human service experience* (2 years or less, over 2 years).

Personality

Personality measures included the Big Five personality characteristics as describe above, the Grit-O scale and Difficulties in Emotion Regulation scale. We used a 15-item version of the Big Five with three items per subscale: extraversion, open-mindedness, agreeableness, conscientiousness, and negative emotionality. The response scale runs from 1 (strongly disagree) to 5 (strongly agree) to items such as these (showing one per subscale): (1 – extraversion) I am someone who tends to be quiet; (2- open-mindedness) is fascinated by art, music, or literature; (3 – agreeableness) is compassionate, has a soft heart; (4 – conscientiousness) is reliable, can always be counted on; and (5 – negative emotionality) is emotionally stable, not easily upset. Reliability is as follows: extraversion ($n=270$; $\alpha=0.572$), open-mindedness ($n=267$; $\alpha=0.440$), agreeableness ($n=270$; $\alpha=0.644$), conscientiousness ($n=271$; $\alpha=0.607$), and negative emotionality ($n=268$; $\alpha=0.608$). For Grit-O, the scale ranges from a value of 5 (very much like me), through 3 (somewhat like me) ending at 1 (not like me at all). It includes 12 items such as follows: I often set a goal but later choose to pursue a different one; I finish whatever I begin; I am diligent ($n=267$; $\alpha=0.771$). Finally, as the name implies, the Difficulties in Emotion Regulation scale assesses emotional regulation. Scale items are rated using a 5-point scale from 5 (almost always) through 3 (about half the time), to 1 (almost never). Acceptance is measured with such items as “I pay attention to how I feel”; clarity includes such

items as “I have no idea how I am feeling”; Goals is measured by “When I’m upset, I have difficulty getting work done”; impulse includes “When I’m upset, I become out of control”; non-acceptance has the statement “When I’m upset, I become embarrassed for feeling that way”; and, finally, strategies are measured by items such as “When I’m upset, I believe that I will remain that way for a long time.” While there are questions that tap into six areas of emotional regulation, the overall scale had strong overall reliability and was analyzed as such. For DERS, $n=264$ and $\alpha=0.883$.

Stress

We measured *secondary traumatic stress* using the Secondary Traumatic Stress Scale developed by Bride and colleagues (Bride et al., 2004); this is a validated, 17-item summed scale (items rated 1–5; possible range 17–85 points) developed to measure intrusion, avoidance, and arousal symptoms associated with indirect exposure to traumatic events through a professional’s interactions with traumatized clients (Cronbach’s $n=261$; $\alpha=0.935$). We measured work-related burnout with a shortened, 9-item version (items rated 1–7; possible range 9–63 points) of the Maslach Burnout Inventory (Maslach et al., 1996; Riley et al., 2018). The nine-item measure has been found to be valid and reliable as a proxy for the longer scale (Riley et al., 2018), with Cronbach’s $\alpha=0.781$ ($n=256$) for the current study. Finally, we collected a measure of resilience with the 10-item (each item rated 0–4 and scores ranging from 0 to 40) summed Connor-Davidson Resilience Scale (Connor & Davidson, 2003). Reliability for the current study is $\alpha=0.876$ ($n=264$).

Childhood Adversity

We measured adverse childhood experiences using a 10-item scale including Physical Abuse, Sexual Abuse, Negative emotionality/Feeling Unloved, Neglect, Parents Divorced, Parent Died, Interpersonal Violence (IPV), Alcohol/Drugs, Poor Mental Health, and Incarceration. Scores were generated by summing the number of ACE items endorsed. Reliability for the ACEs scale for the current study was $\alpha=.0.735$ ($n=240$).

Caseworker Attitudes—Child Safety versus Family Preservation

The Dalglish Scale (Dalglish, 2010; Fluke et al., 2016) is a six-item attitude scale that employs forced choice questions for which respondents must indicate their preference between a child safety or family preservation statement, paired with a 5-point Likert scale that enables them to indicate the strength of each endorsement (from very weak to very strong). The resulting scores identify those with more centrist views as well as those who tend to endorse more extreme preferences toward either child safety or family preservation. Higher scores indicate a preference toward child safety and lower toward family reunification. Reliability of the Dalglish scale measuring orientation toward child safety or family preservation for the current study is $\alpha=.706$ ($n=256$).

Caseworker Perceptions of Workplace Culture—Leadership Decision Support

As described above, the “Consensus over Liability” scale (which is composed of three items that assess the extent to which a caseworker has concerns about leadership support for their casework decisions if a child on one of their cases is harmed) measures a caseworker’s perception of the organization’s culture in terms of support versus liability. Reliability of the scale for the current study is $\alpha=0.843$ based on $n=268$ valid observations.

Turnover Intentions

We measured staff turnover intentions (the outcome of interest) with four two-item measures: thinking about quitting (“I often think about quitting my job” and “How often do you think about quitting your job?”; $\alpha=0.871$, $n=265$), intent to search (“I will probably look for a new job in the next six months” and “I will probably look for a new job in the next year”; $\alpha=0.959$, $n=268$), and intent to leave (“I intend to leave my job in the next six months” and “I intend to leave my job in the next year”; $\alpha=0.956$, $n=269$). Thinking about quitting is rated on a 5-point scale for each of the two items and then summed for a total score; the other two turnover intention measures are rated on a 7-point scale for each item and summed. These constructs regarding turnover intentions follow the work of Hom & Griffeth (1995) and Griffeth et al. (2000). Note also that although the three turnover intention measures are highly correlated in the sample (see Table 3), the current study also sought to explore whether different characteristics predict different outcomes across a range of seriousness for turnover intentions.

Analysis

Five successive, sequential multiple regression models (Yoder et al., 2020) were run in SPSS to understand effects for three dependent variables of interest: thinking about quitting, intent to search, and intent to leave. The sequential models were structured to include five blocks of conceptually similar variables hypothesized to increase the explanatory power of the Ecological Model of Turnover Intent for caseworkers. Demographics were included first (Block 1), personality measures (Block 2), stress (Block 3), childhood adversity (Block 4), and finally, casework attitudes and perceptions of organizational culture (Block 5). This modeling approach illustrates the additional explanatory effects of each block of variables on the outcomes and can show how the inclusion of new variable groups modifies the effects on existing independent variables in the model as additional sources of explanation are added. In other words, such a modeling strategy can potentially uncover effects of additional explanatory factors and show that previously entered blocks may diminish in explanatory ability (i.e., variables in a previously entered block become statistically non-significant as new blocks are entered). While the full model results are presented here, the progressive block results can be found in the linked supplementary material.

Results

Descriptives

Table 1 displays demographic characteristics for the sample. (Descriptive sample sizes vary by characteristic, depending on how many survey participants responded to a specific question; as noted, listwise deletion was employed for missing scale values). A large majority at 86% of the sample identifies as female and 82% of participants identify as White from among the possible race and ethnic identity options offered in the survey. The next largest group identifies as Latinx at around 9%. Ten percent identify as LGBTQ. A plurality are single/never married (39%), with 37%

Table 1 Demographics

	Percentage ¹
Gender (<i>n</i> = 272)	
Male	13.2
Female	86.4
Prefer not to say	0.4
Racial and ethnic identities (<i>n</i> = 270)	
Latinx	8.5
African American	4.1
Indigenous/Pacific Islander	1.1
Asian	1.1
White	82.6
Multiple, non-Hispanic, identities	1.5
Other racial and ethnic identities	1.1
Self-identify with LGBT community (<i>n</i> = 253)	
LGBT	9.9
Marital status (<i>n</i> = 273)	
Single, never married	38.5
Married or remarried	36.7
Cohabiting, divorced, other	24.8
Highest education (<i>n</i> = 275)	
Bachelors	90.2
Masters or doctoral	9.8
Primary wage earner in household (<i>n</i> = 239)	
Yes	67.8
One of multiple wage earners in household (<i>n</i> = 234)	
Yes	48.7
	Mean (std. dev.)
Age in years (<i>n</i> = 266)	33.8 (10.0)
Years in child welfare total (<i>n</i> = 202)	3.8 (4.5)
Years with state's child and family services agency (<i>n</i> = 203)	3.0 (3.8)

¹Percentages are based on the number of valid responses out of a total sample *n* = 276 for each characteristic.

reporting that they are married or remarried and the remainder (25%) in some other relational status such as divorced or cohabitating. Ninety percent have a bachelors' degree as their highest level of education and about 68% report they are the primary wage earner in their household. The mean age of caseworkers in the study is 34 years, and mean years' experience in child welfare is 3.8.

Table 2 displays sample characteristics for the personality, stress, childhood adversity, and attitudes/perceptions measures, organized by the order in which blocks of variables were later entered into the regression models (see first column of Table 2). Descriptive results are reported here. All personality measures were calculated as means of three component items. Extraversion ($M=3.4$, $SD=0.7$), agreeableness ($M=3.8$, $SD=0.7$), conscientiousness ($M=3.9$, $SD=0.7$), and open-mindedness ($M=3.5$, $SD=0.5$) are all somewhat above the midpoint of 3.0 (between "neutral" and "agree"). Negative emotionality is somewhat below the midpoint, which is consistent with the prior results for a negatively worded item with the average response also between neutral and "disagree." The mean Difficulties in Emotion Regulation summed scale score was 34.2 ($SD=9.5$), well below the midpoint of 54 points (where the highest observed score was 67 of 90 points possible). The last personality characteristic examined in Block 2 was grit ($M=44.9$, $SD=5.2$). Self-reported secondary traumatic stress, burnout, and resilience comprise Block 3.

Table 2 Worker personality, stress, childhood adversity, and perceptions

Block	Scales ¹	Mean	St. dev
Block 2: Personality	Big 5 extravert ($n=272$)	3.4	0.7
	Big 5 agreeable ($n=272$)	3.8	0.7
	Big 5 conscientious ($n=272$)	3.9	0.7
	Big 5 open-minded ($n=272$)	3.5	0.6
	Big 5 neg. emotion ($n=272$)	2.6	0.7
	Difficulties in emotion reg ($n=268$)	34.2	9.5
	Grit-O ($n=271$)	44.9	5.2
Block 3: Stress	STS ($n=266$)	40.4	13.5
	Burnout ($n=264$)	28.0	8.6
	Resilience ($n=266$)	29.3	5.2
Block 4: Childhood Adversity	ACEs 10 ($n=240$)	2.7	2.3
Block 5: Attitudes and Perceptions of Agency	Child safety orientation ($n=264$)	5.4	13.5
	Leadership support ($n=269$)	5.1	1.3
Outcomes	Thinking about quitting	5.4	2.3
	Intent to search	6.5	3.7
	Intent to leave	5.7	3.4

¹Total sample $n=276$ caseworkers

Block 2 Personality: Big 5, Difficulties in Emotion Regulation, GRIT-O.

Block 3 Stress: STS, Burnout, Resilience

Block 4 Childhood Adversity: ACEs

Block 5 Attitudes and Perceptions of Agency Culture: Child Safety Orientation, Leadership Support

The mean reported level of STS based on the summed scale score is $M=40.4$ ($SD=13.5$). The mean reported burnout scale score is 22.0 ($SD=8.5$), and the mean self-reported resilience score is 29.3 ($SD=5.2$). Childhood adversity was high among caseworkers, with the mean number of ACEs experienced at 2.7 per person over the course of participants' childhoods (see Table 2). Only 14% had experienced no ACEs of any kind, another 14% had experienced one, 15% of caseworkers had experienced two ACEs, and about 13% had experienced three. A substantial 45% of caseworkers had experienced four or more ACEs. Twenty-seven percent had experienced physical abuse, 28% sexual abuse, and 12% neglect. Twenty-five percent experienced during childhood the feeling of not being loved/important/special in the family and/or their family not being close and supportive of each other. Considering the child safety vs. family preservation orientation scale, positive values indicate an orientation toward safety, negative values toward family preservation, and the entire summed scale ranges from a possible -30 to $+30$. Among the caseworkers in the study, the mean child safety orientation is 5.4 ($SD=13.5$), indicating on average a slight preference for child safety over family preservation. On the perceived organizational culture scale, higher scores indicate more perceived caseworker decision support from agency leadership. The mean is 5.1, representing a "somewhat agree" response on the 1–7 item scale ($SD=1.3$). Finally, Table 2 also displays summary statistics for the turnover intentions outcomes. Higher values represent greater thoughts of quitting, intention to search for another job or intention to leave one's current job. Workers report a mean level of "thinking about quitting" of 5.4 ($SD=2.3$) on a scale of 2–10. Intent to search for a job and intent to leave are both measured on a 2–14 point summed scale; mean self-reported intent to search is 6.5 ($SD=3.4$) and mean self-reported intent to leave is 5.7 ($SD=3.4$).

Correlations

Table 3 presents bivariate correlations among all the variables for the study. There are very few significant bivariate correlations among demographic characteristics and the three turnover intention outcomes. Only age is significantly and negatively correlated with intention to search ($r = -0.177$, $p < 0.05$) and intention to leave ($r = -0.135$, $p < 0.05$). We also show correlations for years in child welfare; however, since there was substantial missingness (74 of 276 workers, or 27%) and high positive correlation of years in child welfare with age ($r = 0.449$, $p < 0.01$), we did not include years in child welfare in the regression models. Many of the personality measures are highly correlated with the outcomes. Agreeableness is significantly and negatively correlated with all three turnover intention outcomes; conscientiousness, open-mindedness, and are each negatively correlated with two of the outcomes and negative emotionality is significantly and positively correlated with two of three outcomes. Even stronger correlations are present for difficulties in emotion regulation, with higher difficulty being associated with stronger turnover intentions ($r_{\text{thinkquit}} = 0.367$, $p < 0.01$; $r_{\text{intentsearch}} = 0.266$, $p < 0.01$; $r_{\text{intentleave}} = 0.246$, $p < 0.01$). Furthermore, grit is

significantly and negatively correlated with all three turnover intentions (higher measures of grit are associated with lower turnover intentions: $r_{\text{thinkquit}} = -0.241$, $p < 0.01$; $r_{\text{intentsearch}} = -0.203$, $p < 0.01$; $r_{\text{intentleave}} = -0.184$, $p < 0.01$), although the strength of the correlations is slightly lower than for difficulties in emotion regulation.

The next block of factors considered for inclusion in the Ecological Model of Turnover Intent are stress-related factors. Secondary traumatic stress is highly and positively correlated with turnover intention ($r_{\text{thinkquit}} = 0.580$, $p < 0.01$; $r_{\text{intentsearch}} = 0.415$, $p < 0.01$; $r_{\text{intentleave}} = 0.345$, $p < 0.01$) as is burn-out ($r_{\text{thinkquit}} = 0.601$, $p < 0.01$; $r_{\text{intentsearch}} = 0.465$, $p < 0.01$; $r_{\text{intentleave}} = 0.387$, $p < 0.01$) (and STS and burnout are highly correlated with each other, $r = 0.669$, $p < 0.01$). Finally, resilience is consistently and negatively correlated with turnover intentions ($r_{\text{thinkquit}} = -0.355$, $p < 0.01$; $r_{\text{intentsearch}} = -0.261$, $p < 0.01$; $r_{\text{intentleave}} = -0.233$, $p < 0.01$).

Regarding ACEs, literature suggests that social work students and human service professionals may have experienced a higher frequency of ACEs relative to other populations, and we observed high rates of ACEs in this sample. Therefore, we expected that the experience of childhood adversity may be related to the choice both to enter a helping profession such as casework and also may be related to decisions to leave a helping profession. However, empirically, we observe that ACEs are not correlated with any of the three turnover intention measures. Finally, we considered whether attitudes that caseworkers hold toward casework or their perceptions of agency culture may be related to turnover intentions. An orientation or attitude preferring child safety over family preservation is negatively correlated with only one of the turnover intentions (intent to search), meaning that those who prefer child safety over family preservation have a slightly lower intent to search for a new job ($r_{\text{intentsearch}} = -0.125$, $p < 0.05$). Caseworker perceptions about agency culture, defined here as leadership support, are more strongly and negatively correlated with turnover intentions, meaning that the more support that caseworkers perceive, particularly in the situation where a child on the caseload is harmed, the less likely the worker is to express higher turnover intentions ($r_{\text{thinkquit}} = -0.377$, $p < 0.01$; $r_{\text{intentsearch}} = -0.300$, $p < 0.01$; $r_{\text{intentleave}} = -0.262$, $p < 0.01$). Further details about the correlations (sample sizes, precise p -values) can be found in the supplementary material.

Regression Model 1 Results—Thinking About Quitting

The first sequential linear regression model regressed “thinking about quitting” on Block 1, demographic factors. This produced a model which did not adequately explain variation in the turnover intention outcome ($F(5, 253) = 1.415$; $p = 0.219$; $R^2 = 0.027$). Age ($B = -0.035$, $p = 0.019$) was significantly associated with “thinking about quitting”; older workers were slightly less likely to think about quitting. (Note that for each of the three dependent variables, the sequential results from Blocks 1 through 4 are discussed here in text; complete tables are available in the supplemental material.) Adding Block 2 personality factors

increased the *r*-square to $R^2=0.205$. Two of the personality measures significantly explained thinking about quitting, with those higher in agreeableness ($B=-0.637, p=0.004$) less likely to think about quitting and those higher in negative emotionality ($B=0.523, p=0.021$) more likely to think about it. Grit was not associated with thinking about quitting ($B=-0.021, p=0.477$), but difficulties in emotion regulation were associated with thinking about quitting, though with a small effect size ($B=0.063, p<0.001$). The inclusion of personality measures in the model better explained thinking about quitting than age which did not remain a significant predictor in the Block 2 model ($B=-0.015, p=0.306$). Block 3 variables ($r^2=0.460$) introduced explanatory factors related to stress. Both secondary traumatic stress ($B=0.055, p<0.001$) and burnout ($B=0.111, p<0.001$) significantly explained thinking about quitting, but resilience did not ($B=-0.020, p=0.471$). The stress-related variables provided more explanatory ability for variations in thinking about quitting than did personality factors, as difficulties in emotion regulation ($B=-0.013, p=0.423$), agreeableness ($B=-0.184, p=0.344$), and negative emotionality ($B=0.087, p=0.660$) were no longer significant predictors for thinking about leaving after the addition of Block 3. Block 4 adds a childhood adversity measure, which is neither statistically significant, nor did it change the relationships between Block 3 variables and the outcome.

Finally, caseworker attitudes/perceptions were added as the last block of variables. Results from this fifth and final model including all blocks are shown in Table 4.

The first, preference between child safety or family preservation orientations does not explain thinking about leaving ($B=-0.008, p=0.356$); however, the second concerns about leadership support for casework decisions if child on case is harmed—does predict thinking about leaving ($B=-0.264, p=0.006$), with higher scores (more perceived support) predicting lower frequency of thinking about quitting. As shown in Table 4, with all the blocks included in the model, the final four statistically significant predictors of “thinking about quitting” are conscientiousness, secondary traumatic stress, burnout, and leadership decision support. Burnout and leadership decision support are the two significant predictors with the largest effect sizes and the smallest *p*-values ($B=0.12, p<0.001$ and $B=-0.26, p<0.01$, respectively); higher burnout indicates a higher frequency of thinking about quitting; higher support indicates lower frequency of thinking about quitting.

Regression Model 2 Results—Intent to Search

The same blocks of variables were used for the outcome “intent to search.” When we regressed “intent to search” on Block 1 demographic factors, the model did not quite reach significance in explaining variation in the turnover intention outcome ($F(2, 250)=2.243; p=0.051$). Age ($B=-0.070, p=0.004$) was significantly associated with intent to search; older workers were slightly less likely to look for a new job. When adding Block 2 personality factors, none of the personality measures significantly explained intent to search. Grit was also not associated with intention

Table 4 Final block predicting workers' thinking about quitting, intent to search, and intent to leave

Correlates ¹	Model 1		Model 2		Model 3	
	Thinking about quitting		Intent to search		Intent to leave	
	<i>B</i> (<i>SE</i>)	95% CI	<i>B</i> (<i>SE</i>)	95% CI	<i>B</i> (<i>SE</i>)	95% CI
Age	0.01 (0.01)	-0.02, 0.03	-0.02 (0.02)	-0.06, 0.03	-0.02 (0.02)	-0.06, 0.03
Female	0.04 (0.34)	-0.63, 0.71	-0.97 (0.67)	-2.29, 0.34	-0.69 (0.64)	-1.95, 0.58
Graduate degree	-0.36 (0.36)	-1.08, 0.35	-0.08 (0.71)	-1.48, 1.31	-0.68 (0.68)	-2.02, 0.67
Married or remarried	0.02 (0.24)	-0.46, 0.50	-0.6 (0.48)	-1.53, 0.34	-0.20 (0.46)	-1.10, 0.70
White	-0.38 (0.31)	-0.99, 0.24	0.04 (0.62)	-1.18, 1.26	0.68 (0.60)	-0.49, 1.86
Big Five extraverted	-0.28 (0.16)	-0.60, 0.05	0.24 (0.32)	-0.40, 0.88	0.02 (0.31)	-0.60, 0.63
Big Five agreeable	-0.06 (0.20)	-0.45, 0.33	0.57 (0.39)	-0.19, 1.34	0.71 (0.37)	-0.02, 1.45
Big Five conscientious	0.39 (0.19)*	0.02, 0.75	-0.05 (0.37)	-0.78, 0.68	-0.20 (0.36)	-0.91, 0.50
Big Five open-minded	-0.11 (0.20)	-0.49, 0.26	-0.73 (0.37)*	-1.46, 0.01	-0.58 (0.36)	-1.29, 0.12
Big Five negative emotionality	0.09 (0.20)	-0.31, 0.48	-0.11 (0.39)	-0.88, 0.66	-0.45 (0.38)	-1.19, 0.29
Difficulties in emotional regulation	0.00 (0.02)	-0.04, 0.03	0.00 (0.03)	-0.07, 0.06	0.02 (0.03)	-0.04, 0.08
Grit-O	-0.01 (0.03)	-0.07, 0.04	-0.01 (0.05)	-0.11, 0.10	-0.01 (0.05)	-0.11, 0.09
Secondary traumatic stress	0.04 (0.01)***	0.02, 0.07	0.02 (0.02)	-0.02, 0.07	0.01 (0.02)	-0.03, 0.06
Burnout	0.12 (0.02)***	0.08, 0.16	0.18 (0.04)***	0.11, 0.26	0.14 (0.04)***	0.07, 0.22
Resilience	0.01 (0.03)	-0.05, 0.06	0.02 (0.06)	-0.09, 0.12	0.02 (0.05)	-0.08, 0.12
ACEs 10	0.04 (0.05)	-0.06, 0.14	0.04 (0.10)	-0.16, 0.24	0.00 (0.10)	-0.20, 0.19
Child safety orientation	-0.01 (0.01)	-0.02, 0.01	-0.04 (0.02)*	-0.07, 0.00	-0.03 (0.02)	-0.06, 0.00
Leadership support	-0.26 (0.09)**	-0.45, -0.08	-0.51 (0.19)**	-0.88, -0.14	-0.39 (0.18)*	-0.75, -0.04
(Constant)	3.07 (2.06)	-0.99, 7.13	5.82 (4.03)	-2.13, 13.77	5.95 (3.88)	-1.70, 13.61
<i>R</i> -squared		0.511		0.317		0.234
Model <i>F</i>	11.96***		5.28***		3.47***	

* Significant at the 0.05 level; ** significant at the 0.01 level; *** significant at the 0.001 level.

¹Total sample *n* = 276.

to search for a new job ($B = -0.028$, $p = 0.582$), but difficulties in emotion regulation was again associated with the turnover intentions outcome, though with a small effect size ($B = 0.075$, $p = 0.009$). The inclusion of emotion regulation in the model better explained intent to search than did age which did not remain a significant predictor ($B = -0.046$, $p = 0.062$). Block 3 variables ($R^2 = 0.265$) add explanatory factors related to stress. Both secondary traumatic stress ($B = 0.049$, $p = 0.038$) and burnout ($B = 0.156$, $p < 0.001$) significantly explain the outcome, but resilience does not ($B = -0.031$, $p = 0.567$). The stress-related variables provide more explanatory capacity for variations in intent to search than do personality factors; these remain non-significant and difficulties in emotion regulation is no longer a significant predictor ($B = -0.014$, $p = 0.649$) after the addition of Block 3. Block 4 adds childhood adversity, which is not a statistically significant predictor of intent to search, and only slightly changes the relationships between Block 3 variables and the outcome (burnout remains a significant predictor, resilience remains a non-significant predictor, but STS, which was a significant predictor of intent to search with earlier blocks is no longer ($B = 0.037$, $p = 0.131$). Finally, caseworker attitudes/perceptions were added as the last block of variables. As shown in Table 4 for the final model, orientation toward child safety or family preservation does contribute to explaining intent to search ($B = -0.037$, $p = 0.025$), but with very small effect size. Perceptions about leadership decision support also predicts intent to search ($B = -0.511$, $p = 0.007$), with higher scores (more perceived support) predicting lower frequency of intention to search for a new job and with moderate effect size. With all the blocks included in the model, the final four statistically significant predictors of intent to search are open-mindedness, burnout, safety/preservation orientation, and concerns about leadership support. Burnout and decision-making support are again the two predictors with both the largest effect sizes and smallest p -values; $B_{\text{burnout}} = 0.182$; higher burnout indicates a higher likelihood of intent to search and $B_{\text{decision support}} = -0.511$; higher decision support indicates lower likelihood of intent to search.

Regression Model 3 Results—Intent to Leave

The variable blocks were modeled in the same order for the last outcome of interest, intent to leave. Regressing “intent to leave” on Block 1 demographic factors (as with “intent to search”) does not produce a model which achieves significance in explaining variation in the turnover intention outcome ($F(2, 250) = 2.125$; $p = 0.063$). Age ($B = -0.060$, $p = 0.007$) was significantly associated with intent to leave; older workers were slightly less likely to intent to leave their job. For the first time, we also see that self-identifying as racially White is predictive of intent to leave, with a rather large effect size (White staff are more likely to indicate an intent to leave; see supplemental material). When Block 2 personality factors were added, none of these measures significantly explained intent to leave, nor was grit associated with intention to leave the job ($B = -0.030$, $p = 0.518$). However, as with the prior two outcomes, when difficulties in emotion regulation was introduced into the model, it was again associated with the turnover intention outcome with a small effect

size ($B=0.066$, $p=0.013$). The inclusion of emotion regulation in the model better explained intent to leave than did age or White identity, neither of which remained a significant predictor ($B_{\text{age}} = -0.046$, $p=0.048$ and $B_{\text{White}} = 0.627$, $p=0.291$). Block 3 variables (model $R^2=0.184$; supplemental material) added explanatory factors related to stress. Burnout ($B=0.118$, $p=0.001$) significantly explains the turnover outcome, but secondary traumatic stress did not ($B=0.028$, $p=0.210$) and resilience did not, either ($B = -0.041$, $p=0.421$). Burnout provided more explanatory power for variations in intent to leave than the personality factors; these remained non-significant and emotion regulation was no longer a significant predictor ($B=0.001$, $p=0.966$) after the addition of Block 3 (see again, supplemental material). In fact, at the Block 3 stage of modeling, burnout was the only significant predictor of intent to leave among the 15 in the model. Block 4 adds childhood adversity, which is not a statistically significant predictor of intent to leave and does not change the relationships between Block 3 variables and the outcome.

Finally (see Table 4), caseworker attitudes/perceptions were added as the last block of variables. The orientation toward child safety or family preservation does not contribute to explaining intent to leave ($B = -0.030$, $p=0.060$), though trends toward significance with a very small effect size. The perception/concern about leadership support does predict intent to leave ($B = -0.393$, $p=0.030$), with higher scores (more perceived support) predicting lower frequency of intention to leave for a new job (moderate effect size). Table 4 shows that with all blocks included in the model, the only two significant predictors of intent to leave are burnout and concerns regarding decision-making support with moderate effect sizes: $B_{\text{burnout}} = 0.142$; higher burnout indicates a higher likelihood of intent to leave and $B_{\text{decision support}} = -0.393$; higher decision support indicates lower likelihood of intent to leave.

Discussion

Concerns about high levels of child welfare workforce turnover date back decades (USGAO, 2003) and this crisis persists (Edwards & Wildeman, 2018). Moreover, Lin et al. (2016) project that by 2030, there will be a shortfall of almost 200,000 social workers in at least 38 states. It is critical that agencies gain insights into factors associated with turnover intentions and actual turnover, particularly those that are within their control to try to remediate. To that end, this exploratory research serves both to expand the scope of factors examined and to set the foundation for future analyses examining associations between these factors and actual turnover.

This study enabled the consideration and examination of many constructs related to turnover intentions, including some that have extensive support in the child welfare workforce literature (e.g., STS and burnout), and others that are being explored with child welfare staff for the first time (e.g., Grit-O, DERS-18, leadership support, and Dalglish child safety/preservation attitudes). Our models include factors that were either not reliably or ever significant across the three outcomes of (1) thinking about leaving, (2) intent to search, and (3) intent to

leave. We retained these factors nonetheless as these non-significant findings may be helpful to consider in future research endeavors. The presence of many significant bivariate correlations between the model's hypothesized predictors and the three outcomes which do not always remain significant with modeling, suggest both overlap among many factors correlated with turnover intentions and the overall complexity of understanding turnover as a phenomenon. Future research should endeavor to replicate the present study using the same measures and see if the findings presented here are replicated in different contexts, for example, different states or state groups and state vs. county CPS systems.

Still, among the factors considered and across the three dependent variables examined, and controlling for demographic factors such as age, gender, race/ethnicity, educational attainment and marital status, burnout, and perceptions of agency leadership/supervisor support are the most consistent and largest-effect-size predictors of turnover intentions in this study. Our models found that higher levels of burnout are associated with elevated scores on each of the three outcomes examined. Our finding indicating that caseworkers who feel they are less likely to be supported by the agency should an adverse event occur on one of their cases, serves as a new and unique contribution to the literature, although Ravalier's (2019) study of UK social workers found that a blame culture adds to the experience of stress, and stress commonly underlies turnover.

In some ways, these are encouraging findings, as burnout and agency/supervisor support are factors which can be addressed, unlike demographic factors. For example, agencies can install, communicate, and reinforce policies, training, and processes that reflect a culture of decision-making support for their workforce. These include policies and processes that employ due process principles such as the inclusion of thorough assessments and the incorporation of staff input when deconstructing how the adverse event occurred, rather than defaulting to a culture of blame. Group decision-making processes may also serve a dual role of supporting staff and sharing responsibilities for outcomes across multiple staff (Allan et al., 2017). Thus, insights about worker burnout and perceptions of decision-making support can offer opportunities for agencies to focus on interventions that may impact these dynamics.

Here, like in other foundational studies (Bride et al., 2004; Middleton & Potter, 2015), secondary traumatic stress had a positive association with thinking about quitting. Notable, however, is that this association did not replicate with respect to intentions to search or intentions to leave, contrary to the findings of Barbee et al. (2018) who studied caseworkers within their first year of employment.

The finding that staff with a stronger child safety orientation (vs. family preservation) were less likely to indicate an intent to search is of interest as it suggests that staff who are more comfortable with prioritizing child safety over preserving families are perhaps more at ease in a work environment that struggles with the tension between the two ends of the continuum. Still, the lack of a significant association between the child safety/family preservation orientation and the two other outcomes, thinking about quitting and intention to leave, suggests that there may be other omitted factors which further explain this dynamic. Differences between the models may also suggest that the three outcomes explored function as a type of continuum, with thinking about quitting serving as a precontemplation proxy, while intent to search

perhaps represents a clearer plan for a departure than the notion that one intends to leave. Further research exploring the associations between these outcomes, actual turnover, and time to turnover may illuminate the extent to which one measure is better than the others at predicting actual departures. Such a finding will aid child welfare administrators and researchers seeking to predict turnover, and especially those who are limited to the typical cross-section study approach, in utilizing the best proxy measure for actual turnover.

The lack of findings about other variables may be partially explained by their associations with other model elements. For example, the failure to detect a significant effect for ACEs in any of the models could be due to its association with other factors such as conscientiousness, openness to experience (Fletcher & Schurer, 2017; Grist & Caudle, 2021), burnout, and vicarious trauma (Howard et al., 2015; Thomas, 2016). Still, our findings suggest that ACEs does have a weak but significant correlation with open-mindedness, Grit-O, and STS. Future analyses using that can account for mediation and moderation effects such as these, i.e., structural equation modeling (SEM) would be helpful to sort out dynamics, as well as explorations into associations between ACEs, job tenure, or actual turnover.

While most of the Big Five domains were not significant in our final models, some findings regarding the Big Five personality constructs differed according to the domain and outcome examined. While we found a positive association between conscientiousness and thinking about quitting, conscientiousness was not associated with either intent to search or intention to leave. Staff who were more open-minded were also more likely to indicate intentions to search, but the association between this domain and the other outcomes was not significant. Moreover, although there were some trends (defined as p -values less than 0.1) towards significance (e.g., agreeableness and intent to leave, extraversion, and thinking about quitting), our models did not yield strong evidence of an association between personality types and turnover proclivity, replicating the Yankeelov et al. (2009) study which found no relationship between the Big Five and actual turnover among child welfare workers.

Finally, although the measures for Grit-O and emotional regulation (DERS-18) had statistically significant bivariate correlations with each of the three outcomes examined (Grit-O had an inverse and DERS-18 had a positive correlation), when included in the multivariate model neither of the measures were statistically significant. For all three outcomes, these two personality aspects—emotion regulation and Grit-O—entered the modeling sequence in Block 2, after demographics. In the models with only Blocks 1 and 2 predictors (see supplemental material), Grit-O was *never* significantly predictive of the turnover intention outcomes. However, DERS-18 was *always* predictive ($p < 0.001$, $p = 0.009$, and $p = 0.013$ for thinking about leaving, intent to search, and intent to leave, respectively). Then, for all three outcomes, the explanatory power of DERS-18 was replaced by the stress-related measures added in Block 3 ($p_{\text{DERS}} = 0.423$, $p_{\text{DERS}} = 0.649$, and $p_{\text{DERS}} = 0.966$ for thinking about leaving, intent to search, and intent to leave, respectively after the stress measures were added). Both secondary traumatic stress and burnout are immediately predictive of thinking about quitting and intent to search after the addition of Block 3 to the model and burnout is also significant in predicting intent to leave. Furthermore, as discussed above, burnout remained one of the two largest effect size and smaller

p-value predictors of turnover intentions in the final model (see Table 4). It is likely that given both its significant bivariate correlations with multiple other predictors and its non-significance in the multivariate model, that Grit-O is a measure lacking explanatory power to predict turnover intentions. Thus, future research in other jurisdictions should explore this association but consider the relative strength of its explanatory power versus other scales with stronger associations. Emotion regulation, on the other hand, is predictive when included with demographics and personality measures but its explanatory power is replaced by the stress measures, particularly burnout. This is also an encouraging finding, because as noted above, burnout may be more amenable to workplace-based interventions than would be difficulties in emotion regulation.

Limitations

This research has multiple limitations. First, we did not include a measure for years in child welfare because it was missing for so many respondents ($n=74$ or 27%). Because it was highly correlated with age ($r=0.449$, $p<0.01$), we chose to include age, exclude years in child welfare and preserve sample size. Future analyses using human resources data matched to the survey data should enable a more focused consideration of tenure and intentions to leave. Also, with respect to demographic measures, we chose to group married (married, remarried) into one group and not-married people together in another (including co-habiting and divorced), and then single and never married people in a third group. However, it is difficult to understand levels of relational commitment or financial resources from the categories provided by the survey questions and other groupings could make sense. Our inclusion of participants missing a small number of scale items has the potential to slightly skew results. However, we performed sensitivity analyses to examine the effects of including participants who were missing select items and our model results did not change. Given these sensitivity results, including these participants is preferable to dropping all participants missing a single item, which would have reduced the sample size by almost 13%. We also observed lower than desirable reliability for the Big Five 2-XS personality trait domains for this sample. This finding is common with this version of the scale, and yet it is still commonly used across an array of research environments (Soto & John, 2017a, 2017b). Employing regression to model these dynamics is also only one method out of many that could be used to explore similar questions. Future research employing structural equation modeling would foster deeper insights into mediation effects not measurable through regression methods. SEM may also enable consideration of whether caseworker attitudes and their perceptions of organizational culture are best modeled separately or together, as a construct reflecting internal and external factors that contribute to their experience of the work. In addition, although future analyses are planned, at this point we do not know the relative predictive strengths of each of these measures when actual turnover is considered. Finally, despite a robust number of exploratory variables in the model, as is always the case, the model omits some variables that may be important. These could include the degree to which staff practice self-care, receive therapy, or

have experienced chronically acute or severe cases, such as those involving a fatality, failed reunifications, and/or violence, the role a staff person fills (e.g., investigation worker, adoption worker), and other factors that could culminate into an untenable work experience.

Conclusion and Future Research

First, we note that the STS and burnout constructs, while conceptually very different, may be capturing some of the same workforce challenges (e.g., emotional exhaustion may have overlap with both constructs). Thus, it is difficult to tease these out from one another, even with detailed models as presented here. Future research needs to examine the separation/overlap of these two concepts to further help child welfare and other administrators know what to do to mitigate both STS and burnout. Next, we have future research plans to explore how these models perform in a mediation analysis and to test the model in more diverse child welfare workforce settings, including other jurisdictions from the QIC-WD. More importantly, we aim to expand the model for the current state to include actual turnover data (expected within several months) and conduct comparative explorations of alternative measures and their association with actual turnover. In that effort, we plan to examine the predictive strength of each of the three dependent variables with respect to actual turnover. Furthermore, the elevated STS and ACE scores associated with the child welfare staff surveyed in this sample suggest that the often-noted paradigm, that social workers themselves are sometimes “wounded healers,” exists in this sample. Future research should also explore if and how such characteristics may be associated with distinct patterns of case decision-making.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s42448-022-00139-4>.

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Data Availability The data used in this research are not publicly available.

Declarations

Ethics Approval This study was approved by the University of Louisville (ref: 17.0851).

Conflict of Interest The authors declare no competing interests.

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