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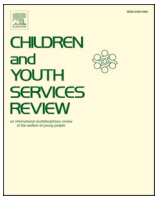

Hope and resilience as protective factors linked to lower burnout among child welfare workers

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ABSTRACT

Research has established that child welfare professionals regularly face workplace burnout, leading to both high turnover and reduction in service quality. Resilience has been identified as an important factor in coping with workplace burnout. However, a second construct, hope, has also been described as an important buffer to adversity and burnout. To better understand the relative role hope and resilience play in mitigating burnout among child welfare professionals, we conducted a study involving two independent samples of child welfare professionals in Oklahoma (N = 1,272). The two samples were analyzed with structural equation modeling. The model fit the data well (X^2 = 85.11, p > .001; *df* = 32, RMSEA = 0.052 [90% CI: 0.039, 0.065]; CFI: 0.983; SRMR = 0.027). Moreover, both hope and resilience were found to be independent protective factors for burnout, but hope was a substantially larger predictor of lower burnout ($\beta = -0.49$; $p < .001$) compared to resilience ($\beta = -0.21$; $p < .001$). The findings suggest that attention to increasing hope in child welfare practice may be a viable intervention to reduce burnout and turnover for child welfare professionals.

1. Introduction

It is widely accepted that maintaining a stable workforce is vital to the success of child welfare organizations. However, national studies suggest the child welfare workforce has been in a prolonged turnover crisis, with estimates indicating turnover rates ranging between 14 and 22 percent annually across the U.S. (Edwards & Wildeman, 2018). Pyshcological burnout is recognized as a significant contributor to turnover among child welfare professionals (McFadden, Mallett, & Leiter, 2017). Thus, understanding potential characteristics of child welfare professionals that mitigate burnout may have value to reducing burnout in the child welfare workforce.

While reslience is a trait established in the literature as important for child welfare professionals to coping with burnout (McFadden et al., 2017), less is known about the role a hopeful mindset plays in burnout. To better understand the operations of hope, relative to resilience, in lowering burnout among child welfare professionals, the current study examines the relationship between hope and resilience to employee burnout among a large sample of child welfare professionals in the State of Oklahoma. Should the results indicate that hope is significantly associated with lower burnout relative to resilience, such a study might point to the usage of hope theory as a valuable tool to reduce burnout in child welfare professionals both in Oklahoma and beyond.

1.1. Burnout and child welfare work

Previous studies of burnout in the child welfare workforce demonstrate that burnout has a significant relationship to turnover (Leake, Rienks, & Obermann, 2017; He, Phillips, Lizano, Rienks, & Leake, 2018; Kim & Kao, 2014, Mor Barak, Nissly, & Levin, 2001). In turn, turnover leads to reductions in the quality of services for children and families. Burnout as a construct is used to describe adverse psychological responses to work-related stressors (Maslach, Schaufeli, & Leiter, 2001). Burnout is determinantal because it is characterized by mental exhaustion and disengagement from work (Demerouti, Bakker, de Jonge, Janssen, & Schaufeli, 2001). Research suggests that child welfare professionals are especially at risk for burnout because of the organizational conditions of child welfare work (Conrad & Kellar-Guenther, 2006). Organizational characteristics attributed to burnout include job demands such as the constant exposure to the suffering and pain of children and families (Phillips, Lizano, He, & Leake, 2020; Travis, Lizano, & Mor Barak, 2016), large caseloads (Thomas, Kohli, & Choi, 2014), poor supervisory and organizational climate (Boyas & Wind, 2010; Glisson, Dukes, & Green, 2006; He et al., 2018; Leake et al., 2017; Linzano & Mor

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Barak, 2012), and burdensome administrative structures (Aarons, Sommerfeld, Hecht, Silovsky, & Chaffin, 2009; Leake et al., 2017).

Given the role burnout places in driving turnoever, researchers have endeavored to understand contributors to burnout. Studies that examine personal characteristics of professionals who experience burnout have found that professionals who feel a higher sense of conflict between work-family balance and professionals with less self-care practice strategies have also been attributed to increased burnout (Linzano & Mor Barak, 2012; Phillips et al., 2020; Salloum, Kondrat, Johnco, & Olson, 2015). Professionals ' sense of professional accomplishment, professional commitment, organizational commitment, and job satisfaction are all characteristics that have also had a negative relationship with burnout in the child welfare workforce literature (Boyas, Wind, & Ruiz, 2013; Conrad & Kellar-Guenther, 2006; Griffiths, Royse, Culver, Piescher, & Zhang, 2017; Linzano & Mor Barak, 2012; Williams, Nichols, Kirk, & Wilson, 2011).

Given the challenges of the work and risk for burnout among child welfare professionals, interventions proposed to improve the conditions that contribute to burnout have also been examined. Interventions to improve the work environment, such as enhanced salary, education and training opportunities, and recruitment incentives have been deployed in many states (Gomez, Travis, Ayers-Lopez, & Schwab, 2010). Other interventions have focused on addressing the social and emotional needs of the employee. Models that emphasize self-care strategies (Salloum et al., 2015) and supportive supervision (Ausberger, Schudrich, McGowan, & Auerbach, 2012) have been deployed to improve the worker's well-being and decrease burnout of employees by reducing the cumulative adverse impact of the stress on the child welfare worker. Despite advances in our understanding of burnout among child welfare professionals, more is needed to understand how to reduce the negative effects of burnout in the child welfare context. This study seeks to contribute to e by studying hope and resilience as precursors of lower burnout among child welfare practitioners.

1.2. Resilience

One characteristic often cited as essential to mitigating burnout is resilience (Luthans, Avolio, Walumbwa, & Li, 2005; McFadden, Campbell, & Taylor, 2015, McFadden et al., 2017). Resilience has become an important construct in research for child welfare as a possible buffer between burnout and child welfare work (McFadden et al., 2017). However, resilience as a construct is not without controversy (van Breda, 2018; Luthar, Cicchetti, & Becker, 2000). The criticism of resilience centers on the lack of uniformity that exists in the literature regarding how resilience is defined. To wit, resilience has been described as a trait, a process, an outcome, or an all-encompassing combination of all three (Southwick, Bonanno, Masten, Panter-Brick, & Yehuda, 2014). Moreover, resilience has also been described as a variety of external protective factors, internal psychological characteristics, and/or coping behaviors (Ahern, Kiehl, Sole, & Byers, 2006). The internal psychological characteristics of resilience have been further described as including other established constructs, such as self-efficacy, humor, patience, optimism, and/or faith (Connor & Davidson, 2003). For those that e resilience as the presence of external factors, these factors have been described in a variety of ways, including the presence of individuals, family, and/or community support, or some combination of the three (Zimmerman, 2013). Such variability in the descriptions of resilience has led to criticisms of resilience as a practical framework for understanding coping with adversity (Fletcher & Sarkar, 2013; Kolar, 2011). In fact, for some, the amorphous nature of how resilience is defined in the literature has led to the conclusion that resilience has "…become an empty word that can be filled with almost any meaning" (van Breda, 2018, p. 15). Consequently, identifying an additional construct, beyond resilience, that helps us to better understand what aids in coping with burnout may guide the development of additional interventions to improve the well-being of the child welfare workforce.

Although resilience is defined in many ways, (Fletcher & Sarkar, 2013; Kolar, 2011; van Breda, 2018), it was necessary to arrive at a single definition for the current study. We concluded that despite the lack of agreement in the literature on the definition of resilience, at its core, resilience involves the ability to bounce back after encountering obstacles (Southwick et al., 2014; Smith et al., 2008; Snyder, 2000). The ability to recover from obstacles to resume pursuing workplace goals has been identified as an important characteristic that aids in mitigating burnout (McFadden et al., 2015). The importance of continuing to pursue workplace goals despite the obstacles associated with child welfare work has led researchers to focus on understanding the operations of resilience in the child welfare context. Such research has examined the potential factors of resilience that aid in safeguarding from burnout (McFadden et al., 2015). Results indicated that certain workplace characteristics contribute to the resiliency of child welfare employees, including internal characteristics such as coping strategies for the job demands and a commitment to the mission of child welfare practice (McFadden et al., 2015). Thus, identifying additional internal characteristics that aid in overcoming obstacles has value to understanding how child welfare professionals can better cope with job demands. One such characteristic may be a hopeful mindset.

1.3. Hope theory

Although resilience is often mentioned in the child welfare literature as an important variable that buffers burnout, hope theory is less well known (Snyder, 1994). While the recognition of the importance of hope to well-being has a long history (Peterson & Seligman, 2004), only since the emergence of the positive psychology subdiscipline (Csikszentmihalyi & Seligman, 2000) have the tools emerged to measure individual differences in the psychological state of hope (Snyder, 1994). One of the most well-researched theories of hope is that of Snyder et al. (1991), who defined hope as a "positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-directed energy), and (b) pathways (planning to meet goals)" (Snyder et al., 1991, p.287).

Hope agency thinking reflects a cognitive assessment of one's capability to initiate and sustain goal-directed expectations (e.g. "I am ready," "I have what it takes") and the ability we have to access the strategies or potential pathways to pursue those goals ("I have a plan," "I know how to get there"). Collectively, pathways and agency thinking form an individual's overall hope (Snyder et al., 1991a,b). While hope shares similarities with other positive psychological characteristics such as resilience, optimism, self-efficacy, and grit, hope theory suggests that hope is a distinct psychological state. The differences between hope and each of the above mentioned constructs are discussed below.

1.3.1. Hope and resilience

Hope theorists have acknowledged a close relationship between hope and resilience (Snyder, 2000; Ong, Standiford, & Deshpande, 2018; Ong, Edwards, & Bergeman, 2006). Yet, while acknowledging that resilience and hope are linked, Snyder (2000) contends that hope theory offers a distinct and succinct two-component construct that describes a mindset that drives goal-directed action in the face of adversity. As such, hope theory lends itself to the development of interventions to promote hope (Snyder, 1994). Moreover, research supports the distinctiveness of hope from resilience, as confirmatory factor analyses have demonstrated that hope stands apart from resilience (Munoz, Hanks, & Hellman, 2020).

1.3.2. Distinction between hope and optimism, self-efficacy, and grit

Hope is also distinct from several other well known constructs. For instance, optimism is the generalized expectancy that good things will happen (Scheier & Carver, 1985). Thus, like hope, optimism involves positive expectations. However, the key distinction between the two is that, unlike hope, optimism is not self-focused (Rand, 2018). In other

words, optimism is the belief that goals will be attained without considering an individual's personal ability to achieve those goals. Hope, in contrast, is more specific, involving an assessment of an individual's agentic ability to bring about desired ends (Snyder, 2000). Research supports the theoretical distinction between the two, as results indicate that hope and optimism are distinct psychological states (Magaletta & Oliver, 1999).

Similarly, self-efficacy is the belief in one's ability to perform a set of behaviors (Bandura, 1986). Like hope, self-efficacy has characteristics of goal directed thoughts and has a future orientation. However, Snyder noted important differences between hope and self-efficacy. First, self-efficacy does not include attention to pathways thinking (Snyder, 2002). Second, self-efficacy is the belief that one *can* do something, not that one *will* do something (Snyder, 1994). Research supports these theoretical distinctions between hope and self-efficacy, as empirical results indicate the two are distinct psychological states (Munoz et al., 2016; O'Sullivan, 2011; Magaletta & Oliver, 1999).

Grit is often defined as an intrapersonal psychological strength characterized by sustained effort towards goals despite setbacks and distress (Duckworth, Peterson, Matthews, & Kelly, 2007) that succinctly explains motivation in adversity. While such a description of the grit construct contains similarities, hope adds to our understanding of motivation in the face of adversity by introducing the iterative relationship of agency and pathways thinking (Snyder, 1994). Moreover, grit theorists have also noted that hope is distinct from grit, contending that hope is an important characteristic of the gritty individual (Duckworth, 2016). Recent research aligns with this view, indicating that hope and grit are empirically distinct constructs (Munoz, Pharris, & Hellman, 2021).

1.3.3. Hope and coping with adversity

While hope has not been well-researched in the context of child welfare work, research in other settings has consistently demonstrated hope is an important contributor to coping with a variety of hardships. For example, in the context of intimate partner violence, hope has positively correlated with a sense of empowerment (Hellman & Gwinn, 2017) and life satisfaction (Munoz et al., 2016). Among foster children, hope has positively correlated with self-control and optimism (Munoz, Hellman, & Brunk, 2017). Hope has been associated with greater subjective perceptions of physical health among homeless individuals (Munoz et al., 2016). A metanalysis by Ong, Standiford, and Deshpande (2018) indicated that hope exhibited robust positive relationships with a litany of variables associated with resilience in the face of obstacles. Given the robust research base on the importance of hope to coping with adversity in various contexts, theory suggests that hope would also be valuable to child welfare professionals facing the difficulties that drive workplace burnout.

1.3.4. Hope and burnout

Hope theory and associated research supports that a hopeful mindset can mitigate employee burnout. This is so because individuals with higher hope are better able to cope with adversity by identifying multiple ways to achieve their goals. In contrast, individuals with lower hope are less likely to continue to pursue their goals because they have concluded their goals cannot be achieved (Rand, 2018). In such cases, lower hope is also characterized by emotional exhaustion, a state often described as being associated with burnout (Snyder, 1994).

In the context of helping professionals such as child welfare professionals, Snyder (1994) contended that employees often begin their careers with hopefulness, but under challenging working conditions, often experience regular failures caused by roadblocks to important work-related goals (Snyder, 1994). In contrast, high hope employees remain engaged in pursuing employment-related goals, the anthesis of workplace disengagement (Mouton & Montijo, 2018; Snyder, 1994). Higher hope professionals are less likely than lower hope professionals to view impediments as sources of stress and thus approach their workplace goals with greater motivation (Snyder, 1994). Other research has found a positive relationship between hope and job satisfaction, organizational commitment, and work happiness (Luthans et al., 2005; Larson & Luthans, 2006; Muse, 2018; Youssef & Luthans, 2007) and positively correlated with work engagement often associated with measures of work performance (Karatepe, 2014).

Research on hope in professions that have been linked to high risk for burnout and stress show hope has a strong negative relationship with burnout. For example, among child abuse pediatricians, hope contributed to lower burnout (Passmore, Hemming, McIntosh, & Hellman, 2020). A meta-analysis examining 133 effect sizes in 45 studies has revealed that hope is positively associated with positive workplace outcomes across various industries (Reichard, Avey, Lopez, & Dollwer, 2013). With a statistically significant positive relationship between hope and job satisfaction, employee well-being, health, and a statistically significant negative relationship between hope and burnout (Reichard et al., 2013). Researchers who examine hope provide explanations for how and why hope promotes positive outcomes. Higher hope employees show a higher level of performance and well-being because they are motivated to pursue goals and find multiple pathways to achieve those goals. When faced with adversity, hopeful employees find ways to set goals, adapt new pathways to the goal, and sustain the energy to accomplish those goals (Peterson & Byron, 2008). The promising nature of hope research in the workplace has led to a call from others to examine how improvements in working conditions can increase hope to foster the corresponding workplace benefits (Reichard et al., 2013).

1.4. The current study

As outlined above, resilience and hope are theorized to be distinct and important drivers of lower burnout. To the best of our knowledge, the current study is the first of its kind to test the relative relationships of hope and resilience to reduce burnout among child welfare professionals. Prior studies of hope and resilience support the distinctiveness of hope and resilience as psychological states that contribute to well-being (Authors, 2020). The results may provide insight into the development of interventions to decrease burnout in child welfare.

2. Methods

2.1. Participants and procedure

To assess the relative strength of the relationship of higher hope and resilience to lower burnout among child welfare professionals, we surveyed employees of the state child welfare services division in partnership with the State of Oklahoma. Surveys were distributed in the intenral email system of the organization to all of the approximately 2,500 child welfare employees, of which N = 1,272 responses were recieved. The study involved established psychometric scales, as described below, that measured hope, resilience, and burnout. The survey was administered via Qualtrics Survey and provided to participants via email and the annual employee engagement survey. IRB approval was obtained from both the State of Oklahoma IRB and the University of Oklahoma.

All participants (N = 1,272) in the survey reported working within the State of Oklahoma Child Welfare Services. Participant job tenure varied, with early-career employees who have worked in the state child welfare agency for 1–5 years (16%), with 54% working for 6–10 years, 15% for 11–15 years, and 15% >16 years. Most of the sample were front-line field staff (n = 823 or 65%) and front-line supervisors (n = 181 or 14%). The remaining participants were directors, program administrators, and program supervisors (n = 139 or 11%) or provided other essential services such as administrative support, legal and financial services, or job aids (n = 129 or 10%).

3. Measures

3.1. The Adult hope scale

Hope was measured using the Adult Hope Scale (AHS; Snyder et al., 1991a,b). The AHS contains 12 items scored with an eight-point Likert response format (1 = Definitely False; 8 = Definitely True). The 12 items are made up of four pathway items, four agency items, and four filler items, which are four questions that are not used in the total score of a survey but are present to demarcate questions that represent distinct dimensions of a scale. The AHS agency items and the AHS pathway items create two distinct dimensions of hope. An example of an AHS agency item is "I energetically pursue my goals," and "I meet the goals I set for myself," while AHS pathways items is "I can think of many ways to get the things in life that are important to me, or "There are lots of ways around a problem" (Snyder et al., 1991a,b). Total hope scores are obtained by summing the four pathways and the four agency items, with higher scores reflecting more hope.

A reliability generalization study indicated the AHS had produced good internal consistency across samples (Hellman, Pittman, & Munoz, 2013). The AHS has also shown good validity, with AHS scores negatively correlating with dysphoria and positively correlating with an array of other variables associated with well-being (Feldman & Snyder, 2005; Snyder et al., 1991a; Snyder, Irving, & Anderson, 1991b; Hellman, Pittman, & Munoz, 2013).

3.2. Brief resilience scale

Based on a systemic review of resilience measures (Windle, Bennett, & Noyes, 2011), the Brief Resilience Scale (BRS; Smith et al., 2008) was selected for the current based on the quality of the psychometrics of the scale, which adopts the theoretical conceptualization of resilience as an internal psychological ability to bounce back or recover from stress (Smith et al., 2008). The BRS assesses individual differences in resilience with six items that employ a five-point Likert response format (1 = Strongly Disagree; 5 = Strongly Agree). Three items of the BRS are positively worded, while three are negatively worded. An example of positively worded BRS items is "I tend to bounce back quickly after hard times," while a negatively worded item is "It is hard for me to bounce back when something bad happens" (Smith et al., 2008). BRS items are summed with higher scores representing higher subjective perceptions in the ability to bounce back/recover from stress. Scores in the BRS have demonstrated good internal reliability and have correlated positively with optimism, purpose in life, social interactions, and other variables linked to greater well-being (Smith et al., 2008).

3.3. Oldenberg burnout inventory

Individual differences in burnout were measured using the 16-item Oldenburg Burnout Inventory (OLBI; Demerouti & Bakker, 2008). The OLBI is a two-dimensional scale with individual differences being measured via a 5-point Likert scale. The first dimension of the OLBI measures work disengagement, while the second reflects work exhaustion (Demerouti & Bakker, 2008). Higher total scores on each dimension reflect greater overall disengagement and exhaustion. OLBI scores has demonstrated good reliability and validity. For instance, OLBI scores have demonstrated good internal consistency (Halbesleben & Demerouti, 2005; Tipa, Tudose, & Pucarea, 2019) have been negatively correlated with meaning in work (Passmore et al., 2020) and work engagement (Poulsen, Poulsen, Khan, Poulsen, & Khan, 2011).

4. Data analysis

Covariance Based Structural Equation modeling (CB-SEM) was chosen as the data analysis technique because the method allows for the modeling of latent variables (Bollen, 1989). Modeling the selected variables as latent allowed us to examine the empirical distinctiveness of hope and resilience and subsequently to evaluate the relative strength of the contributions of hope and resilience to reductions in burnout among child welfare professionals. The model's latent variables were estimated using the reference variable approach. This involves setting an unstandardized coefficient on each latent variable to the value of one, giving each latent variable a unit of measurement (Bollen, 1989).

All calculations were performed using maximum likelihood estimations and AMOS 19 (Arbuckle, 2010). Comparisons of the relative strength of variables relationships were conducted using standardized beta coefficients. Standardized beta coefficients express all variable relationships in standard deviation units ranging from 0 to 1. Standardized beta units allow for assessments of the relative strength of variable relationships because they are unaffected by differences in the units of measurement employed for each respective scale (Kline, 2016).

The quality of the proposed latent variable model was judged according to multiple fit criteria. First, we employed the Confirmatory Fit Index (CFI) with a cut-off of $\geq$0.90 for acceptable fit, with scores approaching 0.95 considered superior fit (Bentler, 1992; Hu & Bentler, 2009). Second, the Root Mean Square Error of Approximation (RMSEA) was used with a threshold of $\leq$0.10 as a cut-off for acceptable fit, with scores approaching 0.06 indicating superior fit (Browne & Cudeck, 1993; Hu & Bentler, 2009). Third, the Standardized Root Mean Square Residual (SRMR) was used with a score of $\leq$0.08 indicating acceptable fit, with a score approaching 0.05 indicating superior fit (Hu & Bentler, 2009). Finally, a χ^2 analysis was used with a threshold of $p > .05$ indicating acceptable fit. However, it is well known that the χ^2 is sensitive to sample size and frequently exhibits a $p < .05$ for models even when such models produce good fit according to other indices (Kline, 2016).

4.1. Missing data

For the variable of hope, 13% was missing, for resilience, 9% was missing, and for burnout, 13%. To increase the power of the model, we estimated these missing values using full information maximum likelihood analysis (FIML). In the presence of missing data, FIML operates by using probability estimates, specifically a maximum likelihood function, to estimate population parameters. As a full information method, FIML uses all available data to generate parameter estimates (Enders & Bandalos, 2001; Graham, 2009). As a result, FIML has been shown to be an effective tool to increase power while minimizing bias that can be introduced by other missing data procedures (Enders & Bandalos, 2001; Graham, 2009).

4.2. Parceling

In alignment with hope theory (Snyder et al., 1991a,b), aggregate scores for the agency and pathways dimensions of hope were loaded onto a single underlying factor. Similarly, for burnout, aggregate scores for the (1) exhaustion and (2) disengagement dimensions of the OBI (Demerouti & Bakker, 2008) were loaded onto a single underlying factor. Such a process is known as *parceling*. In CB-SEM modeling, parceling involves using the sum totals of a group of items to represent the observed variables of a latent variable (see Little, Cunningham, & Shehar, 2002). Parceling is justifiable when theory supports using aggregate scores as representations of dimensions of a higher-order factor (Little et al., 2002). In contrast, parceling was not employed for the BRS items because the BRS items are said to load on a single underlying factor (Smith et al., 2008).

4.3. Calibration and validation samples

The initial sample collected by the State of Oklahoma consisted of (N = 1272). The large sample size allowed the data to be randomly split into calibration (n = 618) and validation (n = 655) subsamples. Developing a model using a calibration sample and then testing it via a

validation sample is considered a best practice of covariance based structural equation modeling CB-SEM modeling (Bowen & Guo, 2012).

4.4. Power

The estimation tables of MacCallum, Browne, and Sugawara (1996) were used to evaluate the power of the proposed model to detect population effects. For the first sample, the power of a model with a degrees of freedom (*df*) of 32 and a sample size of $n = 618$ well exceeded the widely accepted threshold (>0.80) for adequate power (Cohen, 1988). For the second sample, with a sample size of $n = 655$, and again a degrees of freedom (*df*) of 32, the model also exceeded the 0.80 threshold for adequate power (Cohen, 1988).

4.5. Nested models

Beginning with the calibration sample, the quality of the proposed model at explaining the covariance structure of the data was evaluated by a comparison of "nested" models. A nested model in a CB-SEM context is a model with freely estimates parameters that are a subset of another model (Bollen, 1989). To evaluate the quality of a given nested model, as an additional path is added, the resulting $\Delta\chi^2$ is assessed to determine whether the additional path results in a statistically significant improvement in model fit (Kline, 2016). If the $\Delta\chi^2$ from the additional path is not statistically significant, the additional path is excluded from the final model (Kline, 2016). The model was determined to be the best fit from the calibration sample and was validated with sample 2.

5. Results

5.1. Calibration sample

For the calibration sample ($n = 618$), the internal reliability of all the measures was adequate, with alpha coefficients for the AHS dimensions of agency (0.769) and pathways (0.766) exceeding minimum thresholds. Likewise, the OBI dimensions of disengagement (0.786) and exhaustion (0.741), and BRS scores (0.888), also exceeded minimum thresholds. The normality assumptions that are prerequisites for ML estimations were also tested and met. Moreover, per best practices of CB-SEM modeling, we included a correlation matrix containing the values for the observable variables used to model the respective latent variables. Reporting the correlation matrix of the observable variables, including those at the item level, is considered a best practice in CB-SEM modeling because it allows for the reproduction of the full SEM model (McDonald & Ringo Ho, 2002). Table 1 contains the item level correlation matrix from sample 1. Table 2 contains an additional correlation matrix for the sum total values of the respenctive manifest variables.

Table 2
Zero Order Correlations of Total Hope, Psychological Resilience, and Burnout Scores Among Child Welfare Workers in Oklahoma (N = 618).

Variables	1	2	3
1. Hope	(5.9)		
2. Resilience	0.563*	(3.1)	
3. Burnout	−0.498*	−0.479*	37.1 (8.7)

Notes: *$p < .001$. Means and standard deviations are across the diagonal.

5.2. Nested models

The first model tested included the latent variables of hope and resilience as correlated variables with only a direct path from resilience to the latent variable of burnout. The model produced adequate fit ($\chi^2 = 139.06$; $df = 33$; $p < .001$; RMSEA = 0.072 [90% CI: 0.06, 0.085]; CFI = 0.967; SRMR = 0.049), with resilience serving as robust and significant ($\beta = -0.58$; $p < .001$) predictor of lower burnout. Next, to determine if hope was a unique contributor to lower burnout, we added an additional direct path from hope to burnout. The addition of the direct path from hope to burnout significantly improved model fit ($\Delta\chi^2$ (1) = 85.11; $p < .001$). Thus, the final model of resilience and hope as distinct variables independently and negatively correlated with burnout was the model that best explained the data ($X^2 = 85.11$, p > .001; $df = 32$, RMSEA = 0.052 [90% CI: 0.039, 0.065]; CFI: 0.983; SRMR = 0.027). Moreover, all factor loadings for the model of best fit were > 0.50 and statistically significant. According to the heuristics of Cohen (1988), the model of best fit also explained large variance in the dependent variable of burnout ($R^2 = 422$). A comparison of standardized beta coefficients also indicated that hope ($\beta = .-49$; $p < .001$) exhibited a large negative correlation (Cohen, 1988) with burnout while resilience exhibited a small (Cohen, 1988) negative correlation with burnout ($\beta = .-21$; $p < .001$).

5.3. Validation sample

To test the stability of the model of best fit identified in the calibration sample, we tested the same model in the second validation sample (N = 655). The internal consistency of all items per scale again exceeded accepted thresholds. Fit statistics were again superior for the model of hope and resilience as distinct variable negatively correlated with burnout ($\chi^2 = 112.21$; $df = 32$; $p < .001$; RMSEA = 0.062 [90% CI: 0.05, 0.075]; CFI = 0.972; SRMR = 0.033). All factor loadings were >0.50, the model again accounted for robust variance in burnout ($R^2 = 0.423$). Hope ($\beta = -0.52$) once again exhibited a statistically significant and large (Cohen, 1988) negative relationship with burnout while resilience again displayed a small (Cohen, 1988) negative relationship to burnout ($\beta = -0.18$) (Fig. 1).

6. Discussion

Previous research has demonstrated the job demands associated with

Table 1
Item Level Zero Order Correlations of the Calibration Sample (N = 618).

Variables	1	2	3	4	5	6	7	8	9	10
1. Hope Agency	27.3 (3.1)									
2. Hope Pathways	0.675*	27.4 (2.9)								
3. OLBI Disengagement	−0.487*	−0.446*	17.8 (4.2)							
4. OLBI Exhaustion	−0.417*	−0.378*	0.709*	19.2 (4.7)						
5. BRS 1	0.470*	0.443*	−0.375*	−0.386*	3.24 (0.613)					
6. BRS 2	0.382*	0.416*	−0.366*	−0.399*	0.555*	3.1 (0.68)				
7. BRS 3	0.335*	0.352*	−0.292*	−0.372*	0.559*	0.451	3.08 (0.627)			
8. BRS 4	0.451*	0.485*	−0.354*	−0.386*	0.605*	0.651*	0.552*	3.13 (0.63)		
9. BRS 5	0.361*	0.396*	−0.291*	−0.276*	0.543*	0.519*	0.484*	0.557*	3.03 (0.581)	
10. BRS 6	0.462*	*0.467	−0.365*	−0.385*	0.618*	0.616*	0.538*	0.728*	0.570	3.2 (0.597)

Notes: *$p < .001$. Mean (Standard Deviation) are in the diagonal.

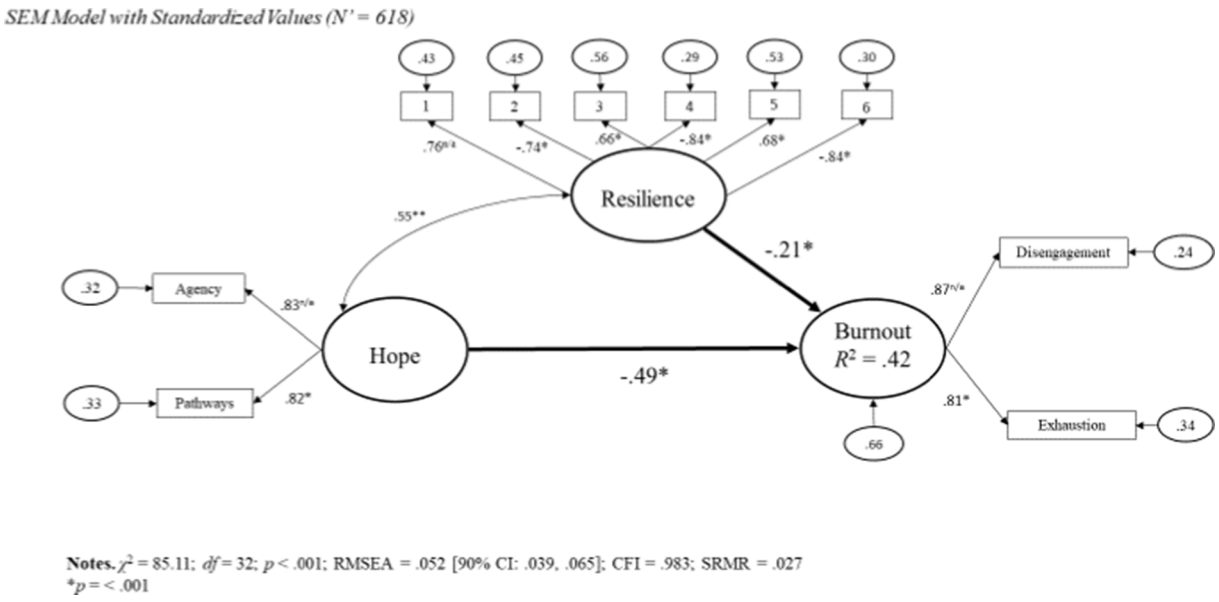

Fig. 1. SEM Model with Standardized Values (N' = 618).

child welfare can lead to work disengagement and exhaustion, both characteristics of burnout (Aarons et al., 2009; Glisson et al., 2006). Organizational leadership, practitioners, and researchers continue to search for internal and external resources that potentially protect child welfare professionals from burnout. This research aimed to examine the association between internal resources, namely hope and resilience, and burnout among a large sample of child welfare professionals. More specifically, this research computed a structural equation model to both a calibration and validation samples, finding that hope and resilience were negatively associated with burnout, but hope was more strongly correlated with lower burnout.

Resilience (McFadden et al., 2015) and hope (Muse, 2018) have both been linked to lower workplace burnout. The results from the current study support the distinctiveness of hope and resilience as psychological states that independently contribute to lower burnout among child welfare professionals. Of note, when comparing the relative strength of hope as a contributor to lower burnout in relation to resilience, hope was more strongly linked with less burnout. Such results align with Snyder (1994) contention that while hope and resilience share similarities, hope offers a simpler theoretical model that explains an important psychological characteristic needed for well-being in the face of adversity. In this case, hope was more strongly associated with lower burnout among child welfare professionals over resilience.

7. Implications and conclusions

Overall, the findings of this study should be useful to both child welfare professionals, policymakers, and researchers in the child welfare systems. Research has consistently linked turnover among child welfare professionals to psychological burnout (Berlanda, Pedrazza, Trifiletti, & Fraizzoli, 2017; Conrad & Kellar-Guenther, 2006; Regehr, Hemsworth, Leslie, Howe, & Chau, 2004). Thus, research that illuminates directions for interventions for child welfare professionals to buffer burnout has apparent value. The current data suggests the simplicity of Snyder (2000) hope construct and hope's strong negative relationship with burnout makes hope theory a prime candidate to guide future efforts to develop interventions for child welfare professionals to cope with burnout.

Hope theory-based interventions have already been developed for use in various contexts that have shown promise as tools to promote hope and hope's associated benefits (Munoz, Hellman, & Brunk, 2017; Counts, Gillam, Perico, & Eggers, 2017; Chan, Wong, & Lee, 2019; Thornton et al., 2014; Feldman & Dreher, 2012; Cheavens, Feldman, Gum, Michael, & Snyder, 2006). While outlininig the mechanics of hope based interventions are beyond the scope of this paper, the core features of hope based interventions include activities to help participants find workable goals, helping participants identify pathways to their goals, and promoting participants' agency via activities such as positive self-talk (Chan et al., 2019). Furthermore, in the context of helping professionals working with families via home visits, a study found that a hope centered intervention modality improved clients outcomes. This occurred because the hope based approach provided a framework for practitioners to help families overcome the obstacles they were facing (Counts et al., 2017). Moreover, the helping professionals delivering the hope centered modality also reported notable increases in their peceptions of engagement with families (Counts et al., 2017). Such a result is of interest to child welfare professionals because work disengagement is considered a core element of burnout (Demerouti et al., 2001).

7.1. Hope informed organizations

Combining the current data with previous research, theory suggests that hope theory may have value at the organizational level to improve working conditions for child welfare professionals. Theory suggests that organizations that focus attention on the valued goals of the employee that align with the employee's interests, strengths, and values may yield positive results in terms of increasing employee's hope levels (Mouton & Montijo, 2018). When supported by the organization, professionals perceive they can achieve their meaningful goals that contribute to greater overall well-being, including lower burnout (Mouton & Montijo, 2018). At times, the professionals goals may align with the organizational goals, but often they may be quite different. The organization should give attention to the professionals goals and help construct viable pathways to the goals. The current study results suggest models of supervision, training, and case consultation could be improved by shifting attention beyond the organizational goals to examining employee's personal goals. This could be done by adopting the language and key concepts of hope theory as a tool to cultivate caseworker hope. This could include regular workplace activities of goal setting and building knowledge and skills that promote access to pathways for goal attainment. While employing hope theory, child welfare leaders may facilitate the agency component of the work and facilitate pathways required for

goals by developing action plans and active problem solving (Peterson & Luthans, 2002). Moreover, utilization of hope theory by managers may assist the organization in identifying structural barriers, such as high caseloads and other administrative demands that block employee goals to help families meaningfully. A hopeful orientation to the work would engage in the long-term future perspective of the worker about achieving the possibility of the work and the impact on children and families.

The findings represent an opportunity for funders and policymakers to explore how hope-centered practice could be infused with current workforce interventions, the potential effects on the workforce of child welfare, and the potential to promote desirable outcomes for families and children who are child welfare systems involved. At a minimum, the current results suggest a need for further research into Snyder (2000) hope theory as an intervention model in the context of child welfare employment. It may be that hope can be integrated into an intervention framework alongside resilience that can help child welfare professionals better cope with burnout.

7.2. Study limitations and future directions

While the current study holds promise for advancing our understanding of the relationship between hope and resilience in reducing burnout among child welfare professionals, it is important to note potential limitations. First, the model was tested on two distinct samples of child welfare professionals from one state. Moreover, the demographic data from the sample, such as charactistics of ethnicity, race, and age, were not included in the study. While theory does not suggest that organismic variables or the state of origin of child welfare professionals would moderate the variable relationships identified in the study, further research is needed to evaluate this assumption. Secondly, resilience has been conceptualized in various ways (van Breda, 2018). This lack of uniformity in definitions of resilience suggests studies using different operationalizations of resilience (see Connor & Davidson, 2003) may produce different empirical relationships between the variables.

Additionally, other well-known measures of burnout (Maslach, Jackson, & Leiter, 1997) could be used to examine the relationship of hope and resilience to burnout, which could produce different empirical results. Moreover, the current study was cross sectional, creating limitations on the ability to establish causal relationships between variables. Further research may be helpful using longitudinal designs to better assess potential causal relationships between the variables.

Despite potential limitations, the current study results are consistent with Snyder (2000) theory that hope and resilience are distinct psychological constructs and that hope is linked to lower burnout. The results indicate that hope was more strongly correlated with lower burnout than resilience. Future research should explore the effect of using the theoretical concepts of hope on organizational culture and climate. Other organizational features are more influential in cultivating hopeful thinking and goal-directed behaviors among the workforce. Based on the current results, we believe that hope theory offers child welfare professionals an important theoretical framework to build future interventions to buffer the negative effects of burnout.

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CRediT authorship contribution statement

Angela B. Pharris: Conceptualization, Methodology, Funding acquisition, Project administration. **Ricky T. Munoz:** Methodology, Formal analysis. **Chan Hellman:** Conceptualization, Methodology, Funding acquisition, Supervision.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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