

# The Chains of the Past: A Life Course Perspective on Childhood Adversity and Organizational Attitudes and Behaviors

Baylor A. Graham and Robert R. Sinclair  
Department of Psychology, Clemson University

Childhood adversity stains the past of millions of working adults worldwide. The impact on health and well-being is substantial—a now-acknowledged public health crisis. Yet, research in the organizational sciences has failed to recognize the burden that individuals with this difficult history carry with them into the workforce. By synthesizing an interdisciplinary body of scholarship into a cohesive theoretical framework, we provide a foundation for emerging work in occupational health psychology. Empirically, across two single-level multiwave studies, we demonstrate the importance of adversity in one's childhood and its impact on the workplace specifically showing that child adversity, directly and indirectly, impacts worker attitudes and discretionary behaviors. Further, providing one of the few examinations of stress proliferation theory in the workplace, we demonstrate adulthood adversity as an essential mediating mechanism that leads to these work outcomes. From an applied perspective, our results highlight a need to focus on the healing and recovery of adult survivors as they work toward breaking the chains of the past in their lives and at work. In presenting this life course perspective on organizational attitudes and behaviors, our work offers a unique and vital contribution to occupational health theory, practice, and research.

*Keywords:* adverse childhood experiences, childhood adversity, stress proliferation, job attitudes

*Supplemental materials:* <https://doi.org/10.1037/ocp0000379.supp>

It is widely accepted that early experiences shape who we become, how we respond, and what opportunities we are afforded. Whether the impact is positive or negative, research consistently finds enduring effects of childhood experiences on future relationships (Umberson et al., 2014), self-perceptions (Appleyard et al., 2010), health (Hughes et al., 2017), and life opportunities such as earnings, employment, education, and more (Crystal & Shea, 1990; Metzler et al., 2017; Vergunst et al., 2019). Adverse childhood experiences (ACEs) such as abuse and neglect represent a growing public health crisis that necessitates the attention of scholars, policymakers, and the public (Dube, 2018).

The prevalence of childhood adversity is astonishing, with estimates revealing that 1 out of 7 children in the United States has experienced child abuse and/or neglect in the past year, with children in poverty being substantially more likely to have these experiences (Finkelhor, 2020). These children begin life at a disadvantage and experience long-term, negative effects on overall health, well-being, and opportunities in life—with the costs associated with child abuse and neglect (health care, child welfare, criminal justice, etc.) reaching nearly \$600 billion in the United States annually (Klika et al., 2020). Abused children have higher

risks of injury, teen pregnancy, sexually transmitted infections, and health problems (Centers for Disease Control and Prevention, 2022). ACEs alter the developing brain resulting in attention deficits, difficulty making decisions, trouble learning, and dysregulation of stress response systems (Evans & Kim, 2012; Shonkoff et al., 2012). These experiences often proliferate into adulthood producing relational problems, financial difficulties, and unstable work histories, leading to challenges in multiple life domains that accumulate over time (Anda et al., 2004; Nurius et al., 2015).

Building on this scholarship, we contend that it is time to recognize that the workplace is not impervious to the effects of childhood adversity. Yet, most work on childhood adversity exists outside of the occupational sciences and often lacks the theoretical depth and practical application that could be possible with more interdisciplinary collaboration (French et al., 2022). Although research acknowledging the impact of some childhood experiences on an individual's work life has slowly grown to a small handful of studies over the years (e.g., Anda et al., 2004; Barling & Weatherhead, 2016; French et al., 2022; Graham, 2021; Liu et al., 2013; Roberts et al., 2007; Woods & Hampson, 2010), the topic demands further attention. Neither research nor theory has sufficiently illuminated the burden that a background of

(Graham & Sinclair, 2023).

Baylor A. Graham played a lead role in conceptualization, formal analysis, visualization, and writing—original draft and an equal role in data curation and writing—review and editing. Robert R. Sinclair played a lead role in funding acquisition and supervision, a supporting role in conceptualization and writing—original draft, and an equal role in data curation and writing—review and editing.

Correspondence concerning this article should be addressed to Baylor A. Graham, Department of Psychology, Clemson University, 419 Brackett Hall, Clemson, SC 29634, United States. Email: [baylorg@g.clemson.edu](mailto:baylorg@g.clemson.edu)

Baylor A. Graham  <https://orcid.org/0000-0003-2166-5151>

The authors report that there are no competing interests to declare.

This work was supported by a Clemson University Department of Psychology Summer Research Award granted to Robert R. Sinclair.

Significant portions of this work are based on a master's thesis (Graham, 2021) completed by Baylor A. Graham and under the supervision of Robert R. Sinclair (Graham, 2021). A variation of this work was also presented at the annual Society for Industrial and Organizational Psychology Conference

childhood adversity represents for the individual worker. Thus, our central research question concerns the extent to which stressors from childhood proliferate into adulthood leading to disadvantages and ultimately influence attitudes and behaviors at work.

Extant evidence highlights how one's childhood may impact future unemployment (Liu et al., 2013), retention (Topitzes et al., 2016), absenteeism, and poor health (Anda et al., 2004) but does not address childhood adversity in relation to worker attitudes such as commitment or discretionary behaviors (e.g., organizational citizenship behaviors [OCBs]). The purpose of the present study is to uncover the connection between these distal life experiences and more proximal attitudes and behaviors at work. Understanding how one's history may detract from their ability to invest in work in terms of organizational commitment and retention is important for enhancing organizational performance, facilitating a positive work environment, and promoting occupational health and well-being. Similarly, understanding how these experiences may contribute to engaging in either positive or negative discretionary behaviors is important for providing insight into individual differences and informing organizational policies and leadership practices that seek to encourage beneficial forms of contextual performance.

By introducing childhood adversity as an important topic to attend to in occupational health research, we answer a call from Nurius et al. (2013) and others advocating for the integration of more interdisciplinary work to help break down existing silos that inhibit the advancement of scientific knowledge. Drawing on literature from multiple disciplines such as sociology, neuroscience, molecular biology, and psychology, we provide a basis for occupational scientists to expand their work by looking at the individual more holistically and accounting for factors that influence work outcomes throughout the life course. Taking an occupational health psychology perspective on this work also introduces the opportunity to view work as a resource for enhancing the health of workers with a difficult history.

Accordingly, the present study makes several theoretical and practical contributions. Theories of occupational health and organizational behavior have generally paid little attention to the role of prior adverse experiences. Although a trauma perspective has been adopted by some prior scholarship (e.g., Vogel & Bolino, 2020), the emphasis has almost exclusively been on the present experience of trauma at work (e.g., abusive supervision) rather than trauma associated with the more distant past (i.e., childhood). While many stress theories do focus on an imbalance between situational demands and available resources (e.g., Hobfoll, 1989; Lazarus & Folkman, 1984; Siegrist, 1996), they often fail to sufficiently address the role of time, human development, the adaptation process, and the compilation of multiple stressors across the life course. Our data span multiple years and consider childhood experiences, past adulthood experiences, and current workplace attitudes and behaviors. Expanding the focus from employees' attitudinal and behavioral reactions to stressors to investigations of the way employees interact with, appraise, and respond to childhood experiences of stress and adversity allows for the possibility that, over time, stress may proliferate (Pearlin et al., 2005) and result in a cumulative disadvantage, leaving individuals trapped in a cycle of stress. We contend that it is essential for current theory to adopt a more holistic perspective—attending to past trauma and stress, acknowledging the role that this history may play in one's present

experience of stress, and recognizing the implications of these life events for attitudes and behaviors in the workplace.

Further, acknowledging the role of childhood adversity in organizational attitudes and behaviors can allow researchers to view the existing literature in these domains in a new light. Research on individual differences in organizational attitudes and behaviors is primarily limited to broad personality characteristics such as the five-factor model (e.g., McCrae & John, 1992) and demographic variables such as gender, age, and ethnicity. Considerably less attention is paid to socioeconomic status (Weaver et al., 2016) and one's personal history, particularly dating back to childhood. Nevertheless, individuals experiencing stress proliferation from childhood into adulthood may be more vulnerable to poor occupational health and well-being. These vulnerable workers may have trouble investing in work and exhibit fewer positive discretionary behaviors. Understanding precipitating factors such as critical events in childhood and the accumulation of stress across the life course can aid in broadening the theoretical rationale explaining why each of these workplace phenomena occurs.

Finally, our study contributes to the broader interdisciplinary scholarship focusing on adversity across the life course. Our study focuses on organizational attitudes and behaviors and allows researchers to extend beyond a rudimentary acknowledgment of adversity having implications for the employment relationship to more specific consequences. In doing so, our study highlights occupational health and well-being as essential outcomes of interest. Indeed, by viewing adversity through a workplace lens, occupational health psychologists can contribute to a better understanding of how individuals navigate and cope with adversity throughout their professional lives.

The present study draws from life course stress models (Elder, 1998; Nurius et al., 2015) to create a theoretical framework that describes the additive effects of multiple social, developmental, and economic disadvantages as one enters adulthood and the workplace. Although the role of developmental history is often overlooked in psychological research and theory (Leong et al., 2014), we aim to draw attention to this limitation both in our research design and by integrating theory from outside the domain of occupational health psychology. Specifically, we use the cumulative disadvantage theory (Bask & Bask, 2015; Crystal & Shea, 1990) and take a life course perspective (Elder, 1995) to understand the impact of early life experiences on work-related outcomes—specifically attitudes and behavior. This understanding can help to guide the development of psychological theory, interventions, support systems, and job design to create a healthier and more successful workplace.

## Theory and Hypothesis Development

Elder's (1995) Life Course Model provides a strong framework for research in public health, developmental psychology, medicine, and sociology (Elder et al., 2003; Leong et al., 2014; Wethington, 2005). This model is often conceptualized as a perspective rather than a formal theory, as it facilitates an approach that spans multiple disciplines (Wethington, 2005) and emphasizes the interplay of time, context (e.g., historical, geographic), process, and meaning as individuals develop and interact (Bengtson & Allen, 1993; Elder et al., 2003). According to prior research, well-being throughout one's life course is heavily influenced by their initial endowment of

resources and early experiences (Nurius et al., 2015; H. A. Turner & Butler, 2003).

Beginning life with disadvantages often results in a cumulative burden that proliferates as one disadvantage leads to another. For example, in the case of financial disadvantages, one may begin life in poverty, which impacts scholastic achievement and, in turn, impacts adult earnings (Duncan et al., 2010; Hair et al., 2015). However, while intergenerational cycles of poverty have been heavily studied (Harper et al., 2003), the additive effects of multiple early disadvantages have received much less attention (Nurius et al., 2015). Further, though some scholarship has addressed the additive burden of a multiple disadvantaged background (Seabrook & Avison, 2012), very little research has examined workplace outcomes. We propose that this additive burden of childhood disadvantages leads to a proliferation of disadvantages as one becomes an adult and, through this cumulative disadvantage process, affects adults' workplace experiences. Our conceptual model summarizing these proposed relationships is presented in Figure 1.

### Stress Proliferation Theory

According to Thoits (2010), resources and deficits accumulate over time and produce disparities in health, wealth, longevity, and well-being. Not only do these deficits or early adversities compound, one form of disadvantage tends to be related to a heightened vulnerability to other forms of disadvantages. The processes through which these disadvantages compile are referred to in the literature as early adversity stress proliferation (Pearlin et al., 2005; Thoits, 2010). Pearlin et al. (2005) coined the term stress proliferation to refer to stressors that stem from other stressors. Stress proliferation can occur in at least two ways. The first is the expansion of primary stressors (e.g., financial losses leading to additional financial losses). This process is often driven by the elevation of demands the initial stressor elicits. The second way proliferation may occur is through the emergence of secondary stressors (e.g., stress at work eliciting stress at home). This occurs due to a spillover process in which stressors in one area may spillover into another.

Thoits (2010) extended this initial work, stating that stress proliferation is one of the mechanisms through which early adversities result in additional adverse health outcomes for individuals as they age. They suggested that childhood stressors can have negative effects on adult mental health both directly and indirectly via stress accumulation and by amplifying the effects of adversity that emerge in adulthood. Current theories more widely adopted in Occupational Health Psychology such as the conservation of resources theory

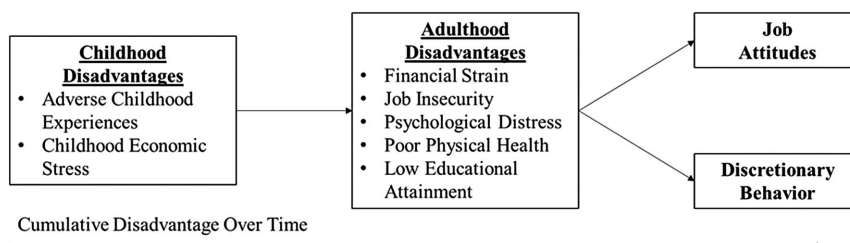
(Hobfoll, 1989) also support this general notion. These models explain how trauma (e.g., in the form of loss spirals; Heath et al., 2012) can then lead to secondary stressors or other traumatic events that are accompanied by additional adverse health consequences. Consistent with this theorizing, adults who have experienced one or more traumatic events as a child tend to report higher instances of both lifetime and recent stressful events (Turner et al., 1995). Stress proliferation can apply in a variety of contexts, such as the proliferation of stress across generations (e.g., intergenerational continuity of poverty), proliferation across life domains (e.g., spillover from work to home), or proliferation across the life course (Thoits, 2010). Focusing on the individual, stress proliferation provides a strong theoretical and empirical backing to the disadvantages that accumulate and inhibit optimal functioning.

### Childhood Adversity

ACEs can be defined as traumatic events and significant disruptions within an individual's family during childhood (0–17 years; Felitti et al., 1998). These childhood experiences generally include three types of childhood abuse, namely, psychological abuse, physical abuse, and contact sexual abuse, as well as four types of household dysfunction in childhood, namely, substance abuse, domestic abuse, mental illness, and criminal behavior in the household. More recent work (e.g., Braveman et al., 2018; Crouch et al., 2019) has expanded the conceptualization of childhood adversity to include other adverse experiences such as parental divorce or separation, economic hardship, food insecurity, homelessness, and bullying. In the present study, we focus on abuse, neglect, and economic stressors, which we define as encompassing unemployment, underemployment, job insecurity, and financial stress (Sinclair et al., 2024; Voydanoff, 1990).

Based on prior work (e.g., Montez & Hayward, 2014; Suglia et al., 2010), it is likely that, along with other ACEs, these economic experiences exert a cumulative impact on children's future development. Indeed, numerous studies have examined the relationship between income and child outcomes (Dahl & Lochner, 2012; Farah et al., 2006; Guèvremont & Kohen, 2013), finding that financially stressed children are consistently at a disadvantage in terms of health, educational opportunities, and more. Other economic stressors such as parental job insecurity have also been found to influence attitudes, emotions, and academic performance (Barling et al., 1998, 1999; Stewart & Barling, 1996). Thus, though they have received less attention compared with other types of ACEs such as abuse or neglect, economic stressors are potentially more prevalent (Braveman et al., 2018) and, like other types of ACEs, may be traumatic or worsen the effects of trauma (Kiser & Black, 2005).

**Figure 1**  
*Conceptual Model*



Not only are adverse experiences potentially traumatizing, but they can also undermine a child's sense of stability, safety, and bonding having lasting effects into adulthood (Metzler et al., 2017). Numerous studies have established that childhood adversity predicts an array of poor mental health outcomes such as posttraumatic stress disorder symptoms, polydrug use, depression, and attempted suicide (Brockie et al., 2015). In addition, the more adverse experiences a child has, the greater the effect on mental health, physical health, and behavioral problems (Kalmakis & Chandler, 2015). A recent meta-analysis revealed that individuals with at least four adverse experiences are at an elevated risk of many health impairments including physical inactivity, obesity, diabetes, increased heavy alcohol use, heart disease, respiratory disease, smoking, cancer, and poor self-rated health overall (Hughes et al., 2017).

Childhood adversity also significantly enhances the risk and impact of numerous stressors in adulthood through various mechanisms, such as the presence of diathesis (a consequence of early exposure to adversity) that decreases the threshold for stress prior to a depressive reaction (Hammen et al., 2000). The effects of traumatic experiences in childhood may also initiate toxic stress either during or after exposure, leading to disruptive effects on the amygdala, hippocampus, and prefrontal cortex that begin as early as in the prenatal period and, for the prefrontal cortex, continue far into adulthood (Shonkoff, 2016; Shonkoff et al., 2012). Further evidence from Danese and McEwen (2012) also links childhood adversity to negative effects on the nervous, endocrine, and immune systems.

In the present study, we emphasize that negative childhood experiences rarely occur in isolation and can have a cumulative impact (Kessler et al., 2010; Sacks & Murphey, 2018). Indeed, some research has found that simply the number of adverse experiences one has is harmful to health and well-being in adulthood—without considering their severity (Felitti et al., 1998; Finkelhor et al., 2007). The interrelatedness of different types of childhood adversity has thus prompted an increased interest in the cumulative influence of multiple adverse experiences across domains (financial, scholastic, etc.). Taking a broader approach allows for the inclusion of some important types of childhood adversity that are often excluded (e.g., economic hardship; Braveman et al., 2018; Crouch et al., 2019).

### ***Childhood Adversity and the Workplace***

Although work focusing on how childhood adversity influences adult employment is uncommon, some connections have been made between these domains. For example, childhood adversity and poor health have been associated with increased work disability (Laditka & Laditka, 2019; Shuey & Willson, 2019), having significant implications for career advancement (Breslin et al., 2007). Childhood adversity is also negatively related to an individual's likelihood of maintaining and obtaining employment (Liu et al., 2013). According to Liu et al. (2013), ACEs impair children's cognitive ability, leading to unemployment through decreased educational attainment and social isolation. Moreover, they suggest that ACEs are associated with lowered resilience to future adversity. Consistent with this idea, research has found that those exposed to greater adversity in childhood experience more frequent unemployment in adulthood (Metzler et al., 2017; Zielinski, 2009) as well as employment difficulties such as being fired (Sansone et al., 2012) or low job retention (Topitzes et al., 2016). Thus, given the accumulating evidence linking childhood

adversity to employment difficulties, the present study sought to investigate the relationship between childhood adversity and worker attitudes and discretionary behaviors.

A handful of existing studies provide insight into how childhood adversity relates to job attitudes. Notably, French et al. (2022) found that childhood psychological maltreatment is negatively related to adult supervisor social support. Using attachment theory as a framework (Ainsworth, 1989; Bartholomew, 1990), they argued that schemas triggered by childhood adversity shape social relationships and subsequent attachment, leading individuals with this difficult history to struggle with receiving support and connecting emotionally. A similar rationale could be applied to job attitudes. For instance, individuals with a background of childhood adversity may experience lower affective organizational commitment (Meyer & Allen, 1991) due to difficulty forming attachments. Consistent with this idea, prior work in leadership has related attachment styles to work-related outcomes (Jiang et al., 2019). Another work by Jiang (2017) has explored secure attachment orientation (Bowlby, 1982) as a moderator of employee reactions to job insecurity and unemployment rates. This framework is consistent with cumulative disadvantage theory in that as disadvantages proliferate, one becomes more likely to experience negative stimuli, and positive emotions are less common. Consequently, based on our theoretical foundation, it may become difficult to invest emotional resources leading to weaker organizational attachments (Arens et al., 2012).

With decreased attachment, attitudes regarding intentions to remain with the organization are also important to consider. Turnover intentions (TOI) are subjective evaluations of the likelihood of an individual leaving their current job or organization (Hom et al., 1984; Mobley, 1982). While prior work has established that childhood adversity is associated with greater employment instability (e.g., Sansone et al., 2012; Topitzes et al., 2016), no existing research has examined intentions to turnover specifically. Yet, this work is important because TOI are one of the best predictors of turnover (Hom et al., 1992) as well as other negative outcomes such as organizational withdrawal behaviors (e.g., absenteeism, presenteeism, tardiness) and counterproductive work behavior (CWB; Carpenter & Berry, 2017; Cohen & Golan, 2007; N. P. Podsakoff et al., 2007; Xiong & Wen, 2020). We theorize that because individuals have fewer resources to invest, they may not be committed to remaining with their organization for the long term. They may readily seek new job opportunities that have promise of providing any additional resources to aid in buffering the proliferation of disadvantages and cascade of resource loss.

*Hypothesis 1:* Childhood disadvantages will be negatively related to beneficial job attitudes and positively related to TOI.

Individuals with a history of childhood adversity may also be less likely to engage in positive discretionary behaviors such as OCBs. Building from our theoretical foundation, as their stress proliferates, they may expend their available resources on maintaining successful performance at work rather than investing in workplace relationships and going above and beyond for the organization. Prior work supports this rationale finding a negative relationship between stress and OCB (e.g., De Clercq & Belausteguigoitia, 2020). However, individuals with a history of adversity may not only have a lesser propensity to engage in OCB, but they may also be more likely to engage in negative discretionary behaviors such as CWB. CWB is a



voluntary behavior that violates organizational and social norms (P. Spector et al., 2006); it includes overt acts of aggression, such as theft, as well as more covert acts, like intentionally failing to adhere to instructions or incorrectly doing the work (Fox et al., 2001). Researchers discuss CWB as being an emotion-based reaction to stressful organizational conditions (e.g., Fox et al., 2001; P. Spector et al., 2006), emphasizing the critical interplay between individual differences and the work environment that induces emotion and elicits behavior.

Research has connected childhood adversity to job-related problems overall but has not substantially developed beyond this general finding (Anda et al., 2004). We extend this work by examining how childhood adversity relates to CWB. Studies have established that childhood adversity is related to an increased risk of antisocial personality symptoms, conduct disorders, and to becoming a violent offender as an adult (Caspi et al., 2002; Widom, 1989). This connection extends beyond childhood adversity that is abusive in nature (e.g., physical or sexual abuse) as individuals who were neglected as children experience strong effects as well (Grogan-Kaylor & Otis, 2003). Another work has found that a history of family aggression is related to hostile affect, explicit hostile cognitions, and engaging in abusive supervision (Garcia et al., 2014). This work is in line with stress proliferation theory in that it demonstrates that aggression is a learned behavior that proliferates from one generation to the next. However, it is also possible that proliferation can occur due to limited resources, thereby promoting maladaptive coping behaviors and perceptions of scarcity at work. Utilizing this empirical and theoretical rationale as a framework, we theorize that childhood disadvantages are associated with increased CWB in adulthood.

*Hypothesis 2:* Childhood disadvantages will be positively related to CWB and negatively related to OCB.

### The Role of Adult Adversity

Cumulative disadvantage theory implies that childhood adversity continues to proliferate and produce additional adversity in adulthood. Adulthood adversity can be conceptualized as a combination of both acute (e.g., divorce) and chronic events (e.g., health problems) that elicit stress. These stressors rarely occur in isolation—individuals may experience multiple stressors simultaneously or sequentially, and their cumulative effects can be more impactful than the sum of individual stressors (Evans & Kim, 2010; Slopen et al., 2018). The accumulative nature of adulthood adversity elicits compounding and long-term effects that reflect a lifetime of negative experiences, challenges, and inequalities (Thoits, 2010).

Adulthood adversity can impact the workplace in several ways. For instance, perceived underqualification resulting from decreased educational attainment has been found to be negatively related to job attitudes and commitment (Sim & Lee, 2018). Financial stress is also related to poorer health and well-being (Pereira & Coelho, 2013; Price et al., 2002), relational difficulties (Falconier & Jackson, 2020), job attitudes (Zhan et al., 2013), negative affect (Graham, Sinclair, & Munc, 2024a), job performance (Brett et al., 1995), and work–family conflict (Odlle-Dusseau et al., 2018). Chronic health conditions associated with adversity (e.g., heart problems; O’Rand & Hamil-Luker, 2005) may also substantially impair work performance as individuals struggle with the associated challenges (Collins et al., 2005).

From a resource perspective, adult adversity may be impactful because it is related to increased demands and resource loss. For example, poor health may elicit further resource loss in the form of medical bills or lost time at work. Thus, multiple adverse events may be interrelated and lead to a cascade of losses. In line with this, prior work has found that distal stress is often the initial stimulus (Dienes et al., 2006) and stress often continues exerting its impact as a sum of disadvantages across the life course. Although the current research acknowledges the cumulative effect of early adversity from a theoretical perspective, substantially less work empirically accounts for it (Bush et al., 2016). This misalignment has limited the understanding of mechanisms that underlie the cumulative relationship between childhood adversity and adult outcomes. Notably, however, recent work has made progress in filling this gap, outlining several domains of life through which childhood adversity may exert its impact in adulthood (Slavich & Shields, 2018). Some of these domains include mental and physical health, education, and economic situation—all of which have received extensive attention in current scholarship (Metzler et al., 2017). We focus on these specific domains of adulthood adversity due to their well-documented relationships with childhood adversity and their theorized relationship to work.

Childhood and adulthood experiences are interconnected and exert cumulative effects in many critical areas of adult life. Those who report a history of child neglect and abuse have reduced educational attainment and are substantially less likely to be high school graduates (Currie & Widom, 2010; Metzler et al., 2017). Childhood adversity is related to a decreased probability of being married, lower net worth, fewer assets, and lower earnings (Covey et al., 2013; Currie & Widom, 2010; Metzler et al., 2017). In fact, individuals with this history are three times more likely to find themselves in poverty, have a reduced likelihood of having health care coverage, and have an increased reliance on Medicaid (Zielinski, 2009). Adult adversity is one of the mechanisms through which childhood adversity explains workplace outcomes, and ignoring events in adulthood is inconsistent with the cumulative disadvantage theory and stress proliferation processes. Indeed, disadvantages that continue into adulthood and span multiple domains of life are more impactful than childhood disadvantages alone (J. Turner et al., 1995; Wheaton, 1999). Thus, the present study adopts a more holistic examination of adversity by examining both childhood and adult disadvantages.

*Hypothesis 3:* Childhood disadvantage will be positively related to adulthood disadvantage.

*Hypothesis 4:* Adulthood disadvantage will be negatively related to beneficial job attitudes and OCB and positively related to CWB and TOI.

*Hypothesis 5:* Childhood disadvantage will have a negative indirect effect on OCB and beneficial job attitudes through adulthood disadvantage and a positive indirect effect on CWB and TOI through adulthood disadvantages.

## Study 1 Method

### Procedure and Sample

We obtained institutional ethical approval to recruit participants through Amazon’s Mechanical Turk (MTurk; see data transparency

statement in Appendix). Using MTurk allowed us to obtain a diverse sample from a variety of career fields (Buhrmester et al., 2011; Michel et al., 2018) and to attract participants with a wide range of childhood experiences. A Qualtrics survey link was posted on MTurk, and participants were invited to complete a questionnaire for which they were compensated with \$4. We utilized data only from U.S. citizens, checked for legitimate zip codes, screened for duplicate MTurk IDs, and ensured that commonly misrepresented items such as income and age (Aguinis et al., 2021) were within a reasonable range. We also checked for long string patterns (e.g., answering a 7 for all items) and utilized reverse-coded items. Three attention check items were embedded in the survey to screen out careless responders. For example, one attention check item asked the participants to “Please respond ‘neutral’ to this question.” If a participant did not respond to the attention check item correctly, they were deemed a careless responder and were excluded from the analyses.

Data were collected at three time points, 6 weeks apart. For the primary measures in this study, it was our aim to have the predictors measured at Time 1, intervening variables at Time 2, and the outcomes at Time 3 to minimize concerns about method variance. Further, regarding temporal precedence, the childhood measures represent events that took place long before the participants began working. As quality control, childhood measures were checked for consistency across the three time points, although no inconsistent responses were identified.

We obtained 349 participants who responded to all three survey waves and passed all three attention checks in each wave. Six participants were omitted because they had missing data for several items, leaving a final sample size of 343. On average, the participants were 29 years of age ( $SD = 9$ ), with men making up 56%, women making up 43.6%, and 0.4% who preferred not to say. Regarding education, 10.7% had an associate’s degree, 40.4% a bachelor’s degree, 9.5% a master’s degree, and 1.8% a doctoral degree. In addition, the retained participants came from all the major groups of standard occupational classification outlined by O\*Net. For instance, our sample included individuals in sales and related occupations (14%), computer and mathematical occupations (13%), management (11%), business and financial operations (9%), office and administrative support (8%), and food preparation/serving-related occupations (4%).

## Measures

### *Cumulative Childhood Disadvantage*

In line with prior work (e.g., Nurius et al., 2015; Schafer et al., 2011; J. Turner et al., 1995), we sought to capture the cumulative effects of a childhood with multiple adverse experiences or disadvantages. Although cumulative indices of adversity have been criticized for combining several distinct experiences (see Brumley et al., 2019), this approach has demonstrated its usefulness in various contexts (e.g., Nurius et al., 2015; Schafer et al., 2011; J. Turner et al., 1995). In addition, while other approaches, such as factor analyses, have been used (e.g., Brumley et al., 2019), these approaches may have flaws theoretically. There is an ongoing debate in the literature regarding whether childhood adversity experiences should be conceptualized as formative or reflective indicators (Brumley et al., 2019). However, while some aspects of childhood

adversity may be reflective, the theoretical framework presented in this article assumes that childhood cumulative disadvantage should be measured in an additive or cumulative way. This approach is consistent with prior work (e.g., Appleyard et al., 2005; Bauman et al., 2006; Nurius et al., 2015; Walsemann et al., 2008), is parsimonious, and conveys the view of a dose–response relationship between childhood adversity and work-related outcomes. Thus, we used both a measure of ACEs and a measure of childhood economic stress to evaluate childhood disadvantage. For our analyses, we utilized the childhood disadvantages measured at Time 1.

**Adverse Childhood Experiences.** To assess ACEs, individuals were given a modified version of the Behavioral Risk Factor Surveillance System ACE questionnaire (Ege et al., 2015) that included 12 questions that were adapted from the original ACE study (Felitti et al., 1998). For example, “While I was a child (under 18), I felt unprotected by my family.” Response options were either “yes” or “no.” This measure captures experiences of emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect, bullying, growing up in an unsafe neighborhood and home, household domestic violence, household substance abuse, household depression, and household incarceration. Prior work (Zanotti et al., 2018) has demonstrated the test–retest reliability of this measure.

**Childhood Economic Stress.** To evaluate economic stress in childhood, we asked the participants about parental unemployment, underemployment, job insecurity, and their subjective perception of income adequacy in childhood. Evaluating both objective (e.g., unemployment) and subjective (e.g., underemployment) economic stress is in line with the current best practices (e.g., Sinclair & Cheung, 2016) and economic stress models (e.g., Voydanoff, 1990). Our questionnaire was comprised of five items ( $\alpha = .90$ ) that were developed for this data collection and were based on the types of economic stress outlined by Sinclair et al. (2024). We asked the participants about how often the primary wage earner in their family experienced job insecurity, unemployment, or underemployment (one item relating to skills, education, and training and one item relating to hours) and how often they were unable to afford basic needs (housing, utilities, food, etc.). For example, “When you were growing up, how often did the primary wage earner in your family experience periods of job insecurity, where you/they were worried about losing their job?”

### *Adulthood Cumulative Disadvantage*

We focus on five types of adulthood cumulative disadvantages that center around health and socioeconomic disadvantages. Specifically, our adulthood cumulative disadvantage variable is comprised of financial strain, job insecurity, ill health, psychological distress, and low educational attainment. In line with our theoretical framework, we assert that these stressors, although distinct, cannot be fully understood in isolation, and we are interested in how they work together to create a cumulative disadvantage effect. The specific stressors that we emphasize in the present study were drawn from prior work (Slavich & Shields, 2018) that explicitly emphasized work, finances, education, and health as a few of several key components that comprise cumulative life stress. We included five measures of disadvantage that were modeled as reflective of overall adulthood cumulative disadvantage (i.e., as a latent variable). These include poor educational attainment, financial strain, job insecurity, poor physical health, and poor psychological

well-being. These disadvantages have been connected to ACEs (Covey et al., 2013; Metzler et al., 2017) and represent the proliferation of adversity as it impacts multiple domains of life. Additional detail on each component is provided in the following subsections, and all were measured in the second wave.

**Financial Strain.** For financial strain, we used a 12-item measure asking the participants about their current financial situation (Sears, 2008; Graham, Sears, et al., 2024;  $\alpha = .97$ ). Items were rated on a 7-point agreement scale from *strongly disagree* to *strongly agree*. A sample item is, “My financial situation is more stressful than I’d like.” Higher scores indicate greater financial strain.

**Job Insecurity.** Job insecurity was measured in the second wave of data collection using 10 items ( $\alpha = .93$ ; Oldham et al., 1986). Items were rated on a 7-point agreement scale from *strongly disagree* to *strongly agree*. A sample item is, “My job is not a secure one.” Higher scores indicate greater job insecurity.

**Educational Attainment.** Educational attainment was measured with a single item asking the participants, “What is the highest level of education you have completed?” They were given six response options ranging from *less than high school* to *doctoral degree (PhD, MD, JD, etc.)*. Responses were coded such that higher values indicated greater educational disadvantage (i.e., lower attainment).

**Health Status.** Health status was measured using a single item that asked the participants, “In general, would you say your health is...?” with responses ranging from 1 (*excellent*) to 5 (*poor*). Responses were coded such that higher values indicated greater disadvantage (i.e., poorer health).

**Psychological Well-Being.** Psychological well-being was measured using an 18-item measure (Ryff, 1989;  $\alpha = .92$ ) that asked the participants to indicate their level of agreement with each statement over the past 30 days. Items were rated on a 7-point agreement scale from *strongly disagree* to *strongly agree*. A sample item is, “I often feel lonely because I have few close friends with whom to share my concerns.” Responses were coded such that higher scores indicated poorer psychological well-being.

## Outcomes

**Turnover Intentions.** To measure TOI, we used measures of both job and organizational TOI in the third wave of data collection. This was done using a six-item measure adapted from Hom et al. (1984) that included three items pertaining to job turnover and three items pertaining to organizational turnover ( $\alpha = .93$ ). A sample job turnover item is “I am planning to search for a new job outside my job during the next 12 months.” A sample organizational turnover item is, “If I have my own way, I will be working for some other organization one year from now.” The items were rated on a 7-point Likert scale with response options ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores on this measure indicate stronger intentions to turnover.

**Affective Organizational Commitment.** Based on a measure (Sinclair et al., 2009) adapted from Meyer et al. (1993), affective organizational commitment was assessed using four items ( $\alpha = .98$ ) from the third wave of data collection. Response options ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). A sample item for affective organizational commitment is “I feel a strong sense of belonging to my organization.” Higher scores on this measure represent more commitment to the organization.

**Counterproductive Work Behavior.** CWB was measured using an eight-item scale ( $\alpha = .90$ ) by Dalal et al. (2009) in the third wave of data collection. The participants were asked to indicate the extent to which they agreed or disagreed with the statements about their behavior at work in the past month. A sample statement is “I did not fully comply with a supervisor’s instructions.” The items were rated on a 7-point Likert scale with response options ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores on this measure indicate more CWB.

**Organizational Citizenship Behavior.** OCB was measured using an eight-item scale ( $\alpha = .89$ ; Dalal et al., 2009) from the third wave of data collection that asked about their behavior at work over the past month. The items were rated on a 7-point Likert scale with response options ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores on this measure indicate greater OCB. A sample item is “I volunteered to do something that was not required.”

## Organizational Tenure

Because prior work has found that organizational tenure is related to feeling a sense of belonging, OCB (Hafidz et al., 2012), CWB (Ng & Feldman, 2010), and TOI (Jung et al., 2012), we chose to examine it as a control variable. Indeed, as shown in Table 1, while tenure was unrelated to childhood adversity, it was significantly related to TOI ( $r = -.15$ ), CWB ( $r = -.17$ ), and OCB ( $r = .16$ ). However, because our results were essentially identical with and without tenure in our model, consistent with Becker (2005), we report the results without tenure for simplicity.

## Study 1 Results

We began by calculating reliabilities, means, standard deviations, and bivariate correlations among all study variables in R Version 4.3.2 (R Core Team, 2022; Table 1). Next, we tested our hypotheses using the lavaan package (Rosseel, 2012). We began by creating a measurement model for all latent variables. Due to model complexity, OCB and CWB were modeled as observed, while latent variables were created for affective commitment, TOI, and childhood disadvantage. For adulthood disadvantage, we created a latent variable with the five indicators (i.e., health, well-being, job insecurity, financial strain, educational attainment). Using maximum likelihood estimation, we found that our model demonstrated acceptable fit, Yuan–Bentler  $\chi^2(91) = 271.96, p < .001$ , comparative fit index (CFI) = .96, root-mean-square error of approximation (RMSEA) = .07, 90% CI [.066, .087], SRMR = .058.

Then, to test Hypotheses 1, 2, and 3, we specified the path model with childhood disadvantage relating directly to the outcomes (TOI, affective commitment, CWB, and OCB) and to adulthood disadvantage. Overall, using maximum likelihood estimation, we found that the model demonstrated an acceptable fit, Yuan–Bentler  $\chi^2(91) = 271.96, p < .001$ , CFI = .96, RMSEA = .07, 90% CI [.066, .087], standardized root-mean-square residual (SRMR) = .055. Childhood disadvantage was not significantly negatively related to affective commitment ( $\beta = -.15, p = .08$ ) but was significantly negatively related to OCB ( $\beta = -.26, p < .01$ ). Childhood disadvantage was positively related to TOI ( $\beta = .31, p < .01$ ) and CWB ( $\beta = .27, p < .01$ ). Thus, Hypothesis 1 was partially supported, and Hypothesis 2 was supported. Finally, childhood disadvantage

**Table 1**  
Means, Standard Deviations, and Bivariate Correlations for Study 1

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. ACEs	2.21	2.78	—											
2. Child economic stress	15.28	8.23	.29**	(.90)										
3. Financial strain	39.48	15.25	.22**	.19**	(.97)									
4. Job insecurity	29.51	12.79	.12*	.18**	.39**	(.93)								
5. Poor well-being	53.66	19.75	.24**	.28**	.52**	.48**	(.92)							
6. Poor health	2.51	1.00	.30**	.13*	.42**	.25**	.43**	—						
7. Education	3.43	1.71	.11*	-.02	-.09	.08	.04	-.03	—					
8. OCB	44.40	8.13	-.07	-.19**	-.17**	-.40**	-.57**	-.19**	-.12*	(.89)				
9. CWB	18.67	9.28	.11*	.19**	.24**	.31**	.45**	.21**	.02	-.48**	(.90)			
10. TOI	10.42	6.03	.12*	.19**	.45**	.47**	.43**	.18**	-.03	-.38**	.40**	(.93)		
11. Affective commitment	17.29	7.83	-.11*	-.07	-.32**	-.51**	-.42**	-.20**	-.02	.50**	-.24**	-.67**	(.98)	
12. Tenure	8.06	6.00	-.00	-.03	-.08	-.05	-.11*	-.01	-.03	.16**	-.17**	-.15**	.10*	—

Note. *N* = 343. ACEs = adverse childhood experience; OCB = organizational citizenship behavior; CWB = counterproductive work behavior; TOI = turnover intentions.

\*  $p < .05$ . \*\*  $p < .01$ .

was positively related to adulthood disadvantage ( $\beta = .57, p < .001$ ) providing support for Hypothesis 3.

Next, we specified the path model with childhood disadvantage relating both directly and indirectly via adult disadvantage to the outcomes (TOI, affective commitment, CWB, and OCB). Overall, using maximum likelihood estimation, we found that the model demonstrated an acceptable fit, Yuan–Bentler  $\chi^2(91) = 271.96, p < .001, CFI = .96, RMSEA = .07, 90\% CI [.066, .087], SRMR = .058$ . We compared this model to a model with no direct effects between childhood disadvantage and our outcomes, Yuan–Bentler  $\chi^2(95) = 279.71, p < .001, CFI = .95, RMSEA = .07, 90\% CI [.065, .086], SRMR = .061$ . Because the  $\chi^2$  difference was not statistically significant ( $p = .09$ ), we retained the simpler model without direct effects.

Adulthood disadvantage was positively related to TOI ( $\beta = .59, p < .001$ ) and CWB ( $\beta = .50, p < .001$ ). Adulthood disadvantage was negatively related to affective organizational commitment ( $\beta = -.54, p < .001$ ) and OCBs ( $\beta = -.59, p < .001$ ) providing support for Hypothesis 4. In addition, we found a significant indirect effect for TOI ( $\beta = .32, p < .001$ ), CWB ( $\beta = .28, p < .001$ ), affective organizational commitment ( $\beta = -.30, p < .001$ ), and

OCBs ( $\beta = -.32, p < .001$ ). For the unstandardized indirect estimates of childhood disadvantage through adulthood disadvantage, see Table 2. All indirect paths were significant ( $p < .001$ ), and Hypothesis 5 was supported.

## Study 2 Method

In Study 2, we replicated the findings from Study 1 to provide more robust support for our hypotheses. Study 2 addressed methodological concerns with Study 1, such as the temporal separation of only 6 weeks between waves and the use of an MTurk sample. These two studies complement each other in that Study 2 spans a much longer time period and may be more representative of the general working population, but Study 1 has much stronger measurement validity and extends beyond the outcomes examined in Study 2 (i.e., by also considering TOI and CWB).

## Participants and Procedure

Study 2 used longitudinal data that spanned approximately 10 years from the National Survey of Midlife Development in the United States (MIDUS; Brim et al., 2004) I, MIDUS II, and MIDUS II Biomarker Project. The original purpose of this study was to investigate how behavioral, psychological, and social factors contribute to variations in health and well-being related to age in a nationwide sample of Americans. The MIDUS data have demonstrated their utility in applied psychology research (e.g., Allen et al., 2023; Gonzalez-Mulé & Cockburn, 2021). However, to the best of our knowledge, the relationships examined in the present study have not been examined in prior work.

Data collection began between 1995 and 1996 with MIDUS I and was conducted by the MacArthur Foundation's Network on Successful Midlife Development. This first wave of the MIDUS study collected survey data from a total of 7,108 participants. All eligible participants were noninstitutionalized, English-speaking adults in the coterminous United States, aged 25–74. For the MIDUS II, these respondents were contacted 10 years later, in 2005, to participate in a second wave of data collection. Of the 7,108 participants in MIDUS I, 4,963 successfully completed the MIDUS II. The participants were contacted to participate in a

**Table 2**  
Unstandardized Estimates of Indirect Effects From Structural Equation Models

Variable	Estimate	<i>SE</i>	<i>z</i>	<i>p</i>
Study 1: <i>N</i> = 343				
Child dis.–adult dis.–TOI	0.129	0.033	3.958	<.001
Child dis.–adult dis.–commitment	–0.123	0.031	–3.930	<.001
Child dis.–adult dis.–CWB	0.545	0.140	3.884	<.001
Child dis.–adult dis.–OCB	–0.555	0.139	–3.997	<.001
Study 2: <i>N</i> = 622				
Child dis.–adult dis.–job attitudes	–0.191	0.050	–3.811	<.001
Child dis.–adult dis.–OCB	–0.119	0.059	–2.017	.044

Note. *SE* = standard error; Child dis. = childhood disadvantages; adult dis. = adulthood disadvantages; TOI = turnover intentions; CWB = counterproductive work behavior; OCB = organizational citizenship behavior.



phone interview that lasted approximately 30 min and were given two self-administered questionnaires, each of about 55 pages in length, which were mailed to the participants and, when completed, were returned by mail.

Those who completed both the phone interview and questionnaire were then eligible to participate in the Biomarker Project as a supplement to the MIDUS II (Dienberg Love et al., 2010). Of those who completed MIDUS II, 1,255 respondents also completed the Biomarker Project supplement. Out of these participants, we filtered the data to include only those who were employed in all waves, completed all three data collections, and provided complete answers to our items. Our final sample size was 622 participants. Of these participants, 55% were women, and 45% were men. The majority (71%) were married, and 13% had been divorced. In addition, 91% identified as White, 3% as Black, 2% as other, less than 1% as Asian, and less than 1% as multiracial. Regarding educational attainment, 5% had some high school, 23% graduated high school, 28% had some college, 24% had a bachelor's degree, and 20% had some graduate school or higher. The average hours worked was 40.6 in the MIDUS I and 37.7 in the MIDUS II.

## Measures

### *Childhood Disadvantage*

As in Study 1, we assessed both ACEs and childhood economic stress as reflective of childhood disadvantage. Childhood economic stress was drawn from MIDUS I and was a single item asking the participants to rate their financial situation growing up. This item ranged from 1 to 7 with higher values indicating that the participants were "worse off financially than others." ACEs were measured using the Childhood Trauma Questionnaire (Bernstein & Fink, 1998) during the MIDUS II Biomarker Project. Although this was not measured at the first time point, regarding temporal precedence, this was not a cause for concern as these ACEs were retrospective reports and would have occurred well before the Wave I data collection. For each of the 25 items from the Childhood Trauma Questionnaire, respondents were prompted to think of their experiences growing up as a child and a teenager and indicate how true each statement was, from 1 (*never true*) to 5 (*very often true*). This questionnaire assesses five types of childhood adversity, each comprised of five items: physical abuse, physical neglect, emotional abuse, emotional neglect, and sexual abuse. We summed all items together to create a composite ACE score.

### *Adulthood Cumulative Disadvantage*

Adulthood cumulative disadvantage was measured using multiple measures representing adversity in adulthood drawn from the MIDUS I. These measures aligned with the five adulthood disadvantages measured in Study 1 and were coded such that higher values indicated greater disadvantage. Based on prior work, each of these adulthood disadvantages was assumed to be reflective of adulthood cumulative disadvantage and was modeled as such in our analyses.

**Financial Strain.** Financial strain was assessed using a single item that asked the participants to "rate your current financial situation." Responses ranged from 1 (*best possible financial situation*) to 10 (*worst possible financial situation*).

**Job Insecurity.** Job insecurity was measured using a single item asking the participants to rate their job security. Specifically, this item asks, "If you wanted to stay in your present job, what are the chances that you could keep it for the next two years?" Responses were coded such that higher values indicated more job insecurity (i.e., less likely to keep the job).

**Health.** Respondents' general health was evaluated using a single item that asked, "Using a scale from 0 to 10 where 0 means 'the worst possible health' and 10 means 'the best possible health,' how would you rate your health these days?"

**Mental Health.** Mental health was evaluated using a single item that asked respondents "In general, would you say that your mental or emotional health is poor, fair, good, very good, or excellent?"

**Educational Attainment.** Educational attainment was evaluated by asking respondents "What is the highest grade of school or year of college you completed?" Higher levels of education indicated greater educational attainment. Responses ranged from *no school/some grade school* to *PhD, EDD, MD, DDS, LLB, LLD, JD, or other professional degree*.

## Outcomes

We used selected outcomes from the MIDUS data that most closely aligned with Study 1 and fit into our categories of outcomes (i.e., worker attitudes and discretionary behaviors). These items were all taken from the MIDUS II. For our job attitudes measure, we used a one-item measure that reflected feeling job pride and one item that reflected feeling respected for the job. The job pride item was "When I think about the work I do on my job, I feel a good deal of pride," and the job respect item was "I feel that others respect the work I do on my job." These items were correlated ( $r = .59, p < .001$ ) and modeled as both reflecting positive job attitudes.

To capture discretionary behavior, we utilized two items that related to volunteering to doing unwanted tasks at work and helping coworkers. The volunteering item asked to what extent the respondents agreed that they "volunteer do unwanted tasks at work," and the helping item asked to what extent they agreed that they "help out colleagues at work." These items were correlated ( $r = .32, p < .001$ ) and were modeled as both reflecting positive discretionary behavior at work.

## Study 2 Results

As with Study 1, we began by calculating means, standard deviations, and bivariate correlations among all study variables in R Version 4.3.2 (R Core Team, 2022; Table 3). Next, we tested our hypotheses using the lavaan package (Rosseel, 2012). We began by creating a measurement model for all latent variables. For adulthood disadvantage, we created a latent variable with the five indicators (i.e., health, well-being, job insecurity, financial strain, educational attainment). In addition, rather than modeling them as individual outcomes, we created a latent variable to reflect both OCBs and a latent variable to reflect both job attitudes. Using maximum likelihood estimation, we found that our model demonstrated acceptable fit, Yuan-Bentler  $\chi^2(38) = 65.21, p < .001, CFI = .96, RMSEA = .03, 90\% CI [.019, .048], SRMR = .037$ .

Then, to test Hypotheses 1, 2, and 3, we specified the path model with childhood disadvantage relating directly to the outcomes

**Table 3**  
Means, Standard Deviations, and Bivariate Correlations for Study 2

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1. ACEs	37.34	12.88	—										
2. Childhood economic stress	3.97	1.25	.27**	—									
3. Poor mental health	2.06	0.87	.24**	.16**	—								
4. Poor physical health	3.37	1.28	.22**	.06	.35**	—							
5. Poor educational attainment	5.20	2.28	.10*	.17**	.17**	.06	—						
6. Financial stress	3.87	2.04	.15**	.11*	.17**	.25**	.13**	—					
7. Job insecurity	2.55	1.79	.07	.05	.09*	.06	.08*	.08*	—				
8. Helping coworkers	6.06	0.81	.00	.06	-.06	-.09*	-.08*	-.05	-.04	—			
9. Volunteering for tasks	4.94	1.27	.05	.03	-.01	-.03	.02	.02	-.02	.32**	—		
10. Job pride	3.57	0.65	-.12**	-.03	-.13**	-.12**	-.07	-.07	-.18**	.13**	.09*	—	
11. Job respected	3.53	0.66	-.14**	-.04	-.18**	-.14**	-.06	-.12**	-.21**	.18**	.06	.61**	—

Note. *N* = 622. ACEs = adverse childhood experience.

\*  $p < .05$ . \*\*  $p < .01$ .

(job attitudes and OCB) and to adulthood disadvantage. Overall, using maximum likelihood estimation, we found that the model demonstrated an acceptable fit, Yuan–Bentler  $\chi^2(38) = 65.21$ ,  $p < .001$ , CFI = .96, RMSEA = .034, 90% CI [.019, .048], SRMR = .037. Childhood disadvantage was significantly negatively related to job attitudes ( $\beta = -.22$ ,  $p = .003$ ) but was not significantly negatively related to OCB ( $\beta = .05$ ,  $p = .48$ ). Thus, Hypothesis 1 was supported, and Hypothesis 2 was not supported. Finally, childhood disadvantage was positively related to adulthood disadvantage ( $\beta = .61$ ,  $p < .001$ ) providing support for Hypothesis 3.

Next, we specified the path model with childhood disadvantage relating both directly and indirectly via adult disadvantage to the outcomes (job attitudes and OCB). Using maximum likelihood estimation, we found that the model demonstrated an acceptable fit, Yuan–Bentler  $\chi^2(38) = 65.21$ ,  $p < .01$ , CFI = .96, RMSEA = .034, 90% CI [.019, .048], SRMR = .037. We compared this model to a model with no direct effects between childhood disadvantage and our outcomes, Yuan–Bentler  $\chi^2(40) = 70.19$ ,  $p < .01$ , CFI = .96, RMSEA = .035, 90% CI [.021, .048], SRMR = .040. Because the  $\chi^2$  difference was not statistically significant ( $p = .08$ ), we retained the simpler model without direct effects.

In this model, adulthood disadvantage was negatively related to job attitudes ( $\beta = -.36$ ,  $p < .001$ ) and OCBs ( $\beta = -.12$ ,  $p = .03$ ) providing support for Hypothesis 4. In addition, we found a significant indirect effect for both job attitudes ( $\beta = -.21$ ,  $p < .001$ ) and OCB ( $\beta = -.07$ ,  $p = .04$ ). For the unstandardized indirect estimates of childhood disadvantage through adulthood disadvantage, see Table 2. All indirect paths were significant ( $p < .001$ ), and Hypothesis 5 was supported.

## Discussion

It is essential to prioritize the study of occupational health disparities among individuals who have diverse backgrounds reflecting child abuse, neglect, and economic stress. The present study connects the more distal cumulative disadvantage theory to proximal outcomes, arguing that disadvantaged individuals who have undergone significant childhood adversity may have smaller resource pools and be at a resource deficit upon entering the workforce. The losses that they have already experienced make them more vulnerable to subsequent losses and heightened levels of stress. As a result, they are more likely to experience poor job

attitudes and behavior. Overall, in both Studies 1 and 2, we found support for the direct effect of childhood disadvantage on our outcomes and support for an indirect effect through adulthood adversity.

## Theoretical Contributions

Introducing the life course perspective and, specifically, cumulative disadvantage theory to the organizational sciences allows researchers to identify additional relationships impacting the workplace and advance current knowledge. According to Shonkoff et al. (2009), it is important to expand the existing scholarship to include frameworks that emphasize the study of stress and disparities among individuals who come from a variety of backgrounds. These expanded frameworks provide a broader foundation for exploring individual variability as it occurs throughout the life course. Unfortunately, as it pertains to stress, many frameworks used in the organizational sciences fail to account for individual history and the cumulative impact of stress. For example, Lazarus' cognitive–transactional model of stress (Lazarus & Folkman, 1984) emphasizes an appraisal process that occurs as one determines whether each stimulus should be considered a stressor. However, stress is unlikely to occur based on an isolated event. Rather, it is more likely that sequences of events occur and are appraised collectively. Focusing only on isolated events at work neglects the accumulation of factors that likely co-occur and produce future disadvantages and stress not only throughout life but specific to work experiences as well.

In addition, our findings highlight the need for organizational stress research to go beyond consideration of recent or current events. This limited perspective neglects the distant past of the employee, such as their childhood, despite the immense body of existing scholarship that documents not only associations between childhood events and adulthood outcomes but causal mechanisms that ultimately lead to stress, poor mental and physical health, and a variety of additional poor life outcomes (Anda et al., 2004; Duncan et al., 2010; Metzler et al., 2017; Shonkoff et al., 2009). To capture the individual experience of stress more adequately, one must account for the entire life course rather than simply the present situation. Further, while many events can be considered disadvantages, there are several disadvantages that could lead to stress that would not be considered events. For example, environmental factors

such as living in a poor neighborhood could certainly elicit stress and be considered a disadvantage, but not an isolated event. Such contextual factors are important but understudied in organizational stress research (e.g., Jiang et al., 2013). In addition, it may be important to consider not only the impact of childhood adversity on workplace experiences but also the cumulative impact of other experiences such as racial discrimination. Indeed, individuals with a history of adversity are often disproportionately poor and members of minority groups (Sacks & Murphey, 2018; Wade et al., 2014). Considering childhood adversity in conjunction with discrimination could shed light on the unique workplace experiences common to many members of marginalized groups.

Finally, although the present study is rooted in cumulative disadvantage theory and the biological theories of human development that had a substantial role in developing it, it is not our objective to be overly deterministic regarding the extent to which one's past influences reactions to current work experiences. Some people face major disadvantages but fare rather well by mobilizing resources, choosing wisely, and/or expending extraordinary effort (Thoits, 2006). As several articles have demonstrated, how people interpret their experience of adverse events is critical for either the maintenance of well-being or the optimization of life chances (Reynolds & Turner, 2008; Surtees & Wainwright, 2007). However, in current scholarship, there is a considerable variability in perspectives on the extent to which early adversity determines one's life trajectory. While some work has noted that adversity creates opportunities for resilience (e.g., Bethell et al., 2019), other works emphasized the chronic biological effects that lead to lifelong impairment (e.g., Shonkoff et al., 2009). Our findings indicate that early disadvantage and the proliferation of disadvantage in adulthood limit one's ability to lead an optimal work life. While we recognize the vital role that human agency plays in facing adversity, we also aim to highlight the influence of structural disadvantages that place a heavy burden on many workers. Future theorizing should continue to address these issues accounting for both positive and negative implications.

## Practical Implications

Because CWB and TOI represent substantial costs to organizations, understanding their antecedents is a priority to help guide the development of interventions, support systems, and job design to create healthier workplaces. In general, while one might argue that our findings imply that organizations should not hire individuals with disadvantages in their backgrounds, given the prevalence of adversity, this is likely neither feasible nor ethical. Rather, we contend that organizations should acknowledge the implications of this background to the workplace and provide appropriate forms of support (mental and physical health benefits, stress interventions, financial support, etc.). Evidence-based interventions seeking to decrease stress at work may also be particularly beneficial for this population as a background of childhood adversity is associated with increased sensitivity to stress (Heim & Nemeroff, 2001). In doing so, work can be a resource for these individuals and potentially aid in altering their life trajectories for the better.

Addressing the cycle of ACEs necessitates a shift in the current paradigm to focus on the healing and recovery of adult survivors (i.e., tertiary prevention; Dube, 2018). For example, clinicians may be encouraged to consider the implications of childhood adversity

on work-related attitudes and behaviors to enhance the work-related well-being of their patients. Organizations also have the potential to play a vital role in this process with their ability to intervene and target mediating mechanisms that facilitate a proliferation of adversity such as job insecurity or financial strain. This also makes the case for providing increased psychological care that aids in minimizing the impact of childhood adversity and facilitates posttraumatic growth and resilience (Little et al., 2011). In organizations whose workforces are comprised of many individuals who are likely to have undergone significant childhood adversity, such as low-wage workers or members of other marginalized groups (Rosemberg et al., 2018; Sacks & Murphey, 2018), extra attention should be given to investing in resources to support their occupational health.

Establishing the connection between poor work outcomes and childhood adversity could be an extra push that is needed to increase the number of trauma-informed and trauma-focused programs in the workplace. For a workplace to be trauma informed, leaders must be aware of the long-term impact that traumatic experiences can have on employees (Harris & Fallot, 2001). Training all employees to be supportive and trauma sensitive may also provide a resource that could aid in improving health and well-being as individuals with a difficult history are less likely to have preexisting support structures (Vranceanu et al., 2007).

Researchers have also suggested that trauma-informed/trauma-focused programs be added to traditional employee assistance programs, yet little has been done to fill this need (Rosemberg et al., 2018). Although employment assistance programs are already serving individuals with high levels of childhood adversity, they likely do so without the consideration of their histories or the associated developmental and health implications. As a result, important factors that can impinge on successful employment are being ignored, and the programs are subsequently unable to maximize their efficacy. However, it is important that these programs be implemented in a way that minimizes barriers to utilizing them. Those who have experienced the most adversity also may be the least likely to take advantage of these programs. Thus, program designs should be carefully considered ensuring flexibility and adaptability to individual needs in order to minimize this potential issue.

At the societal level, thriving economies require thriving populations. Childhood adversity is an established indicator of population health (Shonkoff, 2016). Social policy changes and interdisciplinary collaboration are imperative. Encouraging federal policies that support working families and that ensure fair wages may help to mitigate some of the negative consequences of adversity. Prioritizing strong social safety nets has also demonstrated efficacy in reducing economic stress (Debus et al., 2012) and may help to buffer the stress proliferation process. Organizational intervention can also extend beyond impacting current employees and incorporate the community holistically. As organizations come to realize the gravity of childhood adversity and its impact on the population, they may be encouraged to engage in outreach efforts to reduce experiences of childhood adversity in local communities and to encourage recovery within their own organizations. These programs are not only beneficial for improving population health but also provide an opportunity for talent to flourish, bringing benefit back to the organization. As organizations play an important role in the future of the economy, investing in these outreach programs could provide benefits for years to come.

## Limitations and Future Directions

While the present study provided strong support for the relationship between a history of adversity and organizational attitudes and behaviors, there are a variety of limitations worth noting. First, we did not evaluate childhood adversity when the participants were children. As a result, loss spirals and cumulative disadvantages were inferred rather than directly observed as would be preferable (Halbesleben et al., 2014). However, assuming that the measures are valid and without recollection error, it is only theoretically plausible for the causal effect to have one direction: Childhood adversity must lead to adult outcomes; adult outcomes cannot influence childhood adversity.

In addition, our study used self-report measures that could have potential issues with faking, social desirability, or common method variance (Paulhus, 2017; P. M. Podsakoff et al., 2003). Despite this, for psychological constructs, self-report is often the most appropriate and feasible option, and the common method variance is often not very problematic (P. E. Spector, 2006). Another limitation specific to Study 1 could be the use of MTurk to collect data. Although it has been found that the participants on MTurk are generally representative of the U.S. population (Michel et al., 2018), the results may not generalize to other populations of workers. However, the addition of Study 2 addresses this potential limitation in part by examining a nationally representative sample of workers who vary more widely in age, education, and socioeconomic status.

Furthermore, it is also important to note that the ACE variables used in both Studies 1 and 2 likely included false negatives (i.e., individuals who experienced adversity before age 18 but failed to report it). These false negatives could be attributed to inaccurate recall, reevaluations of the past based on present views, or memory repression. Moreover, it is likely that there are other childhood experiences not examined in this study that could impact workplace outcomes, such as racial discrimination. Such possibilities may lead our findings to be underestimates of the effects of childhood adversity. Future research should expand on the childhood adversities that are studied in relation to work outcomes. Beyond ACEs, it would also be interesting for future work to examine positive childhood experiences. In the present study, we primarily focus on studying disadvantages, not advantages, and one could argue that they may or may not have symmetrical effects. Prior research (e.g., Baumeister et al., 2001) suggests that disadvantage should have stronger effects than advantage, but to our knowledge, there is no research on this, particularly in the workplace.

It is also important to mention that while most research is conducted using the cumulative risk scoring approach (i.e., adding the number of ACEs experienced), some researchers have proposed alternative scoring methods (Brumley et al., 2019). However, as previously mentioned, there are several theoretical and methodological limitations that accompany these other approaches that made them not ideal for the present study. We also took different approaches in Studies 1 and 2. Study 1 used the sum of binary items (i.e., have you experienced this? [yes or no]) while Study 2 accounted for how often each adversity was experienced. Thus, the measure used in Study 2 is more sensitive to variations in frequency. Overall, the cumulative risk scoring approach was used because our focus was largely on cumulative experiences compounding to create additional disadvantages. Nevertheless, it would be interesting for future work to continue to explore these relationships and any

differences that may emerge that are specific to a particular type of adversity (e.g., sexual abuse). Relatedly, there are also methodological limitations with our adulthood adversity latent variable. Namely, the factor loadings for adult adversity were rather low—especially for education in Study 1 (see [Supplemental Material](#) for detailed information). As such, it would be preferable to use a validated measure of adulthood adversity such as the Stress and Adversity Inventory for Adults (Slavich & Shields, 2018). Further, future work may also consider a formative approach as opposed to the reflective approach we took in the present study.

As it relates to the outcomes examined in the present study, future research could also examine each outcome in more detail. For example, although CWB overall was related to childhood adversity, future research could investigate the types of CWBs that are most likely to occur and if this relationship differs depending on the type of childhood adversity experienced. From a measurement perspective, it may be useful to create more contextualized measures that account for the causes of poor workplace outcomes. For example, the nature of affective commitment may be quite different for low-income workers compared with others. It could also be useful to create measures that are more specific to the occupation to gain additional insight. Accounting for childhood adversity may also explain some of the relationship between work-related stressors and health outcomes. For instance, regarding the relationship between coronary heart disease and job control, research has found that when accounting for ACEs, low job control contributes significantly less to heart disease than previously thought (Hemmingsson & Lundberg, 2006).

Future research should also investigate the relationship between childhood adversity and career attainment. Due to the associated cognitive deficits, there may also be differences in job or task performance that are important to consider. Childhood adversity also disproportionately impacts individuals in racial minority groups and women, limiting upward mobility (Robst, 2008; Sacks & Murphey, 2018). Other factors outside of the workplace may be important to consider as well. For instance, as it relates to childhood specifically, future research could continue to extend the literature on the workplace outcomes of attachment styles (e.g., Jiang et al., 2019). Additionally, extending beyond childhood, future research could also examine environmental factors at home, such as neighborhood violence. This could be an interesting avenue for future exploration as proximity to desirable schools for children may affect workplace outcomes such as employee commitment and retention.

Finally, considering childhood adversity could help explain why some individuals react more negatively to specific events. Existing research has primarily been limited to the study of personality variables with little consideration of experiential differences. However, researchers such as Shirom (2011) have called for an expanded view of individual differences that predispose employees to poor occupational health. Individuals who have gone through significant adversity are more likely to be emotionally reactive and susceptible to the negative consequences of stress including, as our study demonstrates, more negative organizational outcomes. Specific forms of childhood adversity may also disproportionately affect women. For example, Robst (2008) found that women have higher incidences of childhood sexual abuse and experience a greater financial impact from the sexual abuse. Further, other historically vulnerable populations, such as low-income or lesbian,



gay, bisexual, and transgender status individuals, are also disproportionately impacted by childhood adversity (Merrick et al., 2018; Schneeberger et al., 2014).

## Conclusion

In conclusion, our study emphasizes the importance of adopting a life course perspective in the occupational sciences. Our work is the first to our knowledge to explicitly address the role of cumulative adversity in organizational attitudes and behaviors. Across two studies, we found strong evidence that connects an individual's history of adversity to the workplace. It is our hope that future research and theory will continue to explore these relationships.

## References

- Aguinis, H., Villamor, I., & Ramani, R. S. (2021). MTurk research: Review and recommendations. *Journal of Management*, 47(4), 823–837. <https://doi.org/10.1177/0149206320969787>
- Ainsworth, M. D. (1989). Attachments beyond infancy. *American Psychologist*, 44(4), 709–716. <https://doi.org/10.1037/0003-066X.44.4.709>
- Allen, T. D., Regina, J., Wiernik, B. M., & Waiwood, A. M. (2023). Toward a better understanding of the causal effects of role demands on work–family conflict: A genetic modeling approach. *Journal of Applied Psychology*, 108(3), 520–539. <https://doi.org/10.1037/apl0001032>
- Anda, R. F., Fleisher, V. I., Felitti, V. J., Edwards, V. J., Whitfield, C. L., Dube, S. R., & Williamson, D. F. (2004). Childhood abuse, household dysfunction, and indicators of impaired adult worker performance. *The Permanente Journal*, 8(1), 30–38. <https://doi.org/10.7812/TPP/03-089>
- Appleyard, K., Egeland, B., van Dulmen, M. H. M., & Alan Sroufe, L. (2005). When more is not better: The role of cumulative risk in child behavior outcomes. *Journal of Child Psychology and Psychiatry*, 46(3), 235–245. <https://doi.org/10.1111/j.1469-7610.2004.00351.x>
- Appleyard, K., Yang, C., & Runyan, D. K. (2010). Delineating the maladaptive pathways of child maltreatment: A mediated moderation analysis of the roles of self-perception and social support. *Development and Psychopathology*, 22(2), 337–352. <https://doi.org/10.1017/S095457941000009X>
- Arens, A. M., Gaher, R. M., & Simons, J. S. (2012). Child maltreatment and deliberate self-harm among college students: Testing mediation and moderation models for impulsivity. *American Journal of Orthopsychiatry*, 82(3), 328–337. <https://doi.org/10.1111/j.1939-0025.2012.01165.x>
- Barling, J., Dupre, K. E., & Hepburn, C. G. (1998). Effects of parents' job insecurity on children's work beliefs and attitudes. *Journal of Applied Psychology*, 83(1), 112–118. <https://doi.org/10.1037/0021-9010.83.1.112>
- Barling, J., & Weatherhead, J. G. (2016). Persistent exposure to poverty during childhood limits later leader emergence. *Journal of Applied Psychology*, 101(9), 1305–1318. <https://doi.org/10.1037/apl0000129>
- Barling, J., Zacharatos, A., & Hepburn, C. G. (1999). Parents' job insecurity affects children's academic performance through cognitive difficulties. *Journal of Applied Psychology*, 84(3), 437–444. <https://doi.org/10.1037/0021-9010.84.3.437>
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, 7(2), 147–178. <https://doi.org/10.1177/0265407590072001>
- Bask, M., & Bask, M. (2015). Cumulative (dis)advantage and the Matthew effect in life-course analysis. *PLOS ONE*, 10(11), Article e0142447. <https://doi.org/10.1371/journal.pone.0142447>
- Bauman, L. J., Silver, E. J., & Stein, R. E. (2006). Cumulative social disadvantage and child health. *Pediatrics*, 117(4), 1321–1328. <https://doi.org/10.1542/peds.2005-1647>
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, 5(4), 323–370. <https://doi.org/10.1037/1089-2680.5.4.323>
- Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods*, 8(3), 274–289. <https://doi.org/10.1177/1094428105278021>
- Bengtson, V. L., & Allen, K. R. (1993). The life course perspective applied to families over time. In P. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach* (pp. 469–504). Springer. [https://doi.org/10.1007/978-0-387-85764-0\\_19](https://doi.org/10.1007/978-0-387-85764-0_19)
- Bernstein, D., & Fink, L. (1998). *Childhood trauma questionnaire: A retrospective self-report*. The Psychological Corporation.
- Bethell, C., Jones, J., Gombojav, N., Linkenbach, J., & Sege, R. (2019). Positive childhood experiences and adult mental and relational health in a statewide sample: Associations across adverse childhood experiences levels. *JAMA Pediatrics*, 173(11), Article e193007. <https://doi.org/10.1001/jamapediatrics.2019.3007>
- Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry*, 52(4), 664–678. <https://doi.org/10.1111/j.1939-0025.1982.tb01456.x>
- Braveman, P., Heck, K., Egerter, S., Rinki, C., Marchi, K., & Curtis, M. (2018). Economic hardship in childhood: A neglected issue in ACE studies? *Maternal and Child Health Journal*, 22(3), 308–317. <https://doi.org/10.1007/s10995-017-2368-y>
- Breslin, F. C., Tompa, E., Zhao, R., Amick, B. C., III, Pole, J. D., Smith, P., & Hogg-Johnson, S. (2007). Work disability absence among young workers with respect to earnings losses in the following year. *Scandinavian Journal of Work, Environment & Health*, 33(3), 192–197. <https://doi.org/10.5271/sjweh.1126>
- Brett, J. F., Cron, W. L., & Slocum, J. W., Jr. (1995). Economic dependency on work: A moderator of the relationship between organizational commitment and performance. *Academy of Management Journal*, 38(1), 261–271. <https://doi.org/10.2307/256735>
- Brim, O. G., Ryff, C. D., & Kessler, R. C. (2004). The MIDUS national survey: An overview. In O. G. Brim, C. D. Ryff, & R. C. Kessler (Eds.), *How healthy are we? A national study of well-being at midlife* (pp. 1–34). The University of Chicago Press.
- Brockie, T. N., Dana-Sacco, G., Wallen, G. R., Wilcox, H. C., & Campbell, J. C. (2015). The relationship of adverse childhood experiences to PTSD, depression, poly-drug use and suicide attempt in reservation-based Native American adolescents and young adults. *American Journal of Community Psychology*, 55(3–4), 411–421. <https://doi.org/10.1007/s10464-015-9721-3>
- Brumley, L. D., Brumley, B. P., & Jaffee, S. R. (2019). Comparing cumulative index and factor analytic approaches to measuring maltreatment in the National Longitudinal Study of Adolescent to Adult Health. *Child Abuse & Neglect*, 87, 65–76. <https://doi.org/10.1016/j.chiabu.2018.08.014>
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6(1), 3–5. <https://doi.org/10.1177/1745691610393980>
- Bush, N. R., Lane, R. D., & McLaughlin, K. A. (2016). Mechanisms underlying the association between early-life adversity and physical health: Charting a course for the future. *Psychosomatic Medicine*, 78(9), 1114–1119. <https://doi.org/10.1097/PSY.0000000000000421>
- Carpenter, N. C., & Berry, C. M. (2017). Are counterproductive work behavior and withdrawal empirically distinct? A meta-analytic investigation. *Journal of Management*, 43(3), 834–863. <https://doi.org/10.1177/0149206314544743>
- Caspi, A., McClay, J., Moffitt, T. E., Mill, J., Martin, J., Craig, I. W., Taylor, A., & Poulton, R. (2002). Role of genotype in the cycle of violence in

- maltreated children. *Science*, 297(5582), 851–854. <https://doi.org/10.1126/science.1072290>
- Centers for Disease Control and Prevention. (2022). *Health and economic costs of chronic diseases*. <https://www.cdc.gov/chronicdisease/about/costs/index.htm>
- Cohen, A., & Golan, R. (2007). Predicting absenteeism and turnover intentions by past absenteeism and work attitudes. *The Career Development International*, 12(5), 416–432. <https://doi.org/10.1108/13620430710773745>
- Collins, J. J., Baase, C. M., Sharda, C. E., Ozminowski, R. J., Nicholson, S., Billotti, G. M., Turpin, R. S., Olson, M., & Berger, M. L. (2005). The assessment of chronic health conditions on work performance, absence, and total economic impact for employers. *Journal of Occupational and Environmental Medicine*, 47(6), 547–557. <https://doi.org/10.1097/01.jom.0000166864.58664.29>
- Covey, H. C., Menard, S., & Franzese, R. J. (2013). Effects of adolescent physical abuse, exposure to neighborhood violence, and witnessing parental violence on adult socioeconomic status. *Child Maltreatment*, 18(2), 85–97. <https://doi.org/10.1177/1077559513477914>
- Crouch, E., Probst, J. C., Radcliff, E., Bennett, K. J., & McKinney, S. H. (2019). Prevalence of adverse childhood experiences (ACEs) among US children. *Child Abuse & Neglect*, 92, 209–218. <https://doi.org/10.1016/j.chiabu.2019.04.010>
- Crystal, S., & Shea, D. (1990). Cumulative advantage, cumulative disadvantage, and inequality among elderly people. *The Gerontologist*, 30(4), 437–443. <https://doi.org/10.1093/geront/30.4.437>
- Currie, J., & Widom, C. S. (2010). Long-term consequences of child abuse and neglect on adult economic well-being. *Child Maltreatment*, 15(2), 111–120. <https://doi.org/10.1177/1077559509355316>
- Dahl, G. B., & Lochner, L. (2012). The impact of family income on child achievement: Evidence from the earned income tax credit. *American Economic Review*, 102(5), 1927–1956. <https://www.aeaweb.org/articles?id=10.1257/aer.102.5.1927>
- Dalal, R. S., Lam, H., Weiss, H. M., Welch, E. R., & Hulin, C. L. (2009). A within-person approach to work behavior and performance: Concurrent and lagged citizenship-counterproductivity associations, and dynamic relationships with affect and overall job performance. *Academy of Management Journal*, 52(5), 1051–1066. <https://doi.org/10.5465/amj.2009.44636148>
- Danese, A., & McEwen, B. S. (2012). Adverse childhood experiences, allostatic load, and age-related disease. *Physiology & Behavior*, 106(1), 29–39. <https://doi.org/10.1016/j.physbeh.2011.08.019>
- De Clercq, D., & Belausteguigoitia, I. (2020). When does job stress limit organizational citizenship behavior, or not? Personal and contextual resources as buffers. *Journal of Management & Organization*. Advance online publication. <https://doi.org/10.1017/jmo.2020.7>
- Debus, M. E., Probst, T. M., König, C. J., & Kleinmann, M. (2012). Catch me if I fall! Enacted uncertainty avoidance and the social safety net as country-level moderators in the job insecurity–job attitudes link. *Journal of Applied Psychology*, 97(3), 690–698. <https://doi.org/10.1037/a0027832>
- Dienberg Love, G., Seeman, T. E., Weinstein, M., & Ryff, C. D. (2010). Bioindicators in the MIDUS national study: Protocol, measures, sample, and comparative context. *Journal of Aging and Health*, 22(8), 1059–1080. <https://doi.org/10.1177/0898264310374355>
- Dienes, K. A., Hammen, C., Henry, R. M., Cohen, A. N., & Daley, S. E. (2006). The stress sensitization hypothesis: Understanding the course of bipolar disorder. *Journal of Affective Disorders*, 95(1–3), 43–49. <https://doi.org/10.1016/j.jad.2006.04.009>
- Dube, S. R. (2018). Continuing conversations about adverse childhood experiences (ACEs) screening: A public health perspective. *Child Abuse & Neglect*, 85, 180–184. <https://doi.org/10.1016/j.chiabu.2018.03.007>
- Duncan, G. J., Ziol-Guest, K. M., & Kalil, A. (2010). Early-childhood poverty and adult attainment, behavior, and health. *Child Development*, 81(1), 306–325. <https://doi.org/10.1111/j.1467-8624.2009.01396.x>
- Ege, M. A., Messias, E., Thapa, P. B., & Krain, L. P. (2015). Adverse childhood experiences and geriatric depression: Results from the 2010 BRFSS. *The American Journal of Geriatric Psychiatry*, 23(1), 110–114. <https://doi.org/10.1016/j.jagp.2014.08.014>
- Elder, G. H. (1995). The life course paradigm: Social changes and individual development. In P. Moen, G. H. Elder, & K. Luscher (Eds.), *Examining lives in context* (pp. 101–139). American Psychological Association. <https://doi.org/10.1037/10176-003>
- Elder, G. H., Jr. (1998). The life course as developmental theory. *Child Development*, 69(1), 1–12. <https://doi.org/10.1111/j.1467-8624.1998.tb06128.x>
- Elder, G. H., Johnson, M. K., & Crosnoe, R. (2003). The emergence and development of life course theory. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the life course* (pp. 3–19). Springer.
- Evans, G. W., & Kim, P. (2010). Multiple risk exposure as a potential explanatory mechanism for the socioeconomic status–health gradient. *Annals of the New York Academy of Sciences*, 1186(1), 174–189. <https://doi.org/10.1111/j.1749-6632.2009.05336.x>
- Evans, G. W., & Kim, P. (2012). Childhood poverty and young adults' allostatic load: The mediating role of childhood cumulative risk exposure. *Psychological Science*, 23(9), 979–983. <https://doi.org/10.1177/0956797612441218>
- Falconier, M. K., & Jackson, J. B. (2020). Economic strain and couple relationship functioning: A meta-analysis. *International Journal of Stress Management*, 27(4), 311–325. <https://doi.org/10.1037/str0000157>
- Farah, M. J., Shera, D. M., Savage, J. H., Betancourt, L., Giannetta, J. M., Brodsky, N. L., Malmud, E. K., & Hurt, H. (2006). Childhood poverty: Specific associations with neurocognitive development. *Brain Research*, 1110(1), 166–174. <https://doi.org/10.1016/j.brainres.2006.06.072>
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14(4), 245–258. [https://doi.org/10.1016/S0749-3797\(98\)00017-8](https://doi.org/10.1016/S0749-3797(98)00017-8)
- Finkelhor, D. (2020). Trends in adverse childhood experiences (ACEs) in the United States. *Child Abuse & Neglect*, 108, 104641. <https://doi.org/10.1016/j.chiabu.2020.104641>
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007). Poly-victimization: A neglected component in child victimization. *Child Abuse & Neglect*, 31(1), 7–26. <https://doi.org/10.1016/j.chiabu.2006.06.008>
- Fox, S., Spector, P. E., & Miles, D. (2001). Counterproductive work behavior (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behavior*, 59(3), 291–309. <https://doi.org/10.1006/jvbe.2001.1803>
- French, K. A., Drummond, L., & Storey, R. (2022). Childhood psychological maltreatment and work–family conflict throughout adulthood: A test of self-concept and social mechanisms. *Journal of Occupational Health Psychology*, 27(3), 267–285. <https://doi.org/10.1037/ocp0000329>
- García, P. R. J. M., Restubog, S. L. D., Kiewitz, C., Scott, K. L., & Tang, R. L. (2014). Roots run deep: Investigating psychological mechanisms between history of family aggression and abusive supervision. *Journal of Applied Psychology*, 99(5), 883–897. <https://doi.org/10.1037/a0036463>
- Gonzalez-Mulé, E., & Cockburn, B. S. (2021). This job is (literally) killing me: A moderated-mediated model linking work characteristics to mortality. *Journal of Applied Psychology*, 106(1), 140–151. <https://doi.org/10.1037/apl0000501>
- Graham, B. A. (2021). *Off to a poor start: The role of childhood adversity in employee burnout, turnover, commitment, and counterproductive behavior* [Master's Thesis]. Department of Psychology, Clemson University. <https://www.proquest.com/openview/fc664037999557b644f5c950851a1617/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Graham, B. A., Sears, L., Cheung, J., Chodavarapu, S., & Sinclair, R. R. (2024b). Money on My Mind: How Does Hardiness Relate to Financial Stress? *Journal of Financial Counseling & Planning*, 35(1). <https://doi.org/10.1891/JFCP-2023-0050>

- Graham, B. A., & Sinclair, R. R. (2023). *A life course perspective on adversity and organizational attitudes and behaviors* [Poster presentation]. Annual Society for Industrial and Organizational Psychology Conference, Boston, MA, United States.
- Graham, B. A., Sinclair, R. R., & Munc, A. (2024a). The relationship between dispositional affectivity, perceived income adequacy, and financial strain: An analysis of financial stress perceptions. *Psychological Reports*. Advance online publication. <https://doi.org/10.1177/00332941241239267>
- Grogan-Kaylor, A., & Otis, M. D. (2003). The effect of childhood maltreatment on adult criminality: A tobit regression analysis. *Child Maltreatment*, 8(2), 129–137. <https://doi.org/10.1177/1077559502250810>
- Guèvremont, A., & Kohen, D. (2013). Do factors other than SES explain differences in child outcomes between children of teenage and older mothers for off-reserve first nations children? *The International Indigenous Policy Journal*, 4(3). <https://doi.org/10.18584/iipj.2013.4.3.6>
- Hafidz, S. W., Hoesni, S. M., & Fatimah, O. (2012). The relationship between organizational citizenship behavior and counterproductive work behavior. *Asian Social Science*, 8(9), 32–37. <https://doi.org/10.5539/ass.v8n9p32>
- Hair, N. L., Hanson, J. L., Wolfe, B. L., & Pollak, S. D. (2015). Association of child poverty, brain development, and academic achievement. *JAMA Pediatrics*, 169(9), 822–829. <https://doi.org/10.1001/jamapediatrics.2015.1475>
- Halbesleben, J. R., Neveu, J. P., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the “COR” understanding the role of resources in conservation of resources theory. *Journal of Management*, 40(5), 1334–1364. <https://doi.org/10.1177/0149206314527130>
- Hammen, C., Henry, R., & Daley, S. E. (2000). Depression and sensitization to stressors among young women as a function of childhood adversity. *Journal of Consulting and Clinical Psychology*, 68(5), 782–787. <https://doi.org/10.1037/0022-006X.68.5.782>
- Harper, C., Marcus, R., & Moore, K. (2003). Enduring poverty and the conditions of childhood: Lifecourse and intergenerational poverty transmissions. *World Development*, 31(3), 535–554. [https://doi.org/10.1016/S0305-750X\(03\)00010-X](https://doi.org/10.1016/S0305-750X(03)00010-X)
- Harris, M., & Fallot, R. D. (Eds.). (2001). *Using trauma theory to design service systems*. Jossey-Bass/Wiley.
- Heath, N. M., Hall, B. J., Russ, E. U., Canetti, D., & Hobfoll, S. E. (2012). Reciprocal relationships between resource loss and psychological distress following exposure to political violence: An empirical investigation of COR theory’s loss spirals. *Anxiety, Stress & Coping*, 25(6), 679–695. <https://doi.org/10.1080/10615806.2011.628988>
- Heim, C., & Nemeroff, C. B. (2001). The role of childhood trauma in the neurobiology of mood and anxiety disorders: Preclinical and clinical studies. *Biological Psychiatry*, 49(12), 1023–1039. [https://doi.org/10.1016/S0006-3223\(01\)01157-X](https://doi.org/10.1016/S0006-3223(01)01157-X)
- Hemmingsson, T., & Lundberg, I. (2006). Is the association between low job control and coronary heart disease confounded by risk factors measured in childhood and adolescence among Swedish males 40–53 years of age? *International Journal of Epidemiology*, 35(3), 616–622. <https://doi.org/10.1093/ije/dyi308>
- Hobfoll, S. E. (1989). Conservation of resources. A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Hom, P. W., Caranikas-Walker, F., Prussia, G. E., & Griffeth, R. W. (1992). A meta-analytical structural equations analysis of a model of employee turnover. *Journal of Applied Psychology*, 77(6), 890–909. <https://doi.org/10.1037/0021-9010.77.6.890>
- Hom, P. W., Griffeth, R. W., & Sellaro, C. L. (1984). The validity of Mobley’s (1977) model of employee turnover. *Organizational Behavior and Human Performance*, 34(2), 141–174. [https://doi.org/10.1016/0030-5073\(84\)90001-1](https://doi.org/10.1016/0030-5073(84)90001-1)
- Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., Jones, L., & Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. *The Lancet Public Health*, 2(8), e356–e366. [https://doi.org/10.1016/S2468-2667\(17\)30118-4](https://doi.org/10.1016/S2468-2667(17)30118-4)
- Jiang, L. (2017). Perception of and reactions to job insecurity: The buffering effect of secure attachment. *Work & Stress*, 31(3), 256–275. <https://doi.org/10.1080/02678373.2017.1305005>
- Jiang, L., Bohle, S. L., & Roche, M. (2019). Contingent reward transactional leaders as “good parents”: Examining the mediation role of attachment insecurity and the moderation role of meaningful work. *Journal of Business and Psychology*, 34(4), 519–537. <https://doi.org/10.1007/s10869-018-9553-x>
- Jiang, L., Probst, T., & Sinclair, R. R. (2013). Perceiving and responding to job insecurity: The importance of multilevel contexts. In A. G. Antoniou, C. L. Cooper, A. G. Antoniou, & C. L. Cooper (Eds.), *The psychology of the recession on the workplace* (pp. 176–195). Edward Elgar Publishing. <https://doi.org/10.4337/9780857933843.00020>
- Jung, H. S., Yoon, H. H., & Kim, Y. J. (2012). Effects of culinary employees’ role stress on burnout and turnover intention in hotel industry: Moderating effects on employees’ tenure. *Service Industries Journal*, 32(13), 2145–2165. <https://doi.org/10.1080/02642069.2011.574277>
- Kalmakis, K. A., & Chandler, G. E. (2015). Health consequences of adverse childhood experiences: A systematic review. *Journal of the American Association of Nurse Practitioners*, 27(8), 457–465. <https://doi.org/10.1002/2327-6924.12215>
- Kessler, R. C., McLaughlin, K. A., Green, J. G., Gruber, M. J., Sampson, N. A., Zaslavsky, A. M., Aguilar-Gaxiola, S., Alhamzawi, A. O., Alonso, J., Angermeyer, M., Benjet, C., Bromet, E., Chatterji, S., de Girolamo, G., Demyttenaere, K., Fayyad, J., Florescu, S., Gal, G., Gureje, O., ... Williams, D. R. (2010). Childhood adversities and adult psychopathology in the WHO World Mental Health Surveys. *The British Journal of Psychiatry*, 197(5), 378–385. <https://www.idraac.org/home/research-and-publications/pub?id=450>
- Kiser, L. J., & Black, M. M. (2005). Family processes in the midst of urban poverty: What does the trauma literature tell us? *Aggression and Violent Behavior*, 10(6), 715–750. <https://doi.org/10.1016/j.avb.2005.02.003>
- Klika, J. B., Rosenzweig, J., & Merrick, M. (2020). Economic burden of known cases of child maltreatment from 2018 in each state. *Child & Adolescent Social Work Journal*, 37(3), 227–234. <https://doi.org/10.1007/s10560-020-00665-5>
- Laditka, S. B., & Laditka, J. N. (2019). An enduring health risk of childhood adversity: Earlier, more severe, and longer lasting work disability in adult life. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 74(1), 136–147. <https://doi.org/10.1093/geronb/gby018>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing.
- Leong, F., Eggerth, D. E., & Flynn, M. A. (2014). A life course perspective on immigrant occupational health and well being. In S. Leka & R. R. Sinclair (Eds.), *Contemporary occupational health psychology* (pp. 97–113). Wiley. <https://doi.org/10.1002/9781118713860.ch7>
- Little, S. G., Akin-Little, A., & Somerville, M. P. (2011). Response to trauma in children: An examination of effective intervention and post-traumatic growth. *School Psychology International*, 32(5), 448–463. <https://doi.org/10.1177/0143034311402916>
- Liu, Y., Croft, J. B., Chapman, D. P., Perry, G. S., Greenlund, K. J., Zhao, G., & Edwards, V. J. (2013). Relationship between adverse childhood experiences and unemployment among adults from five U.S. states. *Social Psychiatry and Psychiatric Epidemiology*, 48(3), 357–369. <https://doi.org/10.1007/s00127-012-0554-1>
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60(2), 175–215. <https://doi.org/10.1111/j.1467-6494.1992.tb00970.x>
- Merrick, M. T., Ford, D. C., Ports, K. A., & Guinn, A. S. (2018). Prevalence of adverse childhood experiences from the 2011–2014 behavioral risk



- factor surveillance system in 23 states. *JAMA Pediatrics*, 172(11), 1038–1044. <https://doi.org/10.1001/jamapediatrics.2018.2537>
- Metzler, M., Merrick, M. T., Klevens, J., Ports, K. A., & Ford, D. C. (2017). Adverse childhood experiences and life opportunities: Shifting the narrative. *Children and Youth Services Review*, 72, 141–149. <https://doi.org/10.1016/j.childyouth.2016.10.021>
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61–89. [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)
- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538–551. <https://doi.org/10.1037/0021-9010.78.4.538>
- Michel, J. S., O'Neill, S. K., Hartman, P., & Lorys, A. (2018). Amazon's Mechanical Turk as a viable source for organizational and occupational health research. *Occupational Health Science*, 2(1), 83–98. <https://doi.org/10.1007/s41542-017-0009-x>
- Mobley, W. (1982). *Employee turnover: Causes, consequences and control*. Addison-Wesley.
- Montez, J. K., & Hayward, M. D. (2014). Cumulative childhood adversity, educational attainment, and active life expectancy among US adults. *Demography*, 51(2), 413–435. <https://doi.org/10.1007/s13524-013-0261-x>
- Ng, T. W. H., & Feldman, D. C. (2010). Organizational tenure and job performance. *Journal of Management*, 36(5), 1220–1250. <https://doi.org/10.1177/0149206309359809>
- Nurius, P. S., Green, S., Logan-Greene, P., & Borja, S. (2015). Life course pathways of adverse childhood experiences toward adult psychological well-being: A stress process analysis. *Child Abuse & Neglect*, 45, 143–153. <https://doi.org/10.1016/j.chiabu.2015.03.008>
- Nurius, P. S., Uehara, E., & Zatzick, D. F. (2013). Intersection of stress, social disadvantage, and life course processes: Reframing trauma and mental health. *American Journal of Psychiatric Rehabilitation*, 16(2), 91–114. <https://doi.org/10.1080/15487768.2013.789688>
- O'Rand, A. M., & Hamil-Luker, J. (2005). Processes of cumulative adversity: Childhood disadvantage and increased risk of heart attack across the life course. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 60(Special\_Issue\_2), S117–S124. [https://doi.org/10.1093/geronb/60.Special\\_Issue\\_2.S117](https://doi.org/10.1093/geronb/60.Special_Issue_2.S117)
- Odle-Dusseau, H. N., Matthews, R. A., & Wayne, J. H. (2018). Employees' financial insecurity and health: The underlying role of stress and work-family conflict appraisals. *Journal of Occupational and Organizational Psychology*, 91(3), 546–568. <https://doi.org/10.1111/joop.12216>
- Oldham, G. R., Kulik, C. T., Stepina, L. P., & Ambrose, M. L. (1986). Relations between situational factors and the comparative referents used by employees. *Academy of Management Journal*, 29(3), 599–608. <https://doi.org/10.2307/256226>
- Paulhus, D. L. (2017). Socially desirable responding on self-reports. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of personality and individual differences* (pp. 1–5). Springer International Publishing. [https://doi.org/10.1007/978-3-319-28099-8\\_1349-1](https://doi.org/10.1007/978-3-319-28099-8_1349-1)
- Pearlin, L. I., Schieman, S., Fazio, E. M., & Meersman, S. C. (2005). Stress, health, and the life course: Some conceptual perspectives. *Journal of Health and Social Behavior*, 46(2), 205–219. <https://doi.org/10.1177/002214650504600206>
- Pereira, M. C., & Coelho, F. (2013). Untangling the relationship between income and subjective well-being: The role of perceived income adequacy and borrowing constraints. *Journal of Happiness Studies*, 14(3), 985–1005. <https://doi.org/10.1007/s10902-012-9365-z>
- Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, 92(2), 438–454. <https://doi.org/10.1037/0021-9010.92.2.438>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Price, R. H., Choi, J. N., & Vinokur, A. D. (2002). Links in the chain of adversity following job loss: How financial strain and loss of personal control lead to depression, impaired functioning, and poor health. *Journal of Occupational Health Psychology*, 7(4), 302–312. <https://doi.org/10.1037/1076-8998.7.4.302>
- R Core Team. (2022). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. <https://www.R-project.org/>
- Reynolds, J. R., & Turner, R. J. (2008). Major life events: Their personal meaning, resolution, and mental health significance. *Journal of Health and Social Behavior*, 49(2), 223–237. <https://doi.org/10.1177/002214650804900208>
- Roberts, B. W., Harms, P. D., Caspi, A., & Moffitt, T. E. (2007). Predicting the counterproductive employee in a child-to-adult prospective study. *Journal of Applied Psychology*, 92(5), 1427–1436. <https://doi.org/10.1037/0021-9010.92.5.1427>
- Robst, J. (2008). Childhood sexual abuse and the gender wage gap. *Economics Letters*, 99(3), 549–551. <https://doi.org/10.1016/j.econlet.2007.09.044>
- Rosenberg, M. A., Gultekin, L., & Pardee, M. (2018). High-ACE low wage workers: Occupational health nursing research and praxis through a trauma-informed lens. *Workplace Health & Safety*, 66(5), 233–240. <https://doi.org/10.1177/2165079917736070>
- Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, 48(2), 1–36. <https://doi.org/10.18637/jss.v048.i02>
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081. <https://doi.org/10.1037/0022-3514.57.6.1069>
- Sacks, V., & Murphey, D. (2018). *The prevalence of adverse childhood experiences, nationally, by state, and by race/ethnicity* (Research Brief No. 2018-03). Child Trends. <https://www.childtrends.org/publications/prevalence-adverse-childhood-experiences-nationally-state-race-ethnicity>
- Sansone, R. A., Leung, J. S., & Wiederman, M. W. (2012). Five forms of childhood trauma: Relationships with employment in adulthood. *Child Abuse & Neglect*, 36(9), 676–679. <https://doi.org/10.1016/j.chiabu.2012.07.007>
- Schafer, M. H., Ferraro, K. F., & Mustillo, S. A. (2011). Children of misfortune: Early adversity and cumulative inequality in perceived life trajectories. *American Journal of Sociology*, 116(4), 1053–1091. <https://doi.org/10.1086/655760>
- Schneeberger, A. R., Dietl, M. F., Muenzenmaier, K. H., Huber, C. G., & Lang, U. E. (2014). Stressful childhood experiences and health outcomes in sexual minority populations: A systematic review. *Social Psychiatry and Psychiatric Epidemiology*, 49(9), 1427–1445. <https://doi.org/10.1007/s00127-014-0854-8>
- Seabrook, J. A., & Avison, W. R. (2012). Socioeconomic status and cumulative disadvantage processes across the life course: Implications for health outcomes. *Canadian Review of Sociology*, 49(1), 50–68. <https://doi.org/10.1111/j.1755-618X.2011.01280.x>
- Sears, L. (2008). *Work-related outcomes of financial stress: Relating perceived income adequacy and financial strain to job performance and well-being* [Unpublished Master's Thesis]. Department of Psychology, Portland State University.
- Shirom, A. (2011). Job-related burnout: A review of major research foci and challenges. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 223–241). American Psychological Association.



- Shonkoff, J. P. (2016). Capitalizing on advances in science to reduce the health consequences of early childhood adversity. *JAMA Pediatrics*, *170*(10), 1003–1007. <https://doi.org/10.1001/jamapediatrics.2016.1559>
- Shonkoff, J. P., Boyce, W. T., & McEwen, B. S. (2009). Neuroscience, molecular biology, and the childhood roots of health disparities: Building a new framework for health promotion and disease prevention. *Journal of the American Medical Association*, *301*(21), 2252–2259. <https://doi.org/10.1001/jama.2009.754>
- Shonkoff, J. P., Garner, A. S., Siegel, B. S., Dobbins, M. I., Earls, M. F., Garner, A. S., McGuinn, L., Pascoe, J., Wood, D. L., the Committee on Psychosocial Aspects of Child and Family Health, the Committee on Early Childhood, Adoption, and Dependent Care, & the Section on Developmental and Behavioral Pediatrics. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, *129*(1), e232–e246. <https://doi.org/10.1542/peds.2011-2663>
- Shuey, K. M., & Willson, A. E. (2019). Trajectories of work disability and economic insecurity approaching retirement. *The Journals of Gerontology: Series B*, *74*(7), 1200–1210. <https://doi.org/10.1093/geronb/gbx096>
- Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, *1*(1), 27–41. <https://doi.org/10.1037/1076-8998.1.1.27>
- Sim, Y., & Lee, E. (2018). Perceived underqualification and job attitudes: The role of transformational leadership. *Leadership and Organization Development Journal*, *39*(8), 962–974. <https://doi.org/10.1108/LODJ-03-2018-0127>
- Sinclair, R. R., & Cheung, J. H. (2016). Money matters: Recommendations for financial stress research in occupational health psychology. *Stress and Health*, *32*(3), 181–193. <https://doi.org/10.1002/smi.2688>
- Sinclair, R. R., Graham, B. A., & Probst, T. M. (2024). Economic stress and occupational health. *Annual Review of Organizational Psychology and Organizational Behavior*, *11*(1), 423–451. <https://doi.org/10.1146/annurev-orgpsych-091922-020639>
- Sinclair, R. R., Mohr, C. P., Davidson, S., Sears, L. E., Deese, M. N., Wright, R. R., Waitsman, M., Jacobs, L., & Cadiz, D. (2009). *The Oregon nurse retention project: Final report to the northwest health foundation* [Unpublished Technical Report].
- Slavich, G. M., & Shields, G. S. (2018). Assessing lifetime stress exposure using the stress and adversity inventory for adults (Adult STRAIN): An overview and initial validation. *Psychosomatic Medicine*, *80*(1), 17–27. <https://doi.org/10.1097/PSY.0000000000000534>
- Slopen, N., Meyer, C., & Williams, D. R. (2018). Cumulative stress and health. In C. D. Ryff & R. F. Krueger (Eds.), *The Oxford handbook of integrative health science* (pp. 75–86). Oxford University Press.
- Spector, P., Fox, S., & Domagalski, T. (2006). Emotions, violence, and counterproductive work behavior. In E. K. Kelloway, J. Barling, & J. J. Hurrell Jr. (Eds.), *Handbook of workplace violence* (pp. 29–46). Sage Publications. <https://doi.org/10.4135/9781412976947.n3>
- Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods*, *9*(2), 221–232. <https://doi.org/10.1177/1094428105284955>
- Stewart, W., & Barling, J. (1996). Fathers' work experiences effect children's behaviors via job-related affect and parenting behaviors. *Journal of Organizational Behavior*, *17*(3), 221–232. [https://doi.org/10.1002/\(SICI\)1099-1379\(199605\)17:3<221::AID-JOB741>3.0.CO;2-G](https://doi.org/10.1002/(SICI)1099-1379(199605)17:3<221::AID-JOB741>3.0.CO;2-G)
- Suglia, S. F., Staudenmayer, J., Cohen, S., Enlow, M. B., Rich-Edwards, J. W., & Wright, R. J. (2010). Cumulative stress and cortisol disruption among Black and Hispanic pregnant women in an urban cohort. *Psychological Trauma: Theory, Research, Practice, and Policy*, *2*(4), 326–344. <https://doi.org/10.1037/a0018953>
- Surtees, P. G., & Wainwright, N. W. (2007). The shackles of misfortune: Social adversity assessment and representation in a chronic-disease epidemiological setting. *Social Science & Medicine*, *64*(1), 95–111. <https://doi.org/10.1016/j.socscimed.2006.08.013>
- Thoits, P. A. (2006). Personal agency in the stress process. *Journal of Health and Social Behavior*, *47*(4), 309–323. <https://doi.org/10.1177/002214650604700401>
- Thoits, P. A. (2010). Stress and health: Major findings and policy implications. *Journal of Health and Social Behavior*, *51*(1\_Suppl), S41–S53. <https://doi.org/10.1177/0022146510383499>
- Topitzes, J., Pate, D. J., Berman, N. D., & Medina-Kirchner, C. (2016). Adverse childhood experiences, health, and employment: A study of men seeking job services. *Child Abuse & Neglect*, *61*, 23–34. <https://doi.org/10.1016/j.chiabu.2016.09.012>
- Turner, H. A., & Butler, M. J. (2003). Direct and indirect effects of childhood adversity on depressive symptoms in young adults. *Journal of Youth and Adolescence*, *32*(2), 89–103. <https://doi.org/10.1023/A:1021853600645>
- Turner, J., Wheaton, B., & Lloyd, D. (1995). The epidemiology of social stress. *American Sociological Review*, *60*(1), 104–125. <https://doi.org/10.2307/2096348>
- Umberson, D., Williams, K., Thomas, P. A., Liu, H., & Thomeer, M. B. (2014). Race, gender, and chains of disadvantage: Childhood adversity, social relationships, and health. *Journal of Health and Social Behavior*, *55*(1), 20–38. <https://doi.org/10.1177/0022146514521426>
- Vergunst, F., Tremblay, R. E., Nagin, D., Algan, Y., Beasley, E., Park, J., Galera, C., Vitaro, F., & Côté, S. M. (2019). Association between childhood behaviors and adult employment earnings in Canada. *JAMA Psychiatry*, *76*(10), 1044–1051. <https://doi.org/10.1001/jamapsychiatry.2019.1326>
- Vogel, R. M., & Bolino, M. C. (2020). Recurring nightmares and silver linings: Understanding how past abusive supervision may lead to posttraumatic stress and posttraumatic growth. *The Academy of Management Review*, *45*(3), 549–569. <https://doi.org/10.5465/amr.2017.0350>
- Voydanoff, P. (1990). Economic distress and family relations: A review of the eighties. *Journal of Marriage and Family*, *52*(4), 1099–1115. <https://doi.org/10.2307/353321>
- Vranceanu, A. M., Hobfoll, S. E., & Johnson, R. J. (2007). Child multi-type maltreatment and associated depression and PTSD symptoms: The role of social support and stress. *Child Abuse & Neglect*, *31*(1), 71–84. <https://doi.org/10.1016/j.chiabu.2006.04.010>
- Wade, R., Jr., Shea, J. A., Rubin, D., & Wood, J. (2014). Adverse childhood experiences of low-income urban youth. *Pediatrics*, *134*(1), e13–e20. <https://doi.org/10.1542/peds.2013-2475>
- Walsemann, K. M., Geronimus, A. T., & Gee, G. C. (2008). Accumulating disadvantage over the life course: Evidence from a longitudinal study investigating the relationship between educational advantage in youth and health in middle age. *Research on Aging*, *30*(2), 169–199. <https://doi.org/10.1177/0164027507311149>
- Weaver, K., Crayne, M. P., & Jones, K. S. (2016). IO at a crossroad: The value of an intersectional research approach. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, *9*(1), 197–206. <https://doi.org/10.1017/iop.2015.136>
- Wethington, E. (2005). An overview of the life course perspective: Implications for health and nutrition. *Journal of Nutrition Education and Behavior*, *37*(3), 115–120. [https://doi.org/10.1016/S1499-4046\(06\)60265-0](https://doi.org/10.1016/S1499-4046(06)60265-0)
- Wheaton, B. (1999). The nature of stressors. In A. V. Horwitz & T. L. Scheid (Eds.), *A handbook for the study of mental health: Social contexts, theories, and systems* (pp. 176–197). Cambridge University Press.
- Widom, C. S. (1989). The cycle of violence. *Science*, *244*(4901), 160–166. <https://doi.org/10.1126/science.2704995>
- Woods, S. A., & Hampson, S. E. (2010). Predicting adult occupational environments from gender and childhood personality traits. *Journal of Applied Psychology*, *95*(6), 1045–1057. <https://doi.org/10.1037/a0020600>
- Xiong, R., & Wen, Y. (2020). Employees' turnover intention and behavioral outcomes: The role of work engagement. *Social Behavior and Personality: An International Journal*, *48*(1), 1–7. <https://doi.org/10.2224/sbp.8609>

Zanotti, D. C., Kaier, E., Vanasse, R., Davis, J. L., Strunk, K. C., & Cromer, L. D. (2018). An examination of the test–retest reliability of the ACE-SQ in a sample of college athletes. *Psychological Trauma: Theory, Research, Practice, and Policy*, 10(5), 559–562. <https://doi.org/10.1037/tra0000299>

Zhan, Y., Wang, M., & Yao, X. (2013). Domain specific effects of commitment on bridge employment decisions: The moderating role of

economic stress. *European Journal of Work and Organizational Psychology*, 22(3), 362–375. <https://doi.org/10.1080/1359432X.2012.762763>

Zielinski, D. S. (2009). Child maltreatment and adult socioeconomic well-being. *Child Abuse & Neglect*, 33(10), 666–678. <https://doi.org/10.1016/j.chiabu.2009.09.001>

## Appendix

### Data Transparency

#### Study 1 Data Transparency Statement

The data reported in Study 1 of this article were collected as part of a larger data collection consisting of three time points. For transparency, the authors wish to disclose that portions of the data have been used in other published and in progress articles. The current article focuses on childhood and adulthood adversity and work-related outcomes. From Wave 1, this article utilizes a measure of adverse childhood experiences and childhood economic stress. From Wave 2, this article evaluates adulthood disadvantage, which encompasses financial strain, underemployment, educational attainment, health status, and psychological well-being. From Wave 3, this article utilizes a measure of job insecurity, affective commitment, turnover intentions, CWB, and OCB.

Manuscript (MS) 1 (published) focuses on work-related social support, engagement, and social resource crafting measured in

Waves 1 and 2. MS 2 (published) focuses on financial perceptions and affective disposition. Income, debt, and positive and negative affect were used from Wave 1. Current and near future perceived income adequacy were from Wave 2, and financial strain was used in Wave 3. Although the current article and MS 2 both used financial strain, they were in different waves, and the focus of the two studies was very different with MS 2 focusing on perceived income adequacy within the financial stress process, while the current article focuses on financial strain as one of the multiple aspects of adulthood cumulative disadvantage. MS 3 (in progress) focuses on economic stress and depression and opioid use. Job insecurity, current perceived income adequacy, and financial fragility were used from Wave 1. Depression was used in Wave 2, and opioid use was used in Wave 3. The table below displays where each data variable appears in each study, as well as the current status of each study (Table A1).

**Table A1**  
*Study 1 Data Transparency Table*

Variable	Current article	Published MS 1	Under review MS 2	In-progress MS 3
Income (W1)			X	
Debt (W1)			X	
Job insecurity (W1)				X
Job insecurity (W3)	X			
Financial strain (W2)	X			
Financial strain (W3)			X	
Financial fragility (W1)				X
Current PIA (W1)				X
Current PIA (W2)			X	
Future PIA (W2)			X	
Childhood economic stress (W1)	X			
Education (W2)	X			
Adverse childhood experiences (W1)	X			
Health status (W2)	X			
Psychological well-being (W2)	X			
Engagement (W1)		X		
Engagement (W2)		X		
Affective commitment (W3)	X			
Turnover intentions (W3)	X			
OCB (W3)	X			
CWB (W3)	X			
Positive and negative affect (W1)			X	
Depression (W2)				X
Opioid use (W3)				X
Social resource crafting (W1)		X		
Social resource crafting (W2)		X		
Work-related social support (W1)		X		
Work-related social support (W2)		X		

*Note.* PIA = perceived income adequacy; OCB = organizational citizenship behaviors; CWB = counterproductive work behavior. “X” indicates variable was included in the study and “W” indicates wave of data collection.

(Appendix continues)

### Study 2 Data Transparency Statement

The data reported in this article were obtained from publicly available data, the Midlife in the United States (MIDUS) Series available at <https://www.icpsr.umich.edu/web/ICPSR/series/203>. The findings presented in this article represent a unique use of these data, and the authors have not used these data in any previously published work. More information on previously

published work using the MIDUS data can be found at <https://www.icpsr.umich.edu/web/ICPSR/series/203/publications>.

Received August 7, 2023

Revision received April 6, 2024

Accepted April 11, 2024 ■

### E-Mail Notification of Your Latest Issue Online!

Would you like to know when the next issue of your favorite APA journal will be available online? This service is now available to you. Sign up at <https://my.apa.org/portal/alerts/> and you will be notified by e-mail when issues of interest to you become available!