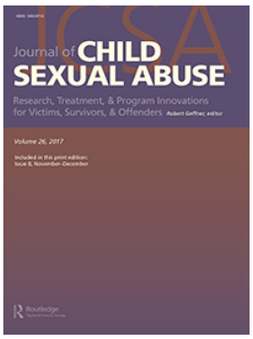

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Exploring the Relationship Between Adverse Childhood Experiences and Hope

Michael A. Baxter [a], Eden J. Hemming[a], Heather C. McIntosh [b], and Chan M. Hellman [c]

[a]Department of Pediatrics, University of Oklahoma Health Sciences Center, Tulsa, Oklahoma, USA; [b]Office for Research Development and Scholarly Activity, University of Oklahoma Health Sciences Center, Tulsa, Oklahoma, USA; [c]Anne and Henry Zarrow School of Social Work, University of Oklahoma, Tulsa, Oklahoma, USA

ABSTRACT

To explore the relationship between adverse childhood experiences and hope, a convenience sample of caregivers bringing in children for medical investigation of child abuse at a regional child advocacy center were surveyed for adverse childhood experiences and dispositional hope. Hope in this sample had a significant negative correlation to the adverse childhood experiences subscale "abuse" ($r = -.19$; $p < .05$). The relationship between hope and the other adverse childhood experiences subscales "neglect" ($r = -.14$) and "dysfunctional family" ($r = -.16$) was not statistically significant. An analysis of variance was performed to determine if caregivers who have experienced both sexual and physical abuse ($M = 29.67$; $SD = 15.96$) have lower hope scores compared to those caregivers who have experienced neither physical nor sexual abuse ($M = 42.64$; $SD = 18.44$). This analysis ($F(1, 84) = 5.28$; $p < 0.05$) showed that caregivers who experienced both physical and sexual abuse scored significantly lower on hope compared to their counterparts who experienced no adverse events, with an estimated effect size of moderate strength ($d = 0.70$). Higher adverse childhood experiences scores are associated with lower hope. This result was especially true for those adult caregivers who reported experiencing both physical and sexual abuse when compared to adults who did not experience either form of child trauma. While the empirical literature continues to demonstrate the negative consequences of adverse childhood experiences across the life span, hope offers a compelling new line of inquiry in child maltreatment research especially for studies targeting prevention or intervention.

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Adverse childhood experiences (ACE) are known to be associated with negative consequences across the lifespan and represent a serious public health concern but the mechanisms for these consequences are not well known (Campbell, Walker, & Egede, 2016; Felitti & Anda, 2009). A large body of research demonstrates the long-term and wide-ranging negative mental and physical effects of ACE (Anda et al., 2007; Bellis, Lowey, Leckenby, Hughes, & Harrison, 2014;

CONTACT Eden Hemming eden-hemming@ouhsc.edu Department of Pediatrics, University of Oklahoma School of Community Medicine, 4502 East 41st Street, Tulsa, OK 74135.

Dube et al., 2001, 2001; Hillis, Anda, Felitti, & Marchbanks, 2001; Williamson, Thompson, Anda, Dietz, & Felitti, 2002). Left untreated, those who have experienced child maltreatment are more likely to experience poor mental health, engage in health risk behaviors, and suffer physical diseases related to increased morbidity (Anda et al., 2007; Bellis et al., 2014; Dube et al., 2001, 2001; Hillis et al., 2001; Williamson et al., 2002) and report more negative parenting experiences (Jaffe, Cranston, & Shadlow, 2012; Locke & Newcomb, 2004). These adults tend to experience lower educational, employment, and economic successes (Currie & Widom, 2010; Lanier, Kohl, Raghavan, & Auslander, 2015) and show an "increased propensity to perpetuate the cycle of violence" (Hellman & Gwinn, 2017). In spite of the interest in ACE, there are lingering gaps in the literature with regard to the differential effects of ACE (Campbell et al., 2016).

The predominant hope theory currently in use is Snyder's (Snyder, 2002) and is recognized as one of the most salient character strengths in positive psychology (Allan, 2015). This theory rests on the idea that all behavior is goal directed. Hope is, therefore, a positive motivational state based on an individual's own assessment of capacity to develop mental strategies (pathways) toward a goal and direct mental energy (agency) to pursue it (Aspinwall & Leaf, 2002; Cheavens, Feldman, Gum, Michael, & Snyder, 2006; Feldman & Snyder, 2005; Gallagher & Lopez, 2009; Lazarus, 1999; Lloyd & Hastings, 2009; Menninger, 1959; Snyder, 2002). Hope represents a positive psychological strength that promotes adaptive behaviors, healthy development, and both psychological and social well-being (Bronk, Hill, Lapsley, Talib, & Finch, 2009; Snyder, 1995). Higher hope is associated with better coping skills, health, and health-related practices (Chang & DeSimone, 2001; Feldman & Sills, 2013; Kelsey et al., 2011).

The primary goal of this research is to examine the relationship between ACE and hope in caregivers bringing children in for medical evaluations of abuse. We chose to focus on the abuse component of the ACE scale since 85% of cases evaluated at child advocacy centers involve sexual or physical abuse (National Children's Alliance, 2015).

First, we compared the prevalence of ACE between our sample and the U.S. Centers for Disease Control and Prevention (CDC) national sample (Centers for Disease Control and Prevention & Kaiser Permanente, 2016). Second, we examined the correlations between hope and the total ACE score as well as the three ACE dimensions: abuse, neglect, and dysfunctional family. Third, we compared those adults who reported being both physically and sexually abused as children to those who had not experienced trauma on their level of hope.

Method

Participants

A convenience sample of adult caregivers using a nonprofit child advocacy center from an urban U.S. city was the target for this study. Participants were

recruited on their arrival to the center seeking medical evaluations for child abuse. In some cases, an abusive parent had already been taken into law enforcement custody and/or had their child or children removed from their care; therefore, when the category of potential survey-takers included parents, they were only nonabusive or potentially abusive parents. During the medical evaluation intake process, the child abuse pediatric nurse provided the adult a packet containing a study information sheet and the pencil-and-paper survey. Rather than signing an informed consent form, a consent information sheet was provided, and consent was assumed only if the caregiver filled out some or all of the survey. The University of Oklahoma Health Sciences Center Institutional Review Board approved this study.

Ultimately, 151 non-offending adults completed the survey. In the year the study was implemented, 837 medical evaluations were performed, for a response rate of 5.5%. Most were female (82%) and reported an average age of 30.61 (SD = 7.15) years ranging from 19 to 55 years. Of those surveyed, 38% reported being employed full time; 32% reported being unemployed. Education levels included less than 12th grade (18%), high school/GED (28%), technical school (4%), some college (28%), and college degree (15%). Just over one-half (54%) of the caregivers were Caucasian, with the remaining reported as African American (20%), Native American (9%), and Hispanic (6%). Socioeconomic status and language spoken at home were not included in data collection. These percentages do not add up to 100% due to the option for participants to choose multiple answers at once or "other."

Measures

The ACE scale

The ACE scale is a 10-item instrument developed to measure the 3 dimensions of child maltreatment: abuse, neglect, and dysfunctional family (Felitti et al., 1998). Each of the items is presented as a *yes* or *no* response option scored as a 1 or 0, respectively. Individually, ACE categories assess whether a respondent has experienced emotional, physical, or sexual abuse (abuse dimension), emotional or physical neglect (neglect dimension), witnessed domestic violence, experienced a mentally ill or substance abusing family member, experienced the loss of a parent or divorce, or had a household member incarcerated (dysfunctional family dimension). Scores on the ACE can also be summed to range between 0 and 10 (Felitti & Anda, 2009).

The Dispositional Hope Scale

The Dispositional Hope Scale (Snyder et al., 1991) is an 8-item survey that measures both the mental energy and pathway cognitions toward goal attainment. Item responses are on an 8-point Likert scale, ranging from 1 (*definitely false*) to 8 (*definitely true*). The Dispositional Hope Scale is divided into 2

subscales: (a) agency, which captures motivation to obtain goals, and (b) pathways, which captures one's capacity to reach those goals. Together, the 2 subscales derive a total hope score with a potential range of 8 (low) to 64 (high). For the current study, total score reliability estimates were adequate ($\alpha = .97$; $M = 41.07$; $SD = 18.31$).

Results

First, we compared the prevalence of ACE in our sample to the national study reported by the CDC. Our sample was significantly ($\chi^2 = 7.23$; $p < .05$) more likely to report at least 1 ACE (81%) compared to the CDC national sample (64%). When comparing the number of ACE, our sample also scored significantly higher than the national sample ($\chi^2 = 10.23$; $p < .05$). However, when comparing the prevalence of physical abuse ($\chi^2 = 1.75$; $p > .05$) and sexual abuse ($\chi^2 = 0.45$; $p > .05$), our sample did not differ significantly from the national sample.

Next, we tested the statistical assumptions for correlations as well as analysis of variance with the results suggesting no significant violations. Missing data were deleted in list-wise fashion with each statistical test; 116 remained in the sample. In order to examine the relationship between ACE and hope, we computed zero-order correlations. Using the one-tail test, hope had a significant negative correlation to the ACE abuse dimension ($r = -.19$; $p < .05$). The relationship between hope and the ACE dimensions of neglect ($r = -.14$) and dysfunctional family ($r = -.16$) was not statistically significant. Finally, we computed an analysis of variance to determine if caregivers who have experienced both sexual and physical abuse ($M = 29.67$; $SD = 15.96$) have lower hope scores compared to those caregivers who have experienced neither physical nor sexual abuse ($M = 42.64$; $SD = 18.44$). The resulting ANOVA ($F(1, 84) = 5.28$; $p < 0.05$) showed that caregivers who experienced both physical and sexual abuse scored significantly lower on hope compared to their counterparts who experienced no adverse events. In addition, calculation of Cohen's d-statistic showed the estimated effect size to be of moderate strength ($d = 0.70$).

Discussion

The relationship between ACE and hope in our study was negative overall. A negative relationship was also observed for the abuse dimension of ACE and hope. More specifically, those who experienced both physical and sexual abuse scored significantly lower on hope than those who did not experience either forms of adverse childhood trauma. Moreover, the magnitude of difference indicated the differences on hope were of moderate strength.

While this study is not without limitations (e.g., geographic location, non-random sampling, cross-sectional design, lack of experimental control), it demonstrates the lack of hope associated with the experience of childhood trauma. Our study suggests that those who have higher ACE scores are less likely to develop successful pathways to their goals as well as less able to dedicate mental energy to pursuing these pathways. When confronted with a challenging situation, such as the potential abuse of a child in their custody, they may be less likely to take corrective action because they have a decreased estimation of their abilities or the resources available to help them manage the situation positively—in other words, they have decreased hope. This mental inertia may have an effect both personally and by extension to those in their care. Within the multi-disciplinary team approach toward violence and abuse in use at this center, this knowledge can be helpful. Caregivers with past physical and sexual abuse are more likely to have lower dispositional hope and, therefore, an increased risk of not obtaining the services necessary for helping their children who have experienced abuse (medical care, psychological care, and social work needs). It is, therefore, very important to provide extra support to these parents and caregivers in the wake of the abuse of their children.

This information could also be used to assist children who have experienced both sexual and physical abuse. Studies show that children who experienced adverse events in general have increased odds of having poor mental health, chronic medical conditions, and social developmental issues in adulthood (Felitti & Anda, 2009; Kerker et al., 2015). Our results show that children who experience both sexual and physical abuse are uniquely at risk. Low hope guides these children into self-destructive behaviors as they grow and encounter greater obstacles. Rather than continuing on through most difficulties with the knowledge of their own efficacy and resources, as would those without abusive childhoods, these children instead hold themselves back. They do not have the confidence in themselves to persist and do not have the confidence in their environment that it will support them. Their poor self-concept and limited view (low hope) restrict the kinds and amounts of efforts they are willing to make, which further restricts both positive and negative feedback from achieving their goals in spite of the obstacles.

Targeted interventions could promote hope through establishing specific and measurable strategies to goal attainment as well as through developing and clarifying goals. Current recommendations for children suspected of suffering abuse include having a supportive caregiver involved in their treatment plan (Jenny & Crawford-Jakubiak Committee on Child, Neglect, & American Academy of, 2013). When referring suspected or confirmed victims of child maltreatment for trauma-focused therapy, knowledge of the caregiver's level of hope can help the clinician target intervention and follow up. Those individuals with low hope may require more intensive treatment plan assistance from the medical community, therapists, and social workers. Treatment plans that help improve the hope of both the child (victim) and

adult (caregiver) may help with improving positive character strengths such as grit (Davidson, Feldman, & Margalit, 2012; Feldman & Dreher, 2012; Hellman & Gwinn, 2017; Huynh, Hall, Hurst, & Bikos, 2015; Koehn, O'Neill, & Sherry, 2012; Proyer, Ruch, & Buschor, 2013; Rew, Powell, Brown, Becker, & Slesnick, 2017; Schrank, Bird, Rudnick, & Slade, 2012)

Given the empirically supported benefits of hope on a meaningful and purposeful life, we argue that this research opens a new and potentially beneficial line of inquiry for the study of child maltreatment.

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Author Notes

Michael A. Baxter, DO, is an assistant professor in the Department of Pediatrics, School of Community Medicine, University of Oklahoma Health Sciences Center, Tulsa, OK, the program director for the Child Abuse Pediatric Fellowship, School of Community Medicine, University of Oklahoma Health Sciences Center, Tulsa, OK, and medical director of the child abuse pediatric team at the Children's Advocacy Center, Tulsa, OK.

Eden J. Hemming, MA, is a Research Assistant, Department of Pediatrics, School of Community Medicine, University of Oklahoma Health Sciences Center, Tulsa, OK.

Heather C. McIntosh, MS, CRA, LSSGB, is Staff Director and Research Statistician, Office for Research Development and Scholarly Activity, School of Community Medicine, University of Oklahoma Health Sciences Center, Tuls, OK.

Chan Hellman, PHD, is Professor in the Anne and Henry Zarrow School of Social Work at the University of Oklahoma, Tulsa, Oklahoma.

ORCID

Michael A. Baxter http://orcid.org/0000-0002-5247-4692
Heather C. McIntosh http://orcid.org/0000-0003-1166-5297
Chan M. Hellman http://orcid.org/0000-0002-9897-9637

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