

# Past Suffering and Current Caring: A Comprehensive Picture of Adverse Childhood Experiences Among Social Work Students

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**Abstract:** *This article aims to provide a comprehensive picture of research on the prevalence and impact of adverse childhood experiences (ACEs) among social work students. In doing so, we highlight where ACE research with social work students is most robust and point out gaps that need further inquiry. This article is organized into four parts, each summarizing pertinent ACE research for that section, limitations, and next steps for further inquiry. Part 1 offers an overview of the operational definitions of ACEs within the context of general population studies. Part 2 reviews foundational studies of childhood adversity with social work students that explored prevalence and influences on career choice. Part 3 provides a composite profile of current ACE prevalence studies with social work students and compares them to non-majors to describe differing trends and patterns. Part 4 presents empirical research on the impact of ACEs on social work students' well-being and professional development. Implications for social work educators are included.*

**Keywords:** *Adverse childhood experiences (ACEs), social work students, wounded healer*

Adverse Childhood Experiences (ACEs) denote potentially traumatic events that occur during childhood and may have lasting effects on an individual's physical, mental, and emotional well-being. ACEs encompass a range of stressful events, such as child abuse and neglect, along with family challenges regarding domestic violence, substance abuse, mental illness, incarceration, and parental divorce/separation (Dong et al., 2004; Felitti et al., 1998). As future practitioners in the field, social work students may bring their own ACE-related experiences into their professional practice. Recognizing the prevalence and impact of childhood adversity in the lives of social work students may serve as a guide for social work programs in developing explicit and implicit curricula that fit their unique needs (Educational Policy and Accreditation Standards [EPAS], CSWE, 2022). Furthermore, providing BSW and MSW students with scholarly and practical applications of adverse childhood experiences may increase the likelihood of understanding the academic elements of trauma exposure and aftermath, along with the normality of emotional reactions to clients' disclosure of such events.

This article aims to provide a comprehensive picture of the conceptual landscape of ACE research as it relates to social work education, summarizing and clarifying past and present investigations to date. In doing so, we highlight where ACE research with social work students is most robust and point out gaps that need further inquiry. Although we know that social work students may experience more childhood adversity than non-majors (Branson et al., 2019), we do not know how much they recognize this in their own lives or have connected it to impacts on their career choice and professional development (Kremer et al., 2023). Answering such questions may better inform curriculum development for meeting social work students' personal and professional needs. Integrating ACE research throughout the curriculum may also help social work students with firsthand knowledge of

the topic to normalize their experiences while creating opportunities to address the possible negative aftermath of one's childhood adversity. Even though adverse childhood experiences may increase the risk of negative outcomes in adult life, they do not determine the future. How such experiences are processed and made sense of may be critically important for social work students.

This article is organized into four parts, each summarizing pertinent ACE research for that section, limitations, and next steps for further inquiry. Part 1 offers an overview of the operational definitions of ACEs within the context of general population studies. Part 2 reviews foundational studies of childhood adversity with social work students that explored prevalence and influences on career choice. Part 3 provides a composite profile of current ACE prevalence studies with social work students and compares them to non-majors to describe differing trends and patterns. Part 4 presents empirical research on the impact of ACEs on social work students' well-being and professional development. Lastly, the conclusion offers a synopsis of implications for social work education.

## **1. Part 1: Overview of ACE Population Studies in the U.S.**

### *1.1. ACE Study Origins and Current Population ACE Research*

Studies in patient samples and the general population show that the cumulative effect of adverse childhood experiences is a predictor of poor physical (Felitti et al., 1998) and mental health in adulthood (Merrick et al., 2018). Wave I of the original ACE research was conducted between 1995 and 1996 by the Centers for Disease and Control (CDC) and Kaiser Permanente, where adults enrolled in the health plan network in San Diego, CA, were surveyed ( $N = 9,508$ , Felitti et al., 1998). The original ACE research showed that as the number of ACEs increased, so did the propensity of illness; however, this association was not significant for patients with three or fewer types of ACEs (Felitti et al., 1998). In contrast, patients with four or more ACEs were associated with higher incidences of poor health and addiction, showing a dose-response pattern.

Wave II of the CDC-Kaiser Permanente ACE study was conducted in 1997 with adults enrolled in the health plan network in San Diego, CA ( $N = 8,629$ , Dong et al., 2004). Patient records were reviewed along with subsequent waves of interviews and data collection. ACE types were highly correlated, and exposure to one predicted the likelihood of another (Dong et al., 2004). Findings from a composite of ACE data (Waves I and II) from Kaiser Permanente health records ( $N = 18,137$ ) found that 64% had encountered at least one ACE, and 13% reported four or more (Anda et al., 2007).

Current general population studies of ACEs use the Behavioral Risk Factor Surveillance System (BRFSS), a multi-state inventory that tracks retroactive childhood maltreatment and informs public health priorities (Giano et al., 2020; Merrick et al., 2018). These studies are more diverse than the original ACE studies (i.e., 65-68% Caucasian vs. 74%-84%) and indicate that females, younger adults, sexual minorities, and multiracial individuals experience higher rates of childhood adversity. Giano et al.'s (2020) study of 211,376 adults reported that 12% had four or more ACEs, which was similar to the original ACE studies of 13%, while Merrick et al.'s (2018) results of 16% ( $N = 214,157$ ) was

slightly higher. These studies, comparable to original ACE research, found an association of four or more ACE scores with increased behavioral health problems and mortality.

### *1.2. Adverse Childhood Experiences Questionnaire (ACE-Q)*

The Adverse Childhood Experiences Questionnaire (ACE-Q) was developed and validated in the original ACE studies in collaboration with the CDC (Dong et al., 2004; Felitti et al., 1998). The ACE-Q has subsequently been validated in samples of college students (Windle et al., 2018), social work students (Kremer et al., 2023), and licensed social workers (Steen et al., 2021). The ACE-Q consists of ten items inquiring about different adverse childhood experiences. One point is assigned for each category endorsed as “yes.” The total range of scores is between 0-10. The ten ACE items include emotional, physical, and sexual abuse; emotional and physical neglect; domestic violence (i.e., violence against one’s mother); parental divorce or separation; household substance abuse (i.e., alcohol or drug use); mental illness (i.e., depression or suicide), and incarceration (i.e., a household member in jail or prison).

### *1.3. Summary of Lessons Learned*

Over the past 25 years, ACE general population studies have indicated a dose-response pattern, where increased levels of ACEs are associated with a greater risk for physical illness, psychological distress, and mortality. This relationship, however, is not found to be significant for individuals with three or fewer ACEs. Study participants of ACE research in the 1990s were limited to adults with Kaiser Permanente Health Insurance Coverage within one city in a Westcoast state. Moreover, 62% were 50 or older, and sample diversity was lacking as 84% of respondents identified as Caucasian in Wave I and 74% in Wave II. In contrast, more current general population ACE studies encompass data collection from multi-state inventories with diverse samples. As a result, the data is more robust and has provided empirical evidence of ACE disproportionality for young adults, females, and minoritized individuals (racial and sexual). For a quarter of a century, the prevalence rate of four or more ACEs in the general population has been consistent, ranging from 12%-16%.

The ACE Questionnaire was developed in the 1990s and validated in several general population and college studies. However, the original ACE Wave I and II studies represent a different time, where, for example, parental divorce was not even included in Wave I and, when measured in Wave II, was present in less than a quarter of the sample (23%). In contrast, current statistics of parental divorce in the U.S. are at approximately 40-50% for first-time marriages (Mayol-García et al., 2021). As divorce is much more prevalent now, we need to consider whether it still represents an uncommon adverse experience in the lives of children.

### *1.4. Limitations*

A limitation of using general population ACE studies as a comparison group for social work students is that those between the ages of 18-24 are underrepresented in current

(Giano et al., 2020, and Merrick et al., 2018, each 12%) and past studies (Dong et al., 2004, and Felitti et al., 1998, each  $M = 56$  years old). Therefore, ACE studies conducted among college students provide a more age-suitable comparison group for social work trainees. ACEs and exposure to potentially traumatic events are shown to be widespread among college student populations. Estimates range from 22% to 75% of college students have experienced at least one ACE before college (Hinojosa et al., 2019; Park et al., 2021), with between 8% and 22% having experienced four or more (Park et al., 2021). Additionally, ACE research among young adults indicates lingering aftereffects into adulthood (Park et al., 2021).

### *1.5. Steps Forward*

Part 2 explores pioneering studies of childhood adversity in the lives of social work students conducted during the 1990s-2000s. Although the ACE-Q has existed for 25 years, its use to collect such data from social work trainees only occurred more recently, with the first published study using the ACE Questionnaire in 2015 (Gilin & Kauffman, 2015). Before the implementation of the ACE-Q, the few studies that investigated rates of childhood adversity in social work students' lives lacked definitional consistency (e.g., ACE types varied across studies) and, therefore, could not be compiled for an overall composite profile. Empirical evidence from these early studies, however, does provide a foundation for examining patterns of ACEs over the years to determine which ones remain relevant in the lives of current social work students as denoted with more recent studies (2015-2023) that used the ACE-Q.

## **2. Part 2: Childhood Adversity and Social Work Career Choice**

### *2.1. Pioneer Studies of Childhood Adversity and Majoring in Social Work*

Evidence from four seminal studies is presented that examines the relationship between a student's history of family problems and its influence on majoring in social work (Black et al., 1993; Rompf & Royse, 1994; Russel et al., 1993; Sellers & Hunter, 2005). Early investigations were concerned about the impact of childhood adversity on students' career choices, development of professional relationships, and the ability to practice effectively. These studies examined the prevalence and career influence of different types of childhood adversity for social work trainees compared to non-majors. Thirty years ago, Black and colleagues (1993) led a call to action for social work educators in the United States to investigate the extent of childhood trauma among social work students. They underscored the need for further inquiry regarding the potential impact of students' psychosocial background on the helping process.

Black et al. (1993) investigated the incidence of childhood trauma among master's level social work students (MSW,  $n = 116$ ) compared to master's level business majors (MBA,  $n = 46$ ) who attended a private college in northeastern Pennsylvania. MSW students reported a significantly higher frequency of childhood adversity in early life compared to business students in the areas of alcohol abuse (55% vs. 13%), drug abuse (27% vs. 0%), emotional abuse (38% vs. 4%), physical illness (56% vs. 17%), mental illness (28% vs. 4%), and death of a family member (72% vs. 39%). Although the authors

did not analyze the association between a history of psychosocial trauma and professional impacts, they underscored how a problematic background might result in a *wounded healer* phenomenon in students, thereby, creating possible countertransference biases in their practice. Psychologist Carl Jung was the first to use the term *wounded healer* in the early 1950s; this term continues to be used today (Newcomb et al., 2015). The authors cautioned social work educators to provide student support rather than sanctions when addressing such issues.

In the early 1990s the professional vernacular often referred to families as *pathological* or *dysfunctional*. *The Strengths Perspective in Social Work Practice* was published in 1992 (Saleebey, 1992), which overtime led to a helping paradigm shift from problem-oriented to strengths-based. Russel et al. (1993) identified how *pathology* in candidates for admission to MSW programs was a growing concern at the time; however, research on the issue was minimal. The authors, therefore, set out to investigate the incidence of traumatic events between graduate students in social work ( $n = 181$ ), guidance and counseling ( $n = 100$ ), business ( $n = 100$ ), and education ( $n = 100$ ) at a Midwestern state university. Study findings indicated that 73% of social work students had experienced one or more problems that defined a *dysfunctional* family (e.g., substance abuse, mental illness, violence, among others). Additionally, they had a significantly greater incidence of family dysfunction than education (45%) and business students (37%), but not so with guidance and counseling trainees (68%). For example, nearly 50% of MSW students reported that alcohol abuse was a problem, in contrast to 23% of business students. Russel et al. (1993) concluded that many MSW students may have encountered family challenges growing up. They recommended that social work educators pay close attention to those with considerable childhood adversity to support and advise them appropriately for professional development.

Rompf and Royse (1994) also investigated how early trauma influenced the selection of social work as a career choice. The authors compared social work students (BSW  $n = 243$ ; MSW  $n = 172$ ) from five public Universities in Kentucky to first-year English majors ( $n = 203$ ) at one university. Statistical differences were found between social work students and English majors on experiences of child abuse and neglect (17% vs. 8%), family emotional problems (37% vs. 25%), alcoholism or drug addiction in the family (32% vs. 21%), and parents unhappily married (44% vs. 30%). Additionally, they found a significant difference between the level of social work students (71%) who had experienced one or more family stressors during childhood compared to English majors (58%). When asked how such experiences influenced their career choice, social work trainees were approximately three times (39%) more likely to view it as impactful than English majors (14%). The authors recommended additional research on student motivators for entering the profession and, if a driving force is to help others, to delineate further why they selected social work rather than another applicable field of practice such as psychology, nursing, or family studies.

Sellers and Hunter (2005) conducted a study with 126 MSW students at a Midwestern university to investigate types of childhood adversity and how these impacted their decision to pursue a career in social work. They found that 69% of respondents indicated one or more problems in their immediate family or among other family members who were



close to them. Logistic regression analysis showed that having more indicators of a family history of *psychopathology* (i.e., clinically diagnosed mental illness, suicide, depression) and violence (i.e., domestic violence, child abuse, a victim or perpetrator of violence) increased the likelihood that students perceived problems in the family of origin as influential in their decision to pursue a career in social work. Additionally, students who reported family problems and indicated that this history was influential to their career choice had increased odds (2.98:1) compared to students who reported no history of family problems of selecting mental health/health as a practice area concentration (versus gerontology, children and families, or macro practice). The authors concluded that although social work students may acknowledge the effect of family history on their career choice, they may be less aware of the implications for their professional development. Thus, they recommended further examination of the relationship between social work trainees' origins and practice effectiveness.

## *2.2. Summary of Lessons Learned*

Thirty years ago, social work researchers and educators were interested in examining the relationship between a history of family problems and its influence on career choice for social work trainees. Levels of adverse childhood events were assessed and compared to non-majors to determine differing patterns and possible associations with vocational selection. Research findings indicated that 69-73% of social work students reported one or more adverse childhood experiences in their families of origin (Russel et al., 1993; Sellers & Hunter, 2005). Such rates were comparable to guidance and counseling majors (68%) but significantly higher than non-social science majors (i.e., English, 58%; business, 37%; education, 45%). These earlier studies suggested that life experiences can shape social work students' career interests and postsecondary coursework. For example, Rompf and Royse (1994) found that social work majors were likelier to view problems in their family of origin than English majors as influencing their career choice (39% vs. 14%, respectively). Additionally, Sellers and Hunter (2005) identified how specific indicators of psychopathology and violence in the family influenced social work trainees' decision to pursue a career in social work. Furthermore, they found that a substantial history of family problems increased one's odds of selecting a practice concentration in mental health/health versus other areas of practice.

## *2.3. Limitations*

As the ACE Questionnaire was not developed until the late 1990s and empirical studies that used the ACE-Q with social work students were not published until 2015, previous studies lacked a consistent means of measuring childhood adversity and compiling an overall interpretation of its prevalence and impact. Additionally, investigations of ACE scores among social work majors were often compared to non-science majors (e.g., English, business), even though the fields of study are dissimilar, and thus, motivations for selecting a major differ. A more relevant comparison student group would be those enrolled in the social sciences (e.g., psychology, sociology, criminology). Recent social work student investigations implementing the ACE-Q have addressed these methodological and design gaps. For example, Kremer et al. (2023) explored how ACEs may shape

undergraduates' ( $n = 722$ ) selection of college majors that commonly lead to social service jobs. Study findings indicated that social work students reported the highest prevalence of childhood sexual abuse, emotional neglect, physical neglect, familial substance use, and familial mental illness compared to non-social science and other social science majors (e.g., sociology, psychology, economics, anthropology, and political sciences). Furthermore, their findings indicated that students who reported three or four ACEs were approximately three times more likely to major in social work than non-social science majors (e.g., STEM, business). Kremer et al.'s (2023) findings are comparable to the ACE pioneer social work student studies of 30 years ago.

#### *2.4. Steps Forward*

Part 3 provides a composite profile of social work student ACE research studies from 2015-2023. All selected studies used the ACE-Q for data collection. A synthesis of social work student sample characteristics is presented, followed by a composite profile of ACE categories and total scores. Next, findings of a descriptive comparison of ACE research studies are presented for students majoring in social work versus a health profession. As social work education has continued to expand its focus on integrative behavioral health, comparing ACE scores with students in these disciplines may provide fruitful insights regarding interprofessional similarities and differences. A catalyst for preparing students to work in integrative behavioral health settings has been the Health Resources and Service Administration (HRSA) grants awarded to social work programs (CSWE, 2020). ACE research to date has done a thorough job of documenting differences between social work students and those majoring in social sciences or non-social sciences. However, such comparisons are lacking with students majoring in health professions.

### **3. Part 3: Composite Profile of Social Work Student ACE-Q Research**

#### *3.1. Method: Study Selection of Social Work Student ACE Research*

An electronic search of four databases (i.e., APA PsycINFO [EBSCOhost], Social Work Abstracts [EBSCOhost], Social Sciences Premium Collection [ProQuest], and Google Scholar) was used to detect empirical studies that used the ACE-Q for data collection with social work students in the United States. Search terms included: 1) childhood adversity/adverse childhood experiences/ACE/ACEs/ACE Questionnaire, and 2) BSW/MSW/social work students/majors/trainees. Inclusion criteria were 1) quantitative empirical studies, 2) BSW/MSW students enrolled in Schools of Social Work, 2) original data (i.e., unduplicated samples), 3) ACE-Q noted as a data collection measure, and 4) published peer-reviewed articles or thesis/projects/dissertations (i.e., ScholarWorks). Eight studies met inclusion criteria (see Table 1). All studies executed a cross-sectional research design. A composite profile of ACEs in social work students was calculated from this data. This included summing frequencies across the eight studies for each ACE type, and each was then divided by the sum of the total sample ( $n = 831$ ) and multiplied by 100 to determine percentages. The same procedure was used to determine the percentage of ACE levels (i.e., 0 ACE, 1 ACE, 1+ ACEs, and 4+ ACEs) and percentages of gender (female/male) and race/ethnicity (BIPOC, Caucasian).

Author (Year)	Population/sample size	Age: Range, <i>M</i> ( <i>SD</i> )	Measure(s)	Results
1 Kremer et al. (2023)	BSW students ( <i>n</i> = 135) & nonmajors ( <i>n</i> = 587, Social Science [SocSci] & non-SocSci.) 3 midwestern & southern universities, <i>N</i> = 722	Age not reported	ACE-Q	SW students significantly ↑ ACES in child sexual abuse (CSA), emotional neglect (EN), physical neglect (PN), substance abuse (SA), mental illness (MI) vs. SocSci. & non-SocSci. majors. Students with 3-4 ACES, were 2-3 times more likely to major in SW than non-SocSci majors.
2 McLean & DeLacey (2022)	BSW ( <i>n</i> = 15) & MSW ( <i>n</i> = 74) students at a California state university, <i>N</i> = 89	21-65 <i>M</i> = 32.1 ( <i>SD</i> =8.59)	ACE-Q, Warwick-Edinburgh Mental Well-being Scale (WEMWBS, Tenant et al., 2007)	No significant relationship between ACES & levels of well-being in SW students.
3 Lyter (2021)	BSW ( <i>n</i> = 69) & MSW ( <i>n</i> = 45) students at Pennsylvania State University, <i>N</i> = 114	18-51+ 18-50 (96%) 51+ (4%)	ACE-Q, Brief Resilience Scale (BRS, Smith et al., 2008), Life Satisfaction Scale (LSS, Kuroki, 2016)	No significant relationship between ACES & levels of resilience or life satisfaction.
4 Branson et al. (2019)	BSW ( <i>n</i> = 81) & non-majors ( <i>n</i> = 269) at a public Midwestern university, <i>N</i> = 350	Age not reported	ACE-Q	SW students ↑ on all ACE items than non-majors, statistical differences on EA, parental divorce/separation (Di), domestic violence (DV), SA, MI, incarceration (Inc). One or more ACES, 2.88 X more likely to major in SW.
5 Conrad (2020)	BSW ( <i>n</i> = 51) & undergraduate non-majors ( <i>n</i> = 134) at a public Michigan university, <i>N</i> = 185	Age not reported	ACE-Q	SW students ↑ on scores on 8 ACES, statistical differences on: EA, physical abuse (PA), CSA, Di, & SA. Non-majors' significant difference ↑ on DV, 23.5% vs. 4.5%.
6 Negrete (2020)	MSW students, <i>N</i> = 60	18-65 18-35 (68.4%)	ACE-Q, Categorical measures of practice area, therapy involvement, & internship challenges	Significant association of ACE MI & mental health specialization. Significant association of ACE EN & participation in personal therapy. No statistical difference between ACES & countertransference while interning.
7 Thomas & Beecher (2018)	MSW students at a California State university, <i>N</i> = 139	≤34 (82%) 35+ (18%)	ACE-Q, Conner-Davidson Resilience Scale (CD-RISC, Conner & Davidson, 2003), Perceived Stress Scale (PSS-10, Cohen et al., 1983), Brief Santa Clara Strength of Religious Faith Questionnaire (BSCSRFQ, Plante et al., 2002), Acceptance & Action Questionnaire II (AAQ II, Bond et al., 2011), Mindful Attention Awareness Scale (MAAS, Brown & Ryan, 2003)	↑ ACES were associated with ↑ resilience & avoidance. Perceived stress & avoidance negatively associated with resilience. Mindfulness not significantly associated with resilience.
8 Gilin & Kauffman (2015)	MSW students at a private Northeastern university, <i>N</i> = 162	20-60	ACE-Q	SW students had ↑ ACES in EA, CSA, Di, SA, MI, & Inc than general population. Statistical differences were not computed.



### *3.2. Synthesis of Sample Demographics*

The majority of social work students ( $n = 831$ ) identified as female (84.9% vs. 14.4% male) and as Black, Indigenous, or People of Color (BIPOC 58.3% vs. 46.8% White or Caucasian). A composite age was not calculated as studies varied on how it was reported via age range, age categories, or age  $M$  (see Table 1). Most participants were MSW students (61.4% vs 38.6% of BSW). Sample collection occurred at universities located in various regions in the U.S., including the West Coast ( $n = 4$ ), the Midwest ( $n = 4$ ), the Northeast ( $n = 2$ ), and the South ( $n = 1$ ).

### *3.3. Prevalence of ACEs in Social Work Students*

The prevalence of ACE types among social work students is represented in Table 2, ranked from highest to lowest. The top three ACE categories included parental divorce/separation, substance abuse, and mental illness. The next highest ACE categories were forms of childhood maltreatment; approximately 30% of social work students reported enduring emotional abuse and neglect, while 25% reported histories of physical and sexual abuse. The lowest types of familial adversity included the incarceration of a family member (16%), domestic violence (15%), and childhood physical neglect (11%). Additionally, 32% of social work students reported four or more ACEs while 19% indicated zero ACEs.

### *3.4. Method: Study Selection of Health Professions Student ACE Research*

An electronic search of three health-related data bases (Ovid Medline, PubMed/Central and Cochrane Library) uncovered a lack of ACE-Q research with college students in the health professions apart from nursing. Search terms included: 1) childhood adversity/adverse childhood experiences/ACE/ACEs/ACE Questionnaire, and 2) students in nursing, medicine, physical therapy, dentistry, pharmacy, or respiratory therapy. Inclusion criteria were 1) quantitative empirical studies, 2) students enrolled in a health profession, 3) ACE-Q noted as a data collection measure, and 4) published peer-reviewed articles between 2015-2023. Articles that met eligibility criteria were reviewed. As nursing was the only discipline with more than one ACE study, an investigation including a nationally representative student sample was selected for comparison purposes (Clark & Aboueissa, 2021). The only other studies included one in oral health and one in medicine. A general student sample of undergraduate students was also added to facilitate additional comparisons among social work and health professions students regarding the distribution of ACE scores. Age of participants across study samples ranged between 18 and 29 years old (see Table 2).

Table 2. Comparison Scores of Social Work Student Composite with Other ACE Student Samples (%)

	<b>Social Work<sup>a</sup></b> <b>(n = 831)</b> <b>F = 85%</b>	<b>Nursing<sup>b</sup></b> <b>(n = 1,094)</b> <b>F = 93%</b>	<b>Oral Health<sup>c</sup></b> <b>(n = 66)</b> <b>F = 82%</b>	<b>Medical<sup>d</sup></b> <b>(n = 98)</b> <b>F = 51%</b>	<b>Undergraduate<sup>e</sup></b> <b>(n = 2,969)</b> <b>F = 64%</b>	
1	Parental divorce/ separation	46	48	38	12	33
2	Household substance abuse	40	40	35	15	16
3	Household mental illness	37	51	30	29	16
4	Emotional abuse	37	44	41	21	19
5	Emotional neglect	31	39	24	8	15
6	Physical abuse	25	26	15	13	10
7	Child sexual abuse	25	28	17	15	8
8	Household incarceration	16	17	3	7	8
9	Parental domestic violence	15	11	9	7	6
10	Physical neglect	11	15	8	6	3
	ACE Score					
	0 ACE	19	16	24	49	47
	1 ACE	17	16	NA <sup>f</sup>	20	21
	≥ 4	32	41	26	12	12

<sup>a</sup> ACE type rank order from highest to lowest % for social work student composite, F = Female.

<sup>b</sup> 72% BSN, 60% age range 18-29; Clark & Aboueissa (2021)

<sup>c</sup> undergraduates, 73% age range 19-24; Haslam et al. (2023)

<sup>d</sup> 3rd year medical students, age not reported, although on average medical students graduate in their mid-20s; Sciolla et al. (2019)

<sup>e</sup> undergraduates, age range 18-25; Windle et al. (2018)

<sup>f</sup> NA = Data not reported

### *3.4. Prevalence of ACEs in Social Work Students Compared to Other Student Samples*

Descriptive comparisons indicate that social work and nursing students have higher rates for each ACE type and total ACE score than the other student samples. The top four ACE types were the same for all student samples except for medical students, whose rates of 12% for parental divorce/separation were three to four times less than the others. Although physical neglect rates were low for all student samples, the proportions for social work and nursing trainees were still two to three times higher than the others. Regarding rates of childhood physical and sexual abuse, approximately 25% of social work and nursing students reported experiencing such maltreatment, which was double the rate for the general sample of undergraduate students.

Furthermore, the overall proportion of “0” ACEs was comparable for medical (49%) and undergraduate students (47%), which was double the rate for oral health students (24%) and triple for social work (19%) and nursing (16%) students. A similar pattern was found regarding the overall proportion of four or more ACEs, where medical and undergraduate students’ rates were 12%. In contrast, the rate for oral health students was two times higher (24%), and the rates for social work students (32%) and nursing students (41%) were three times higher.

Differential amounts of adverse childhood experiences may be associated with the sample gender composition of ACE student studies, as participants in social work, nursing, and oral health were primarily female (82%-93%) compared to medical (51%) and undergraduate students (64%). Further exploration of ACEs among student samples of medical trainees and undergraduates was done to explore possible gender differences within overall results. Sciolla and colleagues (2019) found that female medical students reported higher rates than males for each ACE category, and three reached statistical significance: emotional abuse (32% vs 10%), physical abuse (11% vs. 5%), and domestic violence (14% vs. 0%). Although females comprised only 51% of the medical student sample, those with an ACE score of four or more were 100% female (Sciolla et al., 2019). Similar patterns of gender differences were also found in the general sample of undergraduate students (Windle et al., 2018). Females were found to have higher ACE rates than males for all categories except for physical neglect (males = 3%; females = 2%). Females also had higher scores of four or more ACEs than males (14% vs. 9%). Statistical differences were not assessed. A further look at gender differences in oral health students also revealed that females reported a higher incidence than males for each ACE type with significant differences for emotional and physical abuse (Haslam et al., 2023).

### *3.5 Summary of Lessons Learned*

Our composite demographic profile of BSW/MSW ACE studies found participants to have similar characteristics to those with the highest ACE rates in general population studies: females, younger adults, and multiracial individuals (Merrick et al., 2018). These population characteristics are also represented in social work trainees in the U.S., particularly for undergraduates (CSWE, 2020). Information on the nature of educational

institutions (public vs. private) and their regional location indicated broad sample representation from public universities throughout the U.S.

Albeit differing levels, the top four ACE types (parental divorce/separation, substance abuse, mental illness, and emotional abuse) were the same across student samples apart from medical students, whose rates for parental divorce were much lower than the others. The least endorsed ACE categories across all college students were childhood physical neglect and incarceration of a household member. Social and economic status may be a reason for a lack of such exposure, as those attending four-year colleges are more likely to be from middle to high-income households (Zhou, 2019). Additionally, individuals exposed to childhood poverty are underrepresented in higher education and overrepresented in cases of child physical neglect and adult incarceration (Western, 2019; Yang & Maguire-Jack, 2018).

Results of the descriptive comparison suggest that social work and nursing trainees are characterized by childhood adversity ( $\geq 4$  ACEs) rates almost three times that of medical and undergraduate students. Even when the sample composition in ACE studies is more gender-balanced (e.g., college student population studies), research shows that females report higher ACE levels than males, specifically in child sexual and physical abuse. This helps to recognize that female-dominated helping professions (e.g., social work, nursing) are likely to have trainees with high cumulative adverse life events due to the prevalence of victimization of girls and women in the U.S. (e.g., childhood sexual abuse).

### 3.6. Limitations

Empirical articles that assess childhood adversity for students majoring in a health profession are minimal, and studies that use the ACE-Q are even more limited. No published student studies were found in the health professions except those in nursing, medicine, and oral health. Although trauma-informed care is a standard of practice in the health professions (Burns et al., 2023), assessing childhood adversity among students entering these fields appears to be less common. Except for this article, descriptive comparisons among social work students and health profession majors regarding ACE prevalence and prominent types are lacking. This area is ripe for investigation, particularly as health-focused interprofessional education (IPE) continues to grow as part of social work programs.

A composite profile of social work student ACE research allows for understanding the prevalence of ACE types among social work trainees; however, it does not provide a clear picture regarding their impact on student well-being and professional development. Black et al. (1993) cautioned that social work students with histories of childhood adversity (i.e., *wounded healers*) may have different orientations toward clients and be at risk for countertransference biases and other professional impacts (e.g., professional-client boundary issues). Thirty years later, whether such histories increase professional (and personal) vulnerabilities for social work students remains largely unanswered.

### 3.7 Steps Forward

Part 4 encompasses inquiry into the effects of ACEs on social work students' personal and professional development. Four studies from the composite profile of ACE-Q studies explore such outcomes (see Table 1). Social work is a challenging profession, and a central issue is the influence of personal hardship on professional relationships and effectiveness with clients. Among such discourse is whether histories of childhood adversity may increase vulnerabilities for student *wounded healers*. Part 4 reviews empirical evidence on whether childhood *wounds* (i.e., ACEs) are found to present as risk factors, trauma assets, or a non-variable in relationship to adult well-being and professional development for social work students.

## 4. Part 4: The Impact of ACEs on Well-being for Social Work Students

### 4.1. Impact of ACEs on Student Personal and Professional Outcomes

Although the ACE-Q was first used in 2015 with social work students, only four studies have analyzed their impact, two of which are student theses (McLean & DeLacey, 2022; Negrete, 2020). McLean and DeLacey (2022) explored the relationship between ACE scores and levels of well-being among BSW ( $n = 15$ ) and MSW ( $n = 74$ ) students. The authors used the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS, Tenant et al., 2007), a 14-item Likert scale (1 to 5) with a minimum score of 14 and a maximum score of 70. Participants reported comparable levels of well-being ( $M = 46.8$ ,  $SD = 8.6$ ) to the general population ( $M = 51.0$ ,  $SD = 7$ , Tenant et al., 2007). The most common well-being responses were, "I have been feeling optimistic about the future" and "I have been feeling loved," both with 71% of participants answering "Often" or "All of the time." No significant relationship was found between the number of ACEs and social work students' well-being levels.

Lyter (2021) investigated ACE scores and levels of resilience (i.e., Brief Resilience Scale/BRS, Smith et al., 2010) and life satisfaction (i.e., Life Satisfaction Scale/LSS, Kuroki, 2016) among BSW ( $n = 69$ ) and MSW ( $n = 45$ ) students. Despite relatively high levels of ACEs (32%  $\geq 4$  or more ACEs), participants' resilience and life satisfaction scores were positive. The five-item BRS mean was 3.12 ( $SD = 0.67$ , range 1 to 5). More than half of the respondents (63.4%) chose "strongly agree" and "agree" for the statement, "I tend to bounce back quickly after hard times." Furthermore, participants were generally satisfied with their lives. The mean for the single-item LSS was 3.2 ( $SD = 0.67$ , range 1 to 4); 89% of respondents chose "satisfied" or "very satisfied" with their lives. No significant relationship was found between the number of ACEs and levels of resilience or life satisfaction.

Negrete (2020) examined the relationship between ACE scores and field specialization, engagement in personal therapy, and internship challenges (e.g., countertransference) among MSW students ( $n = 60$ ). A statistically significant association was found for those who had reported childhood exposure to mental illness in the household and current specialization in mental health (as opposed to child welfare,

substance abuse, medical social work, or macro practice). No relationship was found between participation in personal therapy and ACE scores. Of those who reported experiencing childhood emotional neglect in childhood, 93% also revealed that they had engaged in personal therapy. This relationship was statistically significant. Regarding challenges experienced during an internship, the most frequently cited were time management/balancing duties (27%), self-doubt (13%), a lack of guidance or supervision (13%), and countertransference (12%). No significant associations were found between these internship challenges and ACE scores.

Thomas and Beecher (2018) found with their MSW student sample ( $n = 139$ ) that higher ACE scores were associated with higher rather than lower levels of resilience (i.e., Conner-Davidson Resilience Scale/CD-RISC, Conner & Davidson, 2003). MSW ACE scores were higher on average than those of human service providers ( $M = 3.04$ ,  $SD = 2.51$  vs.  $M = 2.18$ ,  $SD = 2.13$ ). Their average perceived stress score ( $M = 18.29$ ,  $SD = 6.19$ ) indicated moderate stress levels (range 14-26). Resilience scores for MSW students ( $M = 77.46$ ,  $SD = 9.88$ , range 0-100) were comparable to norms found in studies of the general population ( $M = 80.04$ ,  $SD = 12.8$ ) and college students ( $M = 72.9$ ,  $SD = 13.5$ ). Participants' ages, along with levels of ACEs, perceived stress, religious faith, experiential avoidance, and mindfulness, were also examined as predictors of resilience. All the variables in the final model except age and mindfulness were found to significantly contribute to the model predicting resilience ( $R^2 = 39.2\%$ ). Furthermore, higher ACE scores and stronger religious faith were associated with increased resilience, while higher scores of experiential avoidance and perceived stress were associated with lower levels of resilience.

#### *4.2. Lessons Learned*

Findings from these studies indicate that social work students experience moderate stress during their academic journeys and that many come into social work education with considerable histories of childhood adversity. Student results also underscore how such wounds (ACEs) may positively contribute to students' well-being and practice efficacy, thus challenging social work educators to rethink assumptions that such histories are necessarily problematic. Furthermore, student ACE scores were not associated with practice challenges like countertransference. Paradoxically, Thomas and Beecher (2018) found that average ACE scores were associated with higher rather than lower levels of resilience, while the other investigations found no relationship with well-being, resilience, or life satisfaction. Compared to general population studies, social work students have higher ACE scores and stress levels yet comparable levels of well-being and resilience, scoring particularly high on optimism, feeling loved, and the ability to bounce back from hard times (McLean & DeLacey, 2022; Thomas & Beecher, 2018). Negrete (2020) highlights that social work students recognize the need for personal therapy, and many have engaged in it (68%), particularly those experiencing childhood emotional neglect (93%). An ability to face difficult or painful experiences with awareness and acceptance rather than engage in experiential avoidance strategies may be important to strengthen resilient responses (Thomas & Beecher, 2018).



### *4.3. Limitations*

The main limitation is the need for ACE impact studies conducted with social work students. The disproportionate focus of ACE prevalence studies rather than impact investigations limits what can be learned concerning mitigating aftereffects on social work students' academic performance and professional development. Further inquiry is needed on the impact of ACEs on student practice effectiveness; apart from Negrete's (2020) investigation of ACE scores and their association with internship challenges (e.g., countertransference), little is known. This does not infer that ACE impact research is nonexistent. However, it does highlight a lack of published studies that implement the ACE-Q for assessing the influence of childhood adversity on personal and practice outcomes for social work majors.

### *4.4. Steps Forward*

Although adverse life experiences may contribute to career choices for social work students, further exploration is needed regarding motivating factors from such experiences and their implications for practice (Lyter, 2021). Negrete (2020) asked social work students about their influences on majoring in social work. The highest reported factors were "utilize my past experiences to help others" (27%), "helping others" (18%), "previous personal experience with social services" (17%), and "passion for human rights and social justice" (17%). Further exploration would be fruitful in discovering how one's past experiences may impact students' motivation to help others. For instance, perhaps social work students construe purpose from their suffering and, as a result, make deliberate choices to want to help rather than harm others. Engaging in positive meaning-making may be an essential aspect of coping and, consequently, in advancing student resilience.

As indicated in Table 2, 32% of social work students experience four or more types of ACEs. Additionally, BSW (and many MSW students) engage in post-secondary education during a critical period of mental health development as they transition from late adolescence to early adulthood (18 to 25 years of age). The social work student impact studies reviewed in this section indicated that ACE scores were not correlated with resilience, well-being, or life satisfaction (Lyter, 2021; McLean & DeLacey, 2022; Thomas & Beecher, 2018). However, we do not know if this is the case regarding associations with psychological distress (e.g., depression, anxiety, post-trauma symptoms).

Examining the level of ACE scores (four or more versus three or less) or type of ACEs (e.g., childhood sexual and physical abuse versus parental divorce) may further differentiate who is more at risk for problematic psychological and professional outcomes. Acknowledging and addressing the implications of ACEs in the lives of student social workers is crucial to providing adequate support and promoting resilience within this population.

More research is needed to understand the aftereffects of childhood adversity on professional development for social work students. Students with a history of ACEs may find motivation and fulfillment in their work, have enhanced empathy and sensitivity to the feelings of others, and leverage their personal experiences to connect with individuals

facing similar challenges, offering a sense of understanding and validation. Simultaneously, they may face challenges in maintaining objectivity, setting boundaries, and managing their emotional well-being, leading to compassion fatigue and burnout if not properly managed. Negrete (2020) concluded that social work students need to be mindful of their influences for entering the field of social work and choosing their field specialization to ensure that they take the appropriate measures to reduce the risk of vicarious trauma and ensure ethical practice. Social work educators may equip students with the necessary tools to support and navigate these complexities. Social work students are not expected to be free of psychosocial problems; however, they are expected to recognize personal issues and be willing to work through them.

### Conclusion

Social work students may gravitate toward the profession because of personal encounters with childhood adversity. These experiences, collectively known as Adverse Childhood Experiences, have the potential to impact the personal lives and professional journeys of social work students. Implications for social work educators include addressing students' adverse life events in a balanced manner, not only as a possible risk factor but also as a potential benefit for entering a helping profession. Establishing a supportive and nurturing environment within the educational setting is critical for fostering growth and empowering students to address their needs.

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