The Impact of Adverse Childhood Experiences on Sexual Well-being Among Youth Formerly in the Foster Care System

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Abstract

This study evaluates the impact of broad and singular measures of adverse childhood experiences (ACE) and severity of sexual abuse on sexual well-being among youth formerly in the foster care system (YFFC). Divorce, alcohol/drug use within the home, the presence of mental illness or a family member suicide attempt, and sexual abuse severity increased odds of negative sexual outcomes and predicted lower sexual well-being. Overall ACE levels negative impacted outcomes, but positively impacted sexual well-being. Research must move beyond summative ACE measures to examine impact of types of ACEs and sexual abuse severity on sexual well-being and sexual health outcomes for YFFC.

The Impact of Adverse Childhood Experiences on Sexual Well-being Among Youth Formerly in the Foster Care System

All youth in the child welfare system have experienced some sort of adverse childhood experience and/or trauma and while the impact of these experiences on youths' mental health is well documented, little research explores their impact on the youths' overall sexual well-being or sexual outcomes. Further, much of the existent research on the impact of child abuse, neglect, home instability, and other adverse childhood situations considers adverse experiences as a singular dimension, often using the totality of the Adverse Childhood Experiences (ACEs), rather than differentiating among types of experiences. When considering sexual abuse, many studies use a single prompt asking about a history of sexual abuse or victimization rather than taking into account various aspects of sexual abuse. To better understand the differential impact of adverse experiences and the severity of sexual abuse experiences on sexual well-being, this study evaluated the level to which both broad and singular measures of adverse childhood experiences and sexual abuse predicted sexual well-being among a sample of youth formerly in the foster care system (YFFC).

Adverse Childhood Experiences in the Lives of Youth in the Foster Care System

In 2017 there were close to 443,000 youth under age 20 in the foster care system (YFCS) in the United States (Children's Bureau, 2018). YFCS are differentiated from other youth in the child welfare system by being placed in an out-of-home placement. Examples of these types of placements include a foster home, kinship care (an out-of-home placement with a relative), a group home, a residential facility, and an emergency shelter, though there are other options as well. The most common reasons for entry into the foster care system are neglect, parental drug use, parental inability to meet the youth's needs, physical abuse, lack of adequate housing, and

youth serious behavioral concerns (Children's Bureau, 2018). Youths' living situations after leaving the foster care system vary, with 49% being reunified with their family of origin, 24% being adopted, and the rest having an alternative placement (Children's Bureau, 2018). Alternative placements include being placed with a relative in kinship care that does not result in adoption, entering the juvenile justice system, or aging out of the system and either moving to live independently or entering into a group home-type placement if they are unable to live independently.

Adverse experiences have clear negative impacts on youths' lives whether in the foster system or not. Most often adverse experiences are measured using the ACEs questionnaire (Dube, Felitti, Dong, Giles, & Anda, 2003). While this scale is widely used, within the ACEs questionnaire there is no differentiation regarding the number of times an experience occurred or the severity of the incident. This means that an individual who, for instance, was fondled sexually against their will one time is scored the same as an individual who has experienced repeated rape over a period of years. This has been noted as a limitation and criticism of the inventory, but the authors have suggested this concern would actually dampen the statistical impact of the individual's scores, thereby understating its predictive effects (Felitti & Anda, 2010).

Even with this caveat, the prevalence of ACE-measured experiences and their impact on individuals' lives is well documented. While 46% of Americans individuals have been exposed to at least one ACE category and 11% more than three, over 50% of youth in the child welfare system have experienced four or more ACEs (Kerker et al., 2015; Sacks, Murphey, & Moore, 2014). Exposure to adverse experiences appears to have a cumulative effect on individuals' psychosocial functioning as dosage effects have been identified in relation to adult

unemployment, mental distress, and poor physical health (Gilbert et al., 2015; Metzler, Merrick, Klevens, Ports, & Ford, 2017). Exposure can be particularly damaging for younger children as the chronic levels of stress associated with adverse experiences can harm social emotional development (Kerker et al., 2015). Other areas affected by adverse experiences are mental health difficulties in childhood, delays in cognitive and emotional development, lower levels of family functioning, substance use, and chronic medical conditions (Hughes et al., 2017; Kalmakis & Chandler, 2015; Kerker et al., 2015).

How adverse experiences affect YFCS has been of particular interest to researchers. Among YFCS or YFFC, not only are ACEs scores predictive of the same psychosocial difficulties noted previously (Conn, Szilagyi, Jee, Blumkin, & Szilagyi, 2015; Villodas et al., 2016), but the scale can even be used to differentiate outcomes between different groups of YFCS (Rebbe, Nurius, Ahrens, & Courtney, 2017). Additionally, research indicates a relationship between the number of adverse experiences YFCS have had and the likelihood of entering into the juvenile justice system while a part of the child welfare system (Vidal et al., 2017).

Impact of Adverse Childhood Experiences on Sexual Well-Being Among YFCS

Youth in the child welfare system receive less sexual health-responsive healthcare and experience significantly higher amounts of negative sexual health outcomes. These include increased incidence of unintended pregnancies and sexually transmitted infections; higher level of engaging in risky sexual behaviors such as having more sexual partners, early sexual initiation, less use of birth control, reduced use of condoms to prevent sexually transmitted infections; and higher rates of participation in transactional sex than peers not involved with the child welfare system (Ramseyer Winter, Brandon-Friedman, & Ely, 2016). Previous research

specifically links adverse experiences to increased odds of sexual risk taking, incidence of STIs, and adolescent pregnancy/paternity as a teenager (Garrido, Weiler, & Taussig, 2017; Hughes et al., 2017; Shpiegel, Cascardi, & Dineen, 2017; Wong, Choi, Chan, & Fong, 2017). Further, YFCS often experience traumatic losses, neglect, and abuse, all of which place them at risk for lower levels of sexual well-being (Ahrens, Katon, McCarty, Richardson, & Courtney, 2012; Briere & Scott, 2015; Maniglio, 2009).

Many YFCS have been exposed to negative parental role models and domestic violence (Brandon-Friedman, Kinney, Pierce, & Fortenberry, 2017; English, Edleson, & Herrick, 2005), two of the strongest correlates of risky sexual behaviors and reduced relationship functioning (Kotchick, Shaffer, Forehand, & Miller, 2001). Additionally, coming from homes with a single parent has been shown to be a risk factor for both entering foster care and for engagement in risk behaviors (Carlson, McNulty, Bellair, & Watts, 2014; Simkiss, Stallard, & Thorogood, 2013), compounding the risks for YFCS. Further, the impact of adverse experiences on aspects of sexual well-being appears to be cumulative, as Hillis et al. (2004) found a dosage effect of ACEs scores on incidence of teen pregnancy. It is notable that even when compared to another high-risk group – youth experiencing homelessness – youth with a previous foster care placement had greater likelihood of engaging in transactional sex (Hudson & Nandy, 2012), indicating factors specific to the foster care system may be at play.

Method

Youth formerly in the foster care system (YFFC) were recruited to participate in an online anonymous survey examining the impact of various aspects of sexual socialization on their overall sexual well-being and sexual outcomes from service organizations targeting YFFC, via Facebook groups for YFFC, through advertisement in a magazine targeted toward YFFC, via

emails sent through schools of social work, and word of mouth. Inclusion criteria included being between ages 18 and 24, having been in an out of home placement of any type for more than a year between ages 12 and 18 in the United States, and no longer being under the wardship of a state or tribal authority. Participants received a $20 e-gift as compensation for their time. Study protocols were approved by the authors' university's Institutional Review Board. The results presented here represent a subset of data collected for the larger study.

Sexual well-being was measured using a modified version of the multidimensional model of sexual well-being (MMSW; Hensel & Fortenberry, 2013) that consisted of 35 items divided into nine subscales, Relationship Quality (6 items; $\alpha = .89$), Sexual Communication (3 items; $\alpha = .84$), Sexual Autonomy (3 items; $\alpha = .69$), Condom Use Efficacy (4 items; $\alpha = .88$), Fertility Control (3 items; $\alpha = .59$), Sexual Esteem (3 items; $\alpha = .53$), Sexual Anxiety (4 items; $\alpha = .68$), Genital Pain (4 items; $\alpha = .89$), and Sexual Satisfaction (5 items; $\alpha = .94$). The original MMSW was designed for individuals with vaginas so three items were modified to make them sex-neutral and one item that could not be modified was removed. A further prompt from the original sexual anxiety subscale was removed due to a data entry error. A composite sexual well-being score was calculated by converting individuals' responses to prompts into z-scores and then summing the converted values; a higher sum score indicated better overall sexual well-being (possible raw score range 35-155; actual z-score range: -61.92 to 25.18; $\alpha = .92$). Additional sexual health outcomes considered were engagement in transactional sex, history of a sexually transmitted infection (STI), and experiencing an unintended pregnancy either themselves or of a partner, each as a single yes/no prompt.

Youths' experiences of abuse and/or neglect were measured using the 10-prompt Adverse Childhood Experiences scale (ACEs; Dube et al., 2003), which evaluates the presence or absence

(yes/no) of ten types of abuse and neglect experienced before the age of 18. Total ACEs scores were summed with each yes equaling one point (range: 0-10, $\bar{x}$ = 3.08; SD = 2.51). To further evaluate the impact of sexual abuse experiences, the Childhood Sexual Abuse Severity Scale (CSAS; Aalsma & Fortenberry, 2011) was used. This includes four yes/no prompts that are summed for a total severity level (range: 0-4, $\bar{x}$ = 1.46; SD = 1.81). As gender, time in the foster care system, and race have all been shown to impact sexual well-being among YFCS (Ahrens, McCarty, Simoni, Dworsky, & Courtney, 2013; Courtney et al., 2011), these variables were used as analytic controls. Some aspects of the MMSW may be impacted by whether youth are in a committed relationship or not so relationship status was also included as a control variable for linear regressions. Logistic regressions only included age as a control variable due to low cell counts.

Results

A total of 227 youth completed all measures. Data from eight youth were removed as multivariate outliers leaving a final sample size of 219. Demographic information for the sample is provided in Table 1. Twelve hierarchical regressions were performed to evaluate the impact of aspects of the youths' experiences on their sexual well-being, one for total ACEs scores, one for each of the ten individual ACEs prompts, and one for the total CSAS level. As there were no youth who did not witness domestic violence and had an unintended pregnancy, this variable was excluded from subsequent multivariate analysis.

Unexpectedly, the full ACEs was a significant positive predictor of sexual well-being (β = .137, $p < .05$; Tables 2a and 2b). Additionally, three individual ACEs prompts had a significant positive impact on sexual well-being: experiencing physical abuse (β =.138, $p < .05$), experiencing physical neglect (β = .154, $p < .05$), and a history of physical abuse of a caregiver

($\beta = .182$, $p < .01$). Sexual abuse ($\beta = -.165$, $p < .05$) had a negative impact on sexual well-being. Total ACEs scores were associated with increased odds for experiencing an unintended pregnancy themselves or of a sexual partner (AOR = 1.556, 95% CI=1.108-2.053, $p < .01$; Tables 3a, 3b, and 3c), engaging in transactional sex (AOR = 1.528, 95% CI = 1.108-2.106, $p < .01$), and being diagnosed with an STI (AOR = 1.307, 95% CI = 1.019-1.677, $p < .05$).

Table 1: Demographics of Study Participants[a]

	n	%		*n*	%
Race[b]			Sex Assigned at Birth		
African American / Black	68	31.1	Female	130	59.4
American Indian / Native Alaskan	7	3.2	Male	89	40.6
Asian	11	5.0			
Biracial / Mixed	31	14.2	Gender[b]		
Native Hawaiian or Pacific Islander	3	1.4	Gender Diverse	0	0.0
White	116	53.0	Female	129	58.9
Unlisted Identity	9	4.1	Male	89	40.6
Prefer to Not Say	0	0.0	Non-Binary/Genderqueer	1	0.5
			Trans man/Trans masculine	1	0.5
Ethnicity			Trans woman/Trans feminine	0	0.0
Not Hispanic / Latino	173	79.0	Unlisted Identity	0	0.0
Hispanic / Latino	39	17.8	Prefer to Not Say	0	0.0
Prefer to Not Say	7	3.2			
			Relationship Status[b]		
Sexual Orientation Identity[b]			Divorced	2	0.9
Asexual	2	0.9	Married/Partnered	37	16.9
Bisexual	26	11.9	Polyamorous Relationship	9	4.1
Gay	15	6.8	Separated	1	0.5
Heterosexual/Straight	169	77.2	Single/Never Married	170	77.6
Lesbian	8	3.7	Widowed	0	0.0
Pansexual	3	1.4	Prefer to Not Say	3	1.4
Queer	1	0.5			
Unlisted Identity	0	0.0			
Prefer to Not Say	0	0.0			

[a]$n = 219$; [b]Totals may be greater than 219 as participants could select more than one option in several categories

Individual ACEs items that increased odds for experiencing an unintended pregnancy themselves or of a partner were sexual abuse (AOR = 4.043, 95% CI = 1.827-8.947, $p < .0001$), parental divorce (AOR = 6.570, 95% CI = 1.514-28.251, $p < .05$; Tables 3a, 3b, and 3c), family member alcohol/drug use (AOR = 3.978, 95% CI = 1.158-13.669, $p < .05$), and household member with mental illness/suicide attempt (AOR = 4.529, 95% CI = 1.756-11.682, $p < .01$); while those for engaging in transactional sex were sexual abuse (AOR = 7.210, 95% CI = 2.689-19.331, $p < .05$), parental divorce (AOR = 9.514, 95% CI = 1.249-72.449, $p < .05$), and household member mental illness/suicide attempt (AOR = 11.105, 95% CI = 2.511-49.117, $p < .01$). Significant risk factors for being diagnosed with an STI were sexual abuse (AOR = 5.416, 95% CI = 2.218, 13.222, $p < .01$), family member alcohol/drug use (AOR = 5.366, 95% CI = 1.226-23.492, $p < .05$), and household member with a mental illness/suicide attempt (AOR = 8.367, 95% CI = 2.407-29.082).

As hypothesized, increasing severity of sexual abuse negatively impacted sexual well-being ($\beta = -.200$, $p < .01$; Table 2b). CSAS scores were associated with increased odds for engaging in transactional sex (AOR = 2.038. 95% CI = 1.477-2.812, $p < .001$; Table 3c), being diagnosed with an STI (AOR = 1.488, 95% CI = 1.176-1.884), and experiencing an unintended pregnancy (AOR = 1.424, 95% CI = 1.150-1.762).

Table 2a: Results of Hierarchical Multiple Regression for Sexual Well-Being[a]

	Model 1		Full ACEs Scale		Emotional Abuse		Physical Abuse		Sexual Abuse		Emotional Neglect		Physical Neglect	
	b	β	*b*	β	*b*	β	*b*	β	*b*	β	*b*	β	*b*	β
Age[b]	-.088	-.008	-.352	-.033	-.202	-.019	-.264	-.025	-.015	-.001	-.112	-.010	-.421	-.039
Length of Time in Foster System[b]	-0.428	-0.107	-.564	-.142	-.441	-.111	-.389	-.098	-.156	-.039	-.463	-.116	-.465	-.117
Race/Ethnicity[c]	4.025	.112	4.191	.117	3.841	.107	3.808	.106	3.437	.096	4.069	.113	4.184	.116
Gender Identity[d]	7.404	**.207****	7.570	**.212****	7.526	**.211****	7.316	**.205****	6.307	**.177****	7.381	**.207****	7.019	**.196****
Relationship Status[f]	1.570	.038	2.565	.062	2.259	.054	1.874	.045	1.649	.040	2.279	.055	2.597	.062
Sexual Orientation[e]	-8.733	**-.211****	-8.655	**-.210****	-8.265	**-.200****	-8.297	**-.201****	-7.665	**-.186****	-8.627	**-.209****	-7.905	**-.191****
Adverse Experience	---		.960	**.137***	5.597	.117	5.899	**.138***	-6.130	**-.165***	3.387	.079	6.089	**.154***
F	**4.474*****		**4.444*****		**4.321*****		**4.537*****		**4.601*****		**4.043*****		**4.664*****	
R^2	0.112		0.128		0.125		0.131		0.132		0.118		0.134	
ΔR^2	---		**.016****		0.013		**.019***		**.020***		0.006		**.022***	

Notes: [a]*n* = 219; [b]in years; [c]Reference Group: White; [d]Reference Group: Female; [e]Reference Group: Heterosexual/Straight; [f]Reference Group: Single
* p <.05; ** p <.01; *** p < .001

Table 2b: Results of Hierarchical Multiple Regression for Sexual Well-Being[a]

	Model 1		Parent Separation		Domestic Violence		Substance Abuse in Home		Mentally Ill Family Member		Familial Incarceration		Full CSAS	
	b	β	*b*	β	*b*	β	*b*	β	*b*	β	*b*	β	*b*	β
Age[b]	-.088	-.008	-.102	-.009	-.474	-.044	-.169	-.016	-.036	-.003	-.246	-.023	.035	.003
Length of Time in Foster System[b]	-0.428	-0.107	-.448	-.112	-.427	-.107	-.483	-.121	-.366	-.092	-.486	-.122	-.119	-.030
Race/Ethnicity[c]	4.025	.112	4.031	.112	4.020	.112	4.386	.122	3.932	.109	3.795	.106	3.164	.088
Gender Identity[d]	7.404	**.207****	7.384	**.207****	7.311	**.205****	7.288	**.204****	7.222	**.202****	7.376	**.206****	6.611	**.185****
Relationship Status[f]	1.570	.038	1.674	.040	2.388	.057	2.102	.051	1.408	.034	1.835	.044	1.713	.041
Sexual Orientation[e]	-8.733	**-.211****	-8.751	**-.212****	-7.903	**-.191****	-8.546	**-.207****	-8.439	**-.204****	-8.791	**-.213****	-6.420	**-.155***
Adverse Experience	---		1.181	.030	7.714	**.182****	3.936	.100	-1.495	-.042	4.514	.120	-1.942	**-.200****
F	**4.474*****		**3.849****		**5.044*****		**4.189*****		**3.869****		**4.347*****		**4.906*****	
R^2	0.112		0.113		0.143		0.122		0.114		0.126		0.140	
ΔR^2	---		0.001		**.031****		0.010		0.001		0.014		**.028****	

Notes: [a]*n* = 219; [b]in years; [c]Reference Group: White; [d]Reference Group: Female; [e]Reference Group: Heterosexual/Straight; [f]Reference Group: Single
* p <.05; ** p <.01; *** p < .001

Table 3a: Multiple Logistic Regression Model for Relationships Between Adverse Experiences and Sexual Outcomes[a]

	Full ACEs Scale				ACES - Emotional Abuse				ACEs - Physical Abuse				ACEs - Sexual Abuse			
	Estimate	S.E.	Wald	95% C.I.	Estimate	S.E.	Wald	95% C.I.	Estimate	S.E.	Wald	C.I.	Estimate	S.E.	Wald	C.I.
Engagement in Transactional Sex[b]	0.424	0.164	**6.696****	(1.108, 2.106)	0.737	0.768	0.919	(.463, 9.419)	0.283	0.581	0.236	(.425, 4.146)	1.975	0.503	**15.412*****	(2.689, 19.331)
Diagnosis of STI/STD[c]	0.268	0.127	**4.439***	(1.019, 1.677)	0.429	0.647	0.440	(.432, 5.454)	0.188	0.529	0.127	(.428, 3.405)	1.689	0.455	**13.758*****	(2.218, 13.222)
Experienced Unintended Pregnancy[d]	0.442	0.141	**9.807****	(1.180, 2.053)	0.657	0.641	1.052	(.550, 6.769)	0.434	0.521	0.695	(.556, 4.286)	1.397	0.405	**11.881*****	(1.827, 8.947)

Notes: [a]n = 219; [b]reference = yes; [c]reference = yes; [d]reference = yes; * p <.05; ** p <.01; *** p < .001

Table 3b: Multiple Logistic Regression Model for Relationships Between Adverse Experiences and Sexual Outcomes[a]

	ACEs - Emotional Neglect				ACEs - Physical Neglect				ACEs - Parent Separation / Divorce				ACEs - Domestic Violence in Home			
	Estimate	S.E.	Wald	C.I.	Estimate	S.E.	Wald	C.I.	Estimate	S.E.	Wald	C.I.	Estimate	S.E.	Wald	95% C.I.
Engagement in Transactional Sex[b]	1.987	1.038	3.661	(.953, 55.801)	0.510	0.580	0.773	(.534, 5.192)	2.253	1.036	**4.730***	(1.249, 72.449)	1.102	0.764	2.080	(.673, 13.448)
Diagnosis of STI/STD[c]	-0.106	0.500	0.045	(.338, 2.395)	0.955	0.565	2.859	(.859, 7.870)	1.182	0.635	3.463	(.939, 11.318)	0.387	0.578	0.449	(.547, 4.571)
Experienced Unintended Pregnancy[d]	0.758	0.564	1.804	(.706, 6.452)	1.160	0.602	3.715	(.981, 10.375)	1.883	0.749	**6.317***	(1.514, 28.251)	XXX[e]	XXX[e]	XXX[e]	(XXX, XXX)[e]

Notes: [a]n = 219; [b]reference = yes; [c]reference = yes; [d]reference = yes; * p <.05; ** p <.01; *** p < .001

Table 3c: Multiple Logistic Regression Model for Relationships Between Adverse Experiences and Sexual Outcomes[a]

	ACEs - Substance Use in Home				ACEs - Mentally Ill Family Member				ACEs - Family Member Incarcerated				Full CSAS Scale			
	Estimate	S.E.	Wald	C.I.	Estimate	S.E.	Wald	C.I.	Estimate	S.E.	Wald	C.I.	Estimate	S.E.	Wald	C.I.
Engagement in Transactional Sex[b]	1.467	0.759	3.739	(.980, 19.186)	2.407	0.759	**10.071****	(2.511, 49.117)	0.240	0.505	0.226	(.472, 3.423)	0.712	0.164	**18.779*****	(1.477, 2.812)
Diagnosis of STI/STD[c]	1.680	0.753	**4.974***	(1.226, 23.429)	2.124	0.636	**11.170*****	(2.407, 29.082)	0.769	0.524	2.153	(.772, 6.025)	0.398	0.120	**10.917*****	(1.176, 1.884)
Experienced Unintended Pregnancy[d]	1.381	0.630	**4.809***	(1.158, 13.669)	1.511	0.483	**9.765****	(1.756, 11.682)	0.697	0.484	2.073	(.777, 5.191)	0.353	0.109	**10.529****	(1.150, 1.762)

Notes: [a]n = 219; [b]reference = yes; [c]reference = yes; [d]reference = yes; [e]could not be calcuated due to cell size of 0; * p <.05; ** p <.01; *** p < .001

Discussion

This research examined the impact of various adverse childhood experiences on the overall sexual well-being and select sexual health outcomes among a sample of youth formerly in the foster care system. By differentiating between different types of adverse experiences, it was possible to determine what experiences most hamper sexual well-being. Previous research suggests that adverse experiences negatively impact sexual well-being and lead to negative sexual health outcomes, but for these youth the relationships were more complex.

Home environment concerns such as divorce, alcohol/drug use within the home, the presence of mental illness or a family member suicide attempt, and overall levels of adverse experiences increased the odds of specific negative sexual outcomes. Social-ecology and cumulative risk theories can be used as a means of understanding this phenomenon, suggesting that complex social interactions between macro, mezzo, and micro influences impact YFCS's health (Garrido et al., 2017; Shpiegel et al., 2017). At the micro level, race/ethnicity, sexual orientation identity, gender identity, socioeconomic status, and educational level may play a role as each are associated with reduced levels of sexual well-being (Ahrens et al., 2013; Centers for Disease Control and Prevention, 2016).

At the mezzo level, YFC are often exposed to multiple cumulative risk factors but not as many factors that promote resiliency (Garrido et al., 2017; Shpiegel et al., 2017). These include family situations that limit youths' exposure to positive relationship models, coupled with continuous exposure to less functional ones (Brandon-Friedman et al., 2017). This could extend into youth's time in the foster care system as YFC report lacking exposure to positive relationships even while in foster homes (Brandon-Friedman et al., 2017; Courtney et al., 2011).

At the macro level, the risk factors of lack of sexual education, access to sexual healthcare, and inattentiveness to sexuality-related needs confronting YFC may have a significant impact.

Contrary to hypotheses and previous research findings (e.g., Hillis et al., 2004; Ports, Ford, & Merrick, 2016), overall levels of adverse experiences positively impacted sexual well-being. Reasons for these discrepancies are unclear, but may relate to differences in sampling. Despite the high prevalence of ACEs in the lives of YFC, much of the research on cumulative effects has been conducted on community samples. The experiences of individuals not involved with such a complex governmental system that controls large aspects of their lives are very different from those of YFC, possibly impacting the ways in which adverse experiences impact their lives.

Other contributing factors may be that as the number of youths' adverse experiences increases, so does their likelihood of entering into the foster care system. Once in the foster care system, most youth receive clinical services to address their trauma, which may help them process what occurred, improve their psychosocial functioning, and build resilience. Therapeutic services also increase the number of adults in youths' lives, some of whom become positive influences and serve as a form of attachment figure. As the number and strength of youths' relationships with adults has been shown to improve sexual well-being (Manlove, Welti, McCoy-Roth, Berger, & Malm, 2011; Stott, 2012), the presence of these individuals in the youths' lives could be serving as a buffer against the negative impact of the trauma they have experienced.

Further, the measure of sexual well-being used in this study included positive facets of sexual well-being such as sexual self-esteem, sexual autonomy, and sexual satisfaction. The foster care system is designed to provide a more supportive and positive living environment, thereby exposing youth to family systems with better functionality. These relationship structures

may then serve as models for better relationship dynamics and more individual empowerment. Ideally therapeutic services will also enhance youths' self-awareness and communication skills, providing them with skills to better verbalize relationship and sexual desires. The unique inclusion of these types of positive occurrences in the evaluated measure may have altered the relationship between ACEs and sexual well-being in this sample.

These same factors may also contribute to the finding that physical abuse, physical neglect, and domestic violence in the home had positive impacts on sexual well-being. These three adverse experiences are among the top reasons for entry into the foster care system (Children's Bureau, 2018), providing youth access to the services and role models discussed previously. Thus, while these experiences can clearly have a negative impact on youths' lives both on their own and through the trauma of being removed from their families of origin, they may help fulfill part of the foster care system's goal of enhancing youths' well-being by providing them with a nurturing, positive environment that addresses previous negative experiences through opportunities for learning new relationship structures and achieving intrapsychic and interpersonal growth.

On the other hand, cumulative ACE scores increased individuals' odds of experiencing an unintended pregnancy themselves or of a partner, having been diagnosed with an STI, and engagement in transactional sex. As these sexual outcomes do not take the more positive aspects of sexual well-being into account directly, the benefits of receiving services may be dampened. They could also be one-time experiences, which would not reflect improvements that occur over time.

Sexual abuse seems to overwhelm the impact of treatment and increased resiliency that occurs when youth enter the foster care system, however, as experiencing sexual abuse and

increasing severity of it has an increasingly negative impact on overall sexual well-being, experiencing an unintended pregnancy, incidence of STIs, and engagement in transactional sex. This finding is consistent with most previous research, as sexual abuse is considered among the highest risk factors for reduced levels of sexual well-being and negative sexual health outcomes (Abajobir, Kisely, Maravilla, Williams, & Najman, 2017; Wekerle, Goldstein, Tanaka, & Tonmyr, 2017). While YFC likely receive therapeutic services to address trauma, the lack of attention to sexuality and sexual well-being previously noted may dampen the effectiveness of these services. This is clearly an area that requires further attention both in practice and in research. Professionals need a better understanding of the mechanisms through which sexual abuse translates to reduced levels of sexual well-being and ways to address those areas directly in order to enhance this essential aspect of the youths' lives.

Several limitations of this study must be noted. First, recruitment primarily focused on youth who were members of Facebook groups consisting of YFFC and through agencies and organizations that serve YFFC. Engagement with these types of entities requires youth to forefront their identity as YFFC, which many YFFC may not desire to do. Those who were adopted, were reunified with family members, had significantly negative experiences while in the foster care system, or do not want others to know of their time in the foster care are less likely to be a part of such entities, and these youth may not have been reached through the recruitment strategies used. Second, the study focused sexuality, an area of individuals' lives that is often considered among the most private. This likely reduced the number of YFFC who participated. Third, this was a retrospective study requiring youth to reflect on experiences that may have occurred years ago. Individuals' memories are susceptible to many influences and more recent experiences may have affected youths' recollections of events during adolescence.

Conclusion

This study explored the impact of YFFCs' adverse childhood experiences on their overall sexual well-being and specific sexual outcomes. Results indicated that prior familial environments, sexual abuse, physical abuse, and physical neglect have significant negative impacts on these areas of youths' lives while other areas considered by the ACEs measure have little to no impact for this sample. These findings indicate a need to move beyond summative measures of adverse experiences and toward more nuanced manners of exploring the impact of childhood experiences in order to better examine the complex relationships between types of trauma, treatment service provision, and sexual well-being in youth who have experienced a great deal of adversity.

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