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The Impact of Sociosexualization and Sexual Identity Development on the Sexual Well-Being of Youth Formerly in the Foster Care System

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A B S T R A C T

Purpose: Youth in the child welfare system experience disproportionate rates of negative sexual health outcomes as well as increased engagement in risky sexual behaviors. This study explored the impact of sociosexualization and sexual identity development on the sexual well-being of youth formerly in the foster care system.
Methods: Two hundred and nineteen youth formerly in the foster care system completed an Internet-based survey, including measures of the level of sexuality-related topics discussion, relationship quality with the individual with whom the topics were discussed, adverse childhood experiences, severity of sexual abuse history, sexual identity development, and sexual well-being. Hierarchical regressions examined the impact of youths' sociosexualization experiences and four domains of sexual identity development on their sexual well-being.
Results: Sexual Identity Commitment was the strongest positive predictor of youths' sexual well-being ($\beta = .428$) followed by Sexual Identity Synthesis/Integration ($\beta = .350$) and Sexual Identity Exploration ($\beta = .169$). Sexual Orientation Identity Uncertainty negatively impacted sexual well-being ($\beta = -.235$), as did adverse childhood experiences (β range $= -.150$ to $-.178$) and sexual abuse severity (β range $= -.208$ to $-.322$). Sexuality-related discussions with foster parents negatively impacted youths' sexual well-being, whereas discussions with peers were a positive predictor.
Conclusion: Enhancing youths' sexual identity development and reducing the impact of traumatic experience are critical to improving sexual well-being. The influence of sexuality-related discussions on sexual well-being requires further analysis as impacts varied widely. Public policies should provide guidance to professionals on what services should be provided to enhance youths' sexual development.

IMPLICATIONS AND CONTRIBUTION

Positive sexual identity development and reduction in sexual orientation identity uncertainty are essential for youth in the foster care systems' sexual well-being. Adult–youth sexuality-related discussions need improvement, as they had little or negative effects on youth sexual well-being. Public policies focused on enhancing sexual identity development for youth in the foster care system are needed.

Youth in the foster care system (YFC) experience a number of outcomes associated with reduced sexual well-being outcomes: disproportionate rates of unintended pregnancy, sexually transmitted infections, earlier onset of partnered sex, higher numbers

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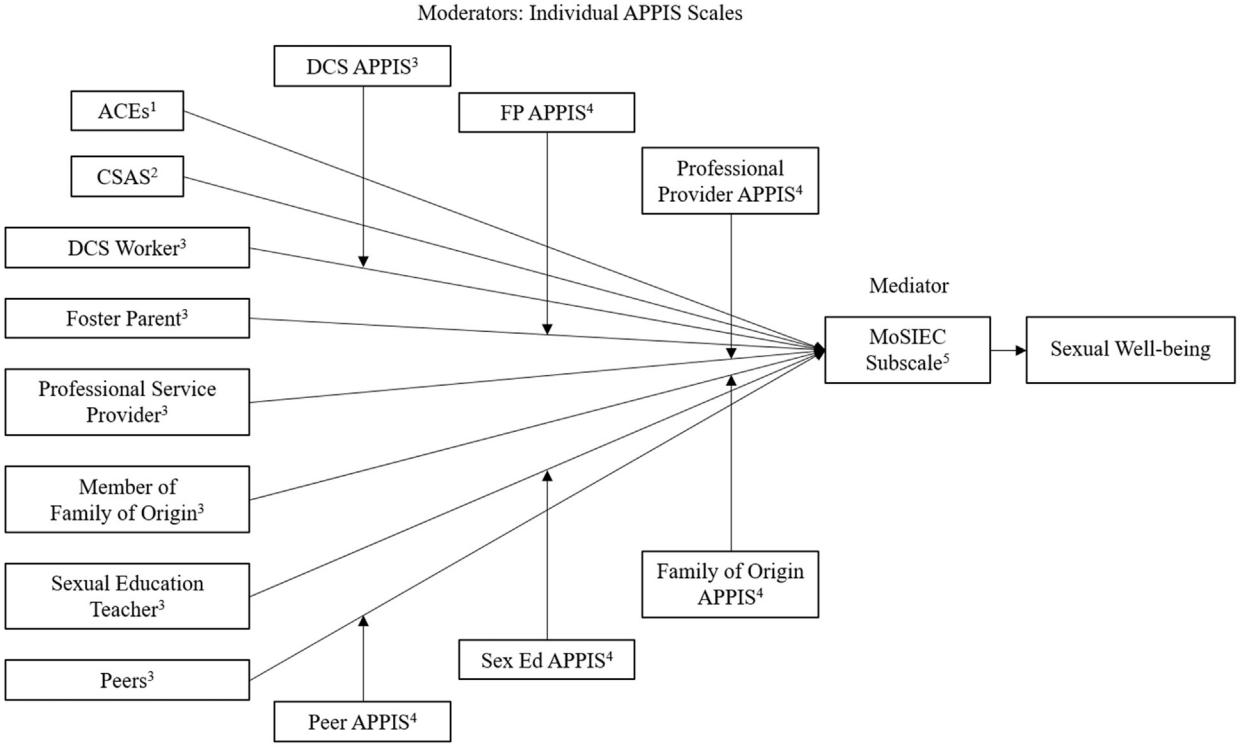
of sexual partners, and engagement in transactional sex [1]. These health risks occur in the context of experienced trauma, familial discord and violence, mental health and substance use concerns, housing instability, and foreshortened views of the future, all of which are associated with negative sexual well-being outcomes. In addition, YFC often lack access to resources that support sexual well-being, such as sexuality education, high-quality relationships with adults, strong relationship role models, and positive sexual messaging [1–6].

One way to connect YFCs' social and environmental situations to sexual well-being is through a framework incorporating youths' sexual identity. Although "sexual identity" is often conflated with "sexual orientation," sexual identity is broader and encompasses all personal and social aspects of individuals' lives relating to the domains of sexual orientation, sexual activities, and romantic desires. These domains have direct and indirect effects on sexual selfhood and ability to successfully engage others in romantic and sexual relationships, avoid negative sexual outcomes, reach educational and occupational goals, and maintain positive relationships [7,8].

All individuals engage in epigenetic phases of sexual identity development, moving toward an integrated identity [7,8]. Theories of sexual development generally are built upon Eriksonian theories of psychosocial development that suggest that individuals proceed through a series of epigenetic phases that progress toward an end goal of achieving an integrated identity. Sexual identity development begins with awareness of emerging sexuality defined through experimentation and comparison to others before integration into a global identity. Development of a coherent, integrated sexual identity affects psychosocial and sexual functioning and is linked to greater sexual and overall well-being [9–12].

Social processes are also important, as individuals' experiences and life situations affect sexual identity development. Models of sociosexualization emphasize that peers, family members, the social environment, and media impact sexual identity development and sexual well-being [6,13–15]. Furthermore, youths' closeness to salience and quality of relationships and identification with others affects the internalization of messages about sexuality [2,16].

As YFC's lives bridge the public–private divide, they are directly impacted by the outsized public focus on managing youth sexuality. YFC are wards of state institutions and are directly impacted by state policies that limit access to information promoting sexual well-being or restrict access to sexual health care [17,18]. Many states limit the types of sexuality-related information that can be provided to YFC by child welfare workers (CWWs), whereas others limit foster parents' ability



Controls: Length of time in the foster care system, racial/ethnic identity, gender identity, sexual orientation identity, and current relationship status
[1]ACEs – Adverse Childhood Experiences
[2]CSAS – Childhood Sexual Abuse Scale
[3]Individuals/Groups for Sexuality-related Discussions
[4]APPIS – Adolescent Professional Provider Interaction Scale (measures strength or relationship and style of communication
[5]4 MoSIEC subscales tested separately – Commitment, Exploration, Synthesis/Integration, Sexual Orientation Identity Uncertainty
[6]Multidimensional Model of Sexual Health

Figure 1. Evaluated model.

to discuss sexuality [17–19]. Private foster care agencies or group homes may further restrict discussions based on religious or moral convictions. This limited access to information often inhibits YFCs' opportunities for healthy sexual development [2,17].

Little research considers YFC's sexual development, but well-established research findings link the harsh familial and social environments often experienced by YFC—physical and emotional abuse, neglect, parental substance use, and interpersonal and neighborhood violence—with several elements of adolescent sexual risk behaviors [3,20,21]. Other relevant factors are racial/ethnicity minority status and younger age at first partnered sexual experience. Membership in a sexual or gender minoritized group is disproportionally prevalent among YFC and often associated with other adverse childhood experiences [22,23]. Distrust of providers, tenuous relationships with adults, and limited access to school-based sexual education because of frequent moves are additional potential influences on sexual identity development [24].

To better understand the sexual well-being of YFC, this study examined the impact of sociosexualization and sexual identity development on YFC's sexual well-being. Hypotheses were as follows: (1) levels of youths' discussion of sexuality-related topics with individuals within their lives will positively impact sexual identity development and sexual well-being; (2) adverse childhood experiences and increasing severity of sexual abuse will have negative impacts on sexual identity development and sexual well-being; (3) Sexual Identity Commitment and Sexual Identity Synthesis/Integration will positively influence sexual well-being, whereas Sexual Identity Exploration and Sexual Orientation Identity Uncertainty will have a negative impact; (4) All four aspects of sexual identity development will mediate the relationship between sociosexualization experiences and sexual well-being; and (5) youths' relationships with the individuals with whom they are discussing sexuality-related topics will moderate the relationship between those discussions and their impact on sexual identity development.

Methods

Recruitment

Recruitment occurred through agencies serving foster care alumni, social media groups for former foster youth and/or foster parents, and advertising in foster care–related publications nationwide. Inclusion criteria were age 18–24 years, having been in an out-of-home foster care placement for greater than 1 year between ages 12 and 18 years, and no longer being under the wardship of a public child welfare agency. Participation required completing an internet-based survey; respondents received a $20 e-gift card as compensation. The study protocol was approved by the authors' university's institutional review board.

Measures

Figure 1 shows the evaluated model and conceptualized relationships between variables.

Sexual well-being. Sexual well-being was measured using a modified version of a multidimensional model of sexual well-being [25], encompassing 10 aspects of sexual well-being across four domains: emotional (relationship quality), physical (sexual satisfaction and absence of genital pain), mental/attitudinal (fertility control, condom use efficacy, sexual esteem, and sexual anxiety), and social (sexual communication and sexual autonomy). The modified scale contained 35 items, 30 rated on a 4-point Likert-type scale from "strongly disagree" to "strongly agree" and five on a 7-point Likert-type scale examining semantic differentials. The original scale was designed only for women, so three items were modified to encompass experiences of individuals of any gender and one sex-specific prompt was removed. An additional item was removed because of an error in the questionnaire participants received. Per the original authors' suggestions (D. Hensel, personal communication), a composite sexual well-being score was calculated for individuals by converting each prompt's raw score to a *z*-score and summing them. Higher scores indicated better overall sexual well-being (possible raw score range 35–155; actual *z*-score range: −60.38 to 26.48; $\alpha = .92$).

1. What a healthy relationship looks like
2. How to communicate with a sexual partner
3. The mechanics of sexual intercourse (what to do/how to do it)
4. Avoiding sexual activity / abstinence
5. Achieving sexual pleasure
6. Avoiding sexually transmitted infections/sexually transmitted diseases (STI/STDs)
7. Avoiding unplanned pregnancy
8. Use of birth control
9. Sexual violence / sexual victimization
10. Sexual orientation
11. Gender identity (transgender)

Figure 2. Sexual health communication topics.

Adverse childhood experiences. The Adverse Childhood Experiences scale (ACEs) [26] is a measure of trauma and neglect experiences designed to capture physical, emotional, and sexual abuse and exposure to five types of household dysfunction. The measure consists of 10 yes/no questions; each yes is one point (possible range: 0–10).

Childhood sexual abuse scale. The Child Sexual Abuse Scale (CSAS) [27] quantifies the severity of sexual abuse experience and allows further differentiation of the impact of sexual abuse beyond the single ACEs prompt. The CSAS has four yes/no prompts and was used as a composite variable (possible range: 0–4).

Communication about sexual well-being. This measure was completed six times, as participants assessed communication with six individuals/groups in their lives: a public CWW, foster parents, a professional service provider, a member of the youth's family of origin, a sexual education teacher, and the youths' peers, each chosen to represent the most influential figures in youths' lives. Eleven sexuality-related topics were chosen based on a review of published literature, sexual well-being outcomes, and discussions with adolescent sexual well-being experts (Figure 2). Participants indicated how often each item was discussed with the person/group using a 4-point Likert-type scale with the options of never, rarely, occasionally, and often. Participants could choose not applicable if they had no substantial interactions with an individual in the identified role and were instructed to choose the individual with whom they had the most significant or longest interactions if there were multiple (e.g., either not living with any foster parents or having several foster parents). Overall sexuality-related communication was calculated by summing scores for each individual/group (possible range: 0–33).

Relationship quality and interactions. Relationship quality with each of the six individuals/groups was measured using a modified version of the Adolescent Patient-Provider Interaction Scale [28] consisting of eight items rating the style of communication and relationship quality between the individual/group and the youth. This variable was conceptualized as a potential moderator of the relationship between communication and sexual identity development. The Adolescent Patient-Provider Interaction Scale uses a 4-point Likert-type scale (strongly disagree to strongly agree; possible range: 0–32). Reliability was appropriate for all individuals/groups (α range: .90–.95).

Sexual identity. The Measure of Sexual Identity Exploration and Commitment (MoSIEC) [12] measures sexual identity development. It includes 22 prompts rated on a 7-point Likert-type scale from "very uncharacteristic of me" to "very characteristic of me" and assesses four dimensions of sexual identity development: commitment (six items; $\alpha = .85$), which represents commitment to a stable sexual identity without having engaged in active exploration; exploration (eight items; $\alpha = .91$), which entails intentional active exploration of aspects of sexual identity; synthesis/integration (five items; $\alpha = .87$), which is commitment to a stable sexual identity after intentional exploration; and sexual orientation identity uncertainty (three items; $\alpha = .72$), which encompasses uncertainty regarding sexual orientation identity. The four MoSIEC dimensions were analyzed independently.

Sample and data analysis

As this was an anonymous Internet-based survey, participants' data were screened on receipt to ensure trustworthiness. Data were checked for internal consistency between answers, logic, and completeness; any questionable participant's data were removed. Initial screening left 227 individuals, but eight further participants' data were removed as multivariate outliers, leaving n = 219. Table 1 shows participant demographics.

Four independent hierarchical linear regressions were performed to test the model (Figure 1), one for each MoSIEC subscale. For all analyses, Model 1 included control variables of time in foster care (continuous variable; measured in months), race/ethnicity (dichotomous: white/non-white, non-Hispanic; reference group white), gender identity (dichotomous: female, male; reference group female), sexual orientation (dichotomous: heterosexual, sexual minority; reference group heterosexual), and relationship status (dichotomous: single, partnered; reference group single). Covariates were chosen based on previous research indicating the impact of each on aspects of sexual identity development and were dichotomized because of sample size limitations. Model 2 added ACEs and CSAS, whereas Model 3 included the degree of sexuality-related discussions with each individual/group. Model 4 included the MoSIEC subscale. Mediation and moderation were tested using the PROCESS macro (v3) for SPSS version 26 (IBM Corp, Armonk, NY) [29].

Results

Impact of sexual identity development on sexual well-being

Model 1 was significant ($F(5, 213) = 5.39$; $p < .001$; $R^2 = 11.2\%$; Table 2), with identifying as female and identifying as a sexual minority predicting lower levels of sexual well-being. Addition of ACEs and CSAS was significant (Model 2; $F(2, 211) = 6.815$; $p < .001$; $R^2 = 18.4\%$; $\Delta R = 7.2\%$); gender identity remained a significant predictor, but sexual orientation did not. Addition of sexuality-related discussions made a significant contribution to the overall model (Model 3, ($F(6, 205) = 5.576$; $p < .001$; $R^2 = 26.1\%$; $\Delta R^2 = 7.7\%$). Gender identity, ACEs, and CSAS remained significantly associated with sexual well-being. Only sexuality-related discussions with foster parents and peers were significant predictors. Discussions with foster parents negatively impacted sexual well-being. Addition of each MoSIEC subscale (Model 4) was significantly associated with sexual well-being. ACEs, CSAS, and sexuality-related discussions with peers or foster parents were significantly associated with sexual well-being for all MoSIEC subscales.

Table 1
Demographics of study participants[a]

	n (%)
Race[b]	
African American/black	68 (31.1)
American Indian/Native Alaskan	7 (3.2)
Asian	11 (5.0)
Biracial/mixed	31 (14.2)
Native Hawaiian or Pacific Islander	3 (1.4)
White	116 (53.0)
Unlisted identity	9 (4.1)
Prefer to not say	0 (.0)
Ethnicity	
Not Hispanic/Latino	173 (79.0)
Hispanic/Latino	39 (17.8)
Prefer to not say	7 (3.2)
Sex assigned at birth	
Female	130 (59.4)
Male	89 (40.6)
Gender[b]	
Gender diverse	0 (.0)
Female	129 (58.9)
Male	89 (40.6)
Nonbinary/genderqueer	1 (.5)
Transman/transmasculine	1 (.5)
Transwoman/transfeminine	0 (.0)
Unlisted identity	0 (.0)
Prefer to not say	0 (.0)
Sexual orientation identity[b]	
Asexual	2 (.9)
Bisexual	26 (11.9)
Gay	15 (6.8)
Heterosexual/straight	169 (77.2)
Lesbian	8 (3.7)
Pansexual	3 (1.4)
Queer	1 (.5)
Unlisted identity	0 (.0)
Prefer to not say	0 (.0)
Relationship status[b]	
Divorced	2 (.9)
Married/partnered	37 (16.9)
Polyamorous relationship	9 (4.1)
Separated	1 (.5)
Single/never married	170 (77.6)
Widowed	0 (.0)
Prefer to not say	3 (1.4)
Living situation at exit from foster care	
Adopted	34 (15.5)
Aged out	108 (49.3)
Returned to family of origin	19 (8.7)
Group home	15 (6.8)
Juvenile justice system	2 (.9)
Other placement situation	36 (16.4)
Prefer to not say	5 (2.3)

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

Table 2
Results of hierarchical multiple regression for MoSIEC subscales.[a]

	Commitment				Exploration				Synthesis				Sexual identity uncertainty			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
	β	β	β	β	B	β	β	β	β	B	β	β	β	B	β	β
Length of time in foster system (years)	−.109	−.055	−.037	.038	−.109	−.055	−.037	−.012	−.109	−.055	−.037	−.008	−.109	−.055	−.037	−.033
Race/ethnicity[b]	.111	.079	.049	.074	.111	.079	.049	.052	.111	.079	.049	.049	.111	.079	.049	.053
Gender identity[c]	.208**	.182**	.164**	.101	.208**	.182**	.164**	.163**	.208**	.182**	.164**	.093	.208**	.182**	.164**	.115
Sexual orientation[d]	−.211**	−.118	−.101	−.052	−.211**	−.118	−.101	−.160*	−.211**	−.118	−.101	−.076	−.211**	−.118	−.101	−.040
Relationship status[e]	.037	.082	.100	.062	.037	.082	.100	.098	.037	.082	.100	.046	.037	.082	.100	.085
ACEs		−.245**	−.191**	−.150*		−.245**	−.191**	−.159*		−.245**	−.191**	−.157*		−.245**	−.191**	−.178*
CSAS		−.314***	−.337***	−.208**		−.314***	−.337***	−.297***		−.314***	−.337***	−.284***		−.314***	−.337***	−.322***
CWW topics			−.005	.024			−.005	−.037			−.005	.034			−.005	.031
Foster parent topics			−.142*	−.118			−.142*	−.152*			−.142*	−.145*			−.142*	−.138*
Prof. service provider topics			.041	.056			.041	.040			.041	.042			.041	.042
Family of origin topics			−.005	.094			−.005	−.005			−.005	.079			−.005	.019
Formal sexual education topics			.127	.107			.127	.084			.127	.094			.127	.129
Peer topics			.201**	.068			.201**	.192**			.201**	.124			.201**	.137*
MoSIEC subscale				.428***				.169*				.350***				−.235***
F	5.390***	6.815***	5.576***	8.862***	5.390***	6.815***	5.576***	5.711***	5.390***	6.815***	5.576***	8.051***	5.390***	6.815***	5.576***	6.383***
R^2	.112	.184	.261	.378	.112	.184	.261	.282	.112	.184	.261	.356	.112	.184	.261	.305
ΔR^2	.112***	.072***	.077**	.117***	.112***	.072***	.077**	.020*	.112***	.072***	.077**	.095***	.112***	.072***	.077**	.043***

ACEs = Adverse Childhood Experiences scale; CSAS = Child Sexual Abuse Scale; CWW, child welfare worker; MoSIEC = Measure of Sexual Identity Exploration and Commitment.
*$p < 05$; **$p < 01$; ***$p < .001$.
[a] n = 219.
[b] Reference group: white.
[c] Reference group: female.
[d] Reference group: heterosexual/straight.
[e] Reference group: single.

Mediation. Mediation was tested by computing bias-corrected (BC) bootstrapped 95% confidence intervals (CI) using 5,000 data resamples. Significant indirect effects varied per MoSIEC subscale. Sexual Identity Commitment mediated the relationship between sexuality-related discussions with peers and sexual well-being ($b = .327$; BC 95% CI [.160–.510]) and between discussions with a member of the youth's family of origin and sexual well-being ($b = -.256$; BC 95% CI [−.443 to −.100]). Sexual Identity Exploration mediated the relationship between sexuality-related discussions with a public CWW and sexual well-being ($b = .081$; BC 95% CI [.003–.187]) and between discussions with a sexual education teacher and sexual well-being ($b = .059$; BC 95% CI [.003–.142]). There were significant indirect effects between sexuality-related discussions with a member of the youth's family of origin ($b = -.216$; BC 95% CI [−.411, −.059]) and between peers ($b = .188$; BC 95% CI [.043–.398]) and sexual well-being via Sexual Identity Synthesis/Integration. Sexual Orientation Identity Uncertainty mediated the relationship between sexuality-related discussions with peers and sexual well-being ($b = .156$; BC 95% CI [.033–.295]).

For the ACEs and CSAS, there were three significant indirect effects. Sexual Identity Commitment mediated the relationship between the severity of sexual abuse and sexual well-being ($b = -1.252$; BC 95% CI [−2.183 to −.502]). There were also significant indirect effects between scores on the ACEs ($b = -.228$, BC 95% CI [−.540 to −.002]) and severity of sexual abuse ($b = -.390$; BC 95% CI [−.815 to −.032]) and sexual well-being via Sexual Identity Exploration.

Moderation. Interaction effects between sexuality-related discussions with all six individuals/groups and the quality of each relationship were examined. No significant interaction effects were detected.

Discussion

Sexuality plays a key role in youths' lives in transition toward adulthood, emphasizing the importance of the sexual identity development process. Adult and peer interactions affect this essential process, as do diverse psychosocial experiences. Unique to this study is its demonstration of a chain of influence connecting sociosexualization to sexual identity development and subsequently to the sexual well-being of youth formerly in the foster care system. Sexual Identity Commitment and Sexual Identity Synthesis/Integration are the two most solidified sexual identity statuses, with each representing the adoption of a concrete sexual identity; these two statuses had the strongest positive impact on the youths' sexual well-being. This suggests determining ways to further enhance youths' sexual identity development may contribute to improved sexual well-being.

The identified positive impact of sexual identity exploration on sexual well-being is congruent with previous research [30]. Although exploration may involve risk taking, increased attention to sexual actions and a focus on sexual decision-making during this time may increase youths' engagement in protective sexual behaviors. Furthermore, sexual well-being includes sexual self-esteem and sexual anxiety, the former of which could be enhanced and the latter diminished through positive sexual interactions and education.

Although sexual identity exploration is a positive occurrence, sexual orientation identity uncertainty had a negative impact. Sexual orientation identity questioning is a complicated process involving myriad interacting intrapsychic and psychosocial factors, many of which may contain negative messaging. These harmful messages could adversely impact youths' sexual decision-making and hamper intrapsychic development. Furthermore, sexual communication, sexual autonomy, sexual esteem, sexual anxiety, and sexual satisfaction, all aspects of sexual well-being, are likely affected if an individual is in a relationship with an individual whose gender identity does not match that to which the individual is attracted, as can happen for sexual minority youth unsure of or resistant to their sexual orientation identity.

That Sexual Identity Commitment and Sexual Identity Synthesis/Integration mediated the impact of sexuality-related discussions with a member of the youth's family of origin and sexual well-being is noteworthy, particularly because those discussions negatively impacted aspects of sexual identity development that were positively related to sexual well-being. Reasons for this are unclear, although family members' negative attitudes toward sexuality, how they discuss sexuality, the topics upon which they focus, or a complex interaction between the youths' previous experiences with those family members and their current sexual development process could lead to these discussions causing the youth further confusion or lack of clarity regarding their sexual identities. It is noteworthy that only 8.7% of the youth in this sample returned to their families of origin, whereas 49% of all youth who enter the child welfare system are reunited with families of origin [31]. This suggests the YFC in this sample had more strained relationships with family members than most youth in the child welfare system, perhaps contributing to negativity in discussions about sexuality that then negatively influences sexual identity development.

Sexuality education is often promoted as a pathway to improved sexual well-being, but sexuality-related discussions may have a lesser effect on YFC's sexual well-being than commonly suggested. Neither youths' conversations with public CWWs, professional service providers, members of their families of origin, nor formal sexuality education teachers impacted sexual well-being. Further exploration of the forms such discussions take and why they are ineffective is needed as these individuals are well-placed to positively impact YFC's lives.

The mediation of the impact of sexuality-related discussions with foster parents and public CWWs on sexual well-being by Sexual Identity Exploration deserves attention. Exploration is a positive aspect of sexual identity development, so the negative impact of foster parent discussions is concerning. That public CWWs' positive influence is mediated by this exploration suggests their discussions could be helping the youth engage in this important process. The basis for this impact deserves considerable further attention.

This negative impact of discussions with foster parents requires further exploration as foster parents should be important resources for youth. Abstinence-only or predominantly risk-focused sexuality-related discussions can be ineffective or counterproductive [32], possibly explaining this finding. Furthermore, lecturing regarding sexual well-being outcomes can increase sexual risk taking [33], providing a possible explanation if the topics were addressed in this manner, which some research suggested occurs [2].

Screening foster parents more closely for negative attitudes about gender identity and sexuality and educating them to have helpful conversations with youth about sexual development seems warranted based on these results. Currently, many foster parents report being unprepared to address sexuality, especially

for sexual and gender minoritized youth [17]. Policies that require professionals and foster parents be trained on how to discuss sexuality in an inclusive and positive manner may address these unmet needs and counteract negativity, but these types of interventions have not been systematically evaluated [34,35]. Sexuality education curricula have been developed specifically for use with YFC, but these also have not been subjected to rigorous evaluation. Increasing accessibility of the curricula for professionals, foster parents, and YFC and further evaluation of their effectiveness is needed.

Differences in the quality of the youths' relationships with adults affect the impact of sexuality-related discussions on sexual well-being [2,6,9], but no significant interaction effects were found in this study. One possible reason is that the youth reported generally low amounts of sexuality-related discussions. Lack of variation in the level of topic discussions may have suppressed the impact of the discussions themselves and how relationship quality affected that relationship, but this needs further evaluation.

Trauma experiences often impair cognitive and social development [36], which may negatively influence youths' sexual well-being. Compared with similarly-aged youth in other studies, participants scored lower on Sexual Identity Commitment and higher on Sexual Identity Exploration and Sexual Orientation Identity Uncertainty [30,37], suggesting the trauma these youth have all experienced may have hampered their sexual identity development. Abuse and neglect experiences may translate to reduced sexual well-being through mechanisms such as negative cognitive associations, trauma responses, shame, and reduced body image and self-esteem, as well as using sexual activity to cope with emotional pain [38,39]. Few studies, however, have explored connections between sexual abuse treatment and sexual well-being improvements or how therapeutic treatment can mitigate this risk. Given the strong impact of abuse and neglect on sexual well-being and the prevalence of these experiences among YFC, this is an essential area for investigation.

Finally, the impact of sexuality-related discussions with peers on sexual well-being warrants further exploration. Peers influence youths' sexual beliefs, attitudes, and actions more than any other individuals with whom youth interact [40], and the findings from this study indicate their influence on sexual well-being may be primarily through contributions to sexual identity development. A better understanding of exactly who these peers are, such as other foster youth or those befriended via residential or mental health in-patient stays, how peers influence each other's sexual identity development and their sexual decisions will allow for targeted interventions.

Limitations

Participants were recruited primarily through services agencies, and social media focused on former foster youth. Many former foster youth neither engage with these types of agencies nor join social groups tied to their identity as having been in the foster care system and would not have been reached through these recruitment methods. Second, the study materials emphasized the focus on sexual well-being, history of abuse and neglect, and sexual identity development, likely limiting participation to only those comfortable discussing these topics. Third, this was a retrospective survey requiring youth to reflect on experiences that happened years before. The length of time and more recent experiences may have affected youths' memories of past events. Finally, this study was cross-sectional, whereas sexual identity development is a temporal process. Longitudinal research designs that can explore the sexual identity development process as it unfolds might identify different areas of need.

Conclusion

This study examined how YFC's sociosexualization impacted their sexual identity development and how that identity development affected their sexual well-being. A history of adverse childhood experiences, sexual abuse, sexuality-related discussion with foster parents, and sexual orientation identity uncertainty negatively impacted sexual well-being, whereas sexuality-related discussions with peers, sexual identity commitment, sexual identity exploration, and sexual identity synthesis/integration positively affected sexual well-being. These results suggest that YFC's histories of abuse and/or neglect, interactions with foster parents and peers, and sexual identity development are areas that require explicit focus when seeking to improve this vulnerable population's overall sexual well-being.

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