





Sexual Self-Concept and Psychological Functioning of Women With a History of Childhood Sexual Abuse in Hong Kong

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ABSTRACT

Sexual self-concept (SSC) is an important component of health that is closely associated with the well-being of survivors of child sexual abuse (CSA). Compared with non-CSA respondents, SSC of CSA survivors was deleteriously affected, resulting in ineffective psychological functioning (negative self-evaluation, psychological ill-health, and difficulties in interpersonal relationships). Negative SSC (sexual anxiety, sexual depression, and sexual fear) played a significant role in mediating the adverse effects of CSA on psychological functioning. Future studies may recruit a sample with greater variation in CSA characteristics and use externalizing problems as outcome measures to cross-validate findings of this study.

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Introduction

In recent years, extensive research has investigated various aspects of child maltreatment. Child sexual abuse (CSA), in particular, the long-term effects of CSA on the development of psychiatric symptoms, psychosocial impairments, and negative sexual outcomes in adulthood, has become the focus of many empirical studies.

CSA and psychiatric symptoms

Depression is one of the most common psychiatric symptoms of CSA survivors, which was presented as poor body image, guilt, social withdrawal, and suicidal attempts (Kim et al., 2017; Sciolla et al., 2011). A meta-analysis found a medium effect size of 0.41 on depression, which was as large as or larger than other sequelae of CSA such as sexual problems, suicidality, dissociation, and somatization (Neumann et al., 1996). As shown in the next section, depression was

associated with lower psychological functioning of CSA survivors.

Another psychiatric symptoms shown by CSA survivors was dissociation, a disturbance in the integration of consciousness, particularly impacting memory and identity. It increased the risk of re-victimization as it tended to encourage CSA survivors to ignore or minimize social cues in dangerous situations (Herman, 1992). Related to dissociation, research had also reported the association of post-traumatic stress disorder (PTSD) with CSA (Gewirtz-Meydan & Lahav, 2020). Besides, CSA was highly correlated with hysterical neurosis, borderline personality disorders, eating disorders, severe or morbid overweight, alcohol dependency, or other substance addictions (Rowan & Foy, 1993). Furthermore, CSA survivors were more likely than individuals without CSA to be diagnosed with agoraphobia, obsessive-compulsive disorder, social phobia, and sexual disorders (Saunders et al., 1992).

CSA and psychosocial impairments

Finkelhor and Browne (1985) proposed that experience of CSA would cause psychosocial impairments through four processes of traumagenic dynamics, viz., stigmatization, powerlessness, betrayal, and traumatic sexualization. The first three traumagenic dynamics are related to the development of ineffective psychological functioning, whereas traumatic sexualization is linked with sexual dysfunction.

Through stigmatization, self-blame, shame, and guilt associated with CSA are internalized as part of a child's self-image which lead to negative self-evaluation. (Feiring et al., 2009) found that shame and negative attribution style led to depression and subsequent social maladjustment. Past research reported that negative self-evaluation was indicative of poor self-esteem, low self-efficacy, and depression. It was predictive of internalizing problems such as anxiety, withdrawal, and loneliness in CSA survivors (Noll et al., 2003; Reese-Weber & Smith, 2011; Valle & Silovsky, 2002).

The dynamics of powerlessness occurs when a child's body space or wishes are invaded by CSA abuser. It occurs when a child is highly vulnerable and often defenseless. Powerlessness not only damages a sense of mastery and agency, but also lead to helplessness and depression. Relatedly, life dissatisfaction is significantly associated with CSA. Whitelock et al. (2013) found that life dissatisfaction was relatively more significant among less-educated CSA survivors and those deprived of an intimate relationship. Putnam (2003) reported that life dissatisfaction was exacerbated by greater CSA severity (e.g., a closer relationship with abuser, longer duration, and earlier onset). However, Morton et al. (2019) reported that compared with non-CSA individuals, life dissatisfaction was higher among CSA survivors regardless of when CSA occurred.

Betrayal is a traumagenic dynamic that occurs when CSA damages the trust of someone whom the child is dependent upon. The loss of trust may lead to depression, anger, and mistrust of others. Davis et al. (2001) found that CSA survivors tended to show distrust, insecurity, and difficulty in forming healthy intimate interpersonal

relationships. As a result, they had fewer friends, fewer social contacts, and more social maladjustment. Abdulrehman and De Luca (2001) observed that CSA survivors tended to show disinterest and lower levels of participation in community activities and affairs, indicating difficulty in interpersonal relationships.

CSA and negative sexual outcomes

According to Finkelhor and Browne (1985), traumatic sexualization shapes a victim's sexual feelings and sexual behavior in a dysfunctional and developmentally inappropriate manner. As a result, CSA survivors were more likely to engage in risky sexual behaviors (e.g., use drugs before sex, unprotected sexual activities, early age of first sexual intercourse) (Greenberg et al., 1999; Senn et al., 2008). Loeb et al. (2002) revealed that female adolescents who had a history of CSA showed impaired ability to resist sexual request and were more likely to experience sexual re-victimization. Consistent with the model of traumatic sexualization, they were less likely to use contraception, which resulted in unwanted pregnancy or infection of sexually transmitted diseases. Besides, women who experienced CSA were more likely to report sexual desire disorder and inhibited female orgasm, particularly if CSA involved force, sexual penetration, or multiple incidents. Leonard and Follette (2002) reported similar results indicating that women with a history of CSA were more likely to suffer from dysfunctions in sexual desire, arousal, and orgasm, and sexual pain. Such sexual dysfunctions were exacerbated by higher levels of CSA severity (e.g., longer duration, use of force, abuse by a family member) (Noll et al., 2003).

Studies of CSA in Hong Kong

Many researchers in Hong Kong have also investigated various correlates of CSA, for example, CSA characteristics regarding disclosure tendency (Lam, 2014) and how professionals perceive and respond to CSA (Cheung & Boutte-Queen, 2000; Ip, 2011). The effectiveness of different intervention modalities to help CSA survivors has been evaluated (Chan, 2009; Ho, 2015). CSA was also

studied with regard to its negative outcomes, such as victimization, violence, and suicidal ideation (Chan et al., 2011; Rhind et al., 1999). Chan (2011) and Ma and Li (2014) investigated the negative impact of CSA on self-esteem. Sum (2000) investigated the criminal consequence of CSA. Research undertaken in Hong Kong generally showed that the effects of CSA were similar to those reported in the West.

Studies in both Hong Kong and Western countries tended to focus on behavioral consequences of CSA. Very few studies investigate how CSA affected survivors' views of themselves as sexual beings or how CSA survivors evaluate their sexual self-concept (SSC). SSC refers to individuals' evaluation of their sexual feelings, thinking, and behavior, i.e., how individuals perceive themselves as sexual beings (Snell, 1998). SSC constitutes an important predictor of sexual behavior as well as a crucial component of sexual health, highlighting its significance when investigating the well-being of CSA survivors.

Significance of studying SSC

SSC forms the core of an individual's sexuality and is a major component of sexual health (Potki et al., 2017). It is closely associated with physical health, mental health, and overall well-being (Anderson, 2013). Data on SSC should provide valuable information for promoting CSA survivors' mental and sexual well-being. In this regard, sexual self-esteem and sexual self-efficacy have been studied regarding intimate communication and re-victimization (Kearns & Calhoun 2010; Ottaes & Offman, 2007). However, SSC is a multi-dimensional construct (Snell, 1998). Other dimensions of SSC (e.g., sexual anxiety, sexual depression, sexual fear, sexual consciousness, sexual motivation, etc.) should not be neglected.

Differentiation of SSC and psychological functioning

While a correlation between SSC and psychological functioning is expected, the two constructs are distinct, as indicated by empirical research that help formulate the hypotheses tested in this study. Ottaes and Offman (2007) reported that sexual self-esteem was predictive of sexual

communication, whereas global self-esteem made no significant contribution to the prediction. Kearns and Calhoun (2010) found that sexual self-efficacy differentiated re-victimized women and non-victimized women but general efficacy failed to differentiate between the two groups. Similar findings were reported by Feiring et al. (2010) who observed that CSA-specific self-blame was predictive of dissociative symptoms one and six years later, but general self-blame for everyday events was not.

The above findings demonstrate that constructs in the sexual and general domains are dissimilar and are different in their levels of generality. In practice, constructs with common variance of 50–70% are considered empirically similar (Henseler et al., 2015; Rönkkö & Cho, 2020). Boey and Ng (2021) found that the average common variance between SSC subscales and measures of the three domains of psychological functioning (self-evaluation, psychological health, and interpersonal relationships) were 7.2%, 5.4%, and 5.9% respectively. Given the small proportion of common variance shared by constructs of the sexual domain (SSC) and general domain (psychological functioning), the two sets of constructs are considered dissimilar.

Indirect effect of CSA

Existing empirical research suggests that the relationship between CSA and psychological functioning may be mediated by SSC and that the relationship between CSA and SSC may be moderated by CSA characteristics and demographic factors.

Mediating effect of SSC

Previous studies on the mediation of CSA effects focused on the role of sexual self-esteem. For example, Van Bruggen et al. (2006) reported that the effect of CSA on re-victimization was partially mediated by sexual self-esteem. Lemieux and Byers (2008) reported that CSA survivors tended to experience less sexual reward (sexual relationships that are pleasurable and satisfying) and more sexual cost (sexual relationships that cause pain, anxiety, embarrassment, and other negative affects) in sexual relationship. It was

found that the quality of such sexual relationship was mediated by sexual self-esteem.

A longitudinal study by Feiring et al. (2009) showed that CSA-specific self-schema (perception or belief about oneself) mediated the association of CSA and dissociative symptoms. These findings have implications for the mediating role of SSC, which may be considered a form of self-schema in the sexual domain. More recently, Krahe and Berger (2017) reported that the long-term effects of CSA on sexual victimization among women and the perpetration of sexual aggression among men were also mediated by sexual self-esteem.

The above findings show the role of sexual self-esteem in mediating CSA effects. However, the mediating role of other dimensions of SSC has not been investigated. This study examines the mediating role of Positive SSC (sexual self-esteem, sexual self-efficacy, and sexual satisfaction), Negative SSC (sexual anxiety, sexual depression, and sexual fear), and Situational SSC (sexual consciousness and sexual motivation). Moreover, instead of focusing on sexual behavior as outcome measures, we examine psychological functioning in three general life domains, viz., self-evaluation, psychological health, and interpersonal relationships.

Moderation of CSA

Not all CSA survivors exhibited long-term psychosocial impairments. A significant proportion of CSA survivors were confident in their outlook on life and functioned without noticeable impairments (Guyon et al., 2020; Rellini & Meston, 2007). Apparently, certain factors may moderate the effects of CSA and reduce the negative impacts of CSA in adulthood.

(a) CSA characteristics as moderators

As shown in previous sections, sexual dysfunction and life dissatisfaction were exacerbated by greater CSA severity (e.g., longer duration, earlier onset, closer relationship with abuser) (Noll et al., 2003; Putnam, 2003). Lemieux and Byers (2008) found that women who had experienced CSA involving sexual penetration were more likely to experience sexual re-victimization,

engage in risky sexual behavior, and report poor quality sexual interaction than were CSA involving fondling only. Oshima et al. (2014) reported that survivors who encountered repeated maltreatment were more likely to report long-term negative outcomes (e.g., substance abuse, attempted suicide, contraction of sexually transmitted diseases, etc.) than were survivors who experienced only a single encounter. Previous studies also indicated that risk of alcohol problems, illicit drug use, risky sexual behavior, and suicide attempts was higher if CSA had involved force or sexual penetration compared with CSA without force or penetration (Fergusson et al., 1997; Senn et al., 2007).

The findings of the above studies indicated that CSA characteristics moderated the negative outcomes of CSA in various ways (e.g., suicidal behaviors, substance abuse, re-victimization, risky sexual behaviors, etc.). However, there was a tendency of existing research to investigate the association of CSA with sexual behavior more than sexual attitudes or SSC. Most of the studies focused on severity of contact sexual activities. In this study, we shall look into common CSA characteristics (age of onset, duration, frequency, relationship with abuser, etc.) as moderators and SSC as consequent condition of CSA.

(b) Demographic factors as moderators

In a review of factors that affecting SSC, Potki et al. (2017) reported a relationship between age and marital status with SSC; older adolescents had a more positive SSC than younger adolescents and never-married individuals were more likely to have higher sexual anxiety and greater sexual fear than married individuals.

Socio-economic status may also play a moderating role. Previous research reports that CSA survivors attending university demonstrated better-adjusted social behavior than their non-university peers (Finkelhor, 1979). Greater life dissatisfaction was found among CSA survivors less-educated (Whitelock et al., 2013). Oshima et al. (2014) found that CSA survivors from a family of higher income were significantly less likely to report severe CSA that resulted in

psychosocial maladjustment than were survivors from a family of lower income.

Findings from the field of stress and coping showed that older or married adults perceived lower levels of stress, greater social support, and more frequent use of effective coping strategies (Hamarat et al., 2001; Hartley & Coffee, 2019). Religious affiliation is also a source of support that buffers the distress of challenging life demands (Koenig et al., 2001). Individuals with higher education had greater psychosocial resources and enjoyed higher levels of physical and emotional well-being (Niemeyer et al., 2019).

The above findings suggested that demographic factors (age, marital status, financial income, religion affiliation, and education) buffered the effect of stress of life events. These factors are expected to serve as moderators that mitigate the negative impacts of CSA.

CSA-plus and CSA-only

CSA survivors who encounter additional childhood trauma are more vulnerable to long-term psychosocial impairments. They are expected to report more severe symptoms than survivors who experience CSA only. In this study, CSA with other types of trauma is designated as “CSA-plus” and experience of CSA only as “CSA-only.” Differences in SSC and psychological functioning between CSA-plus and CSA-only have not been the focus of previous research. Nonetheless, there have been reports on survivors of multi-type abuse (e.g., children who have experienced neglect, witnessed family violence, and experienced physical abuse). A review of the outcomes of multi-type and single-type abuse should provide reference information on the impacts of CSA-plus and CSA-only.

Severity of multi-type abuse

Compared with single-type child abuse, multi-type child abuse was associated with higher levels of anxiety, depression, dissociation, anger-hostility (Teicher et al., 2006), greater risk of smoking behavior (Jun et al., 2008), and more sexual problems and sleep disturbance (Clemmons et al., 2003). Bagley and McDonald (1984) observed that young women who had experienced multi-

type maltreatment (including maternal separation, sexual abuse, physical abuse, and neglect) reported more psychosocial impairments (i.e., low self-esteem, depression, and psychosexual problems) than those who experienced single-type maltreatment.

The additive effect model of Fox and Gilbert’s (1994) contended that the effects of child abuse increased with an increased number of abuse types. The model was supported by research findings showing that more severe damaging outcomes were found regarding multi-type abuse than in single-type abuse (Arata et al. 2005; Mullen et al., 1996). CSA-plus and CSA-only are respectively cases of multi-type and single-type abuse. Thus, survivors of CSA-plus are expected to show more severe negative effects in SSC and psychological functioning than survivors of CSA-only. As CSA-plus and CSA-only are not a homogenous group, it is essential to separate the two groups when making comparison with non-CSA respondents.

To recapitulate, previous research shows the long-term negative effect of CSA on sexual behavior and impaired psychosocial adjustment in adulthood. The effect of CSA may be mediated by sexual self-esteem. It may also be moderated by CSA characteristics and demographic factors. Previous research has focused on sexual self-esteem and sexual self-efficacy and outcome measures tended to be restricted to behavioral consequences. There has been no systematic investigation of SSC, an important component of sexual health closely related to the well-being of CSA survivors.

Objectives of the study

This study aimed to provide an understanding of the effects of CSA by comparing SSC (including Positive, Negative, and Situational SSC) and psychological functioning of female survivors of CSA with that of women who had no CSA experience. The dynamic relationships of CSA, SSC, and psychological functioning were examined. Factors that might involve in the relationships were also explored.

The literature review facilitated the formulation of the following hypotheses that were tested in

this study. These hypotheses were grouped together for ease of reading but each hypothesis was tested separately.

1. Compared with respondents who had no CSA experience, CSA survivors would score lower in Positive SSC and Situational SSC, and higher in Negative SSC.
2. Compared with respondents who had no CSA experience, CSA survivors would show less effective psychological functioning (i.e., negative self-evaluation, psychological ill-health, and difficulties in interpersonal relationships).
3. CSA characteristics (age of onset, duration, relationship with abuser, number of incidents, and nature of sexual activities) and survivors' demographic factors (age, education, marital status, personal income, and religious affiliation) would moderate the relationship of CSA and SSC.
4. SSC would mediate the relationship between CSA and psychological functioning.
5. CSA-plus survivors would have lower scores in both Positive and Situational SSC, higher scores in Negative SSC, and would demonstrate less effective psychological functioning than CSA-only survivors.

The relationships of CSA, SSC, and psychological functioning and the role of mediation and moderation in these relationships were examined through testing the above hypotheses.

Methods

Respondent recruitment

Women who experienced sexual abuse before the age of 18 years were referred by a specialist counseling center in Hong Kong for female adult survivors of child trauma and specifically, CSA. The center adopted the definition of CSA by Social Welfare Department of Hong Kong, which refers to

Forcing or enticing a child to take part in any acts of sexual activity for sexual exploitation or abuse and the child does not consent to or fully understand or comprehend this sexual activity that occurs to him/her due to mental immaturity. This sexual activity includes acts that have or do not have direct physical

contact with children (e.g. rape, oral sex, procuring a child to masturbate others/expose his/her sexual organs, or to pose in an obscene way/watch sexual activities of others, production of pornographic material, forcing a child to engage in prostitution, etc. (Social Welfare Department, 2020, pp. 26–27)

Potential respondents with experience of CSA undertook an assessment interview with social workers who provided counseling services for survivors of childhood trauma. The interview was part of the study protocol. In the interview, the purpose and significance of the study were explained to potential participants. Women without experience of CSA (non-CSA) or any form of child trauma were recruited from the community via convenience sampling to serve as a comparison group for evaluating the SSC and psychological functioning of CSA survivors. The status of non-CSA or without childhood trauma was based on self-report of no childhood trauma as indicated in a questionnaire that potential respondents were requested to complete. Potential non-CSA respondents were informed of the purpose and significance of the study. No non-CSA respondent was personally known to the investigators.

Respondents were assured that all data gathered would be kept strictly confidential and no individual data would be revealed without the consent of the respondent. Written informed consent form was obtained from respondents in advance of data collection. Ethical approval for the study was given by the Research Ethics Committee of the Institute where the first two authors are affiliated.

The center's referral process

To provide information on the context in which data of CSA survivors were collected, the counseling center's referral process is briefly described. Details of the center's counseling services are available online. A hotline service is available every Wednesday between 2 and 9 pm. About 70% of service users learned about the center through visiting its website and about 30% through other NGOs, a church, friends, or media interviews. Around 80% of service users were self-referred, the others referred by social service

organizations, churches, or friends. The center charges fees on a sliding scale from HK\$100 to HK\$360 (US\$12.9 to US\$46.4) per counseling session that usually lasts for one hour. There is discretion to reduce the fee to ensure that no service user is deprived of a service because of financial difficulty.

Instruments

The following instruments provide operational definitions of the eight dimensions of SSC and the three domains of psychological functioning. These instruments were incorporated in a questionnaire for data collection. The questionnaire also contained items on CSA characteristics (e.g., age of onset, frequency, duration of abuse, relationship with abuser, and nature of the abuse) and demographic information (e.g., age, education, personal income, marital status, and religious affiliation). As far as possible, scales validated in Hong Kong were selected.

SSC subscales

To consider suitable assessment tools for the study, four preparatory meetings were held by the first and second authors with two experienced social workers who work closely with young adults and female CSA survivors. Consensus was reached on the suitability of the selected eight subscales from the *Multidimensional Sexual Self-Concept Questionnaire* (Snell, 1998). These subscales were closely related to sexual risk-taking behavior and the long-term psychosocial impairments reported by CSA survivors. Clinical observations and findings from the first author's research on female sexuality were also considered in the selection of the subscales. In-depth interviews with two female CSA survivors were also conducted. Qualitative analysis of the interviews provided additional input for consideration of scale selection. The eight selected subscales are briefly outlined below. Exemplary items (in italics) are also presented.

1. Sexual self-esteem: Tendency to positively evaluate one's capacity to engage in healthy sexual behaviors (*"I derive a sense of self-pride from the way I handle my own sexual needs and desires"*); *"I am proud of the way I deal with and handle my own sexual desires and needs"*);
2. Sexual self-efficacy: Belief that one can deal effectively with the sexual aspect of oneself (*"I am competent enough to make sure that my sexual needs are fulfilled"*); *"I have the ability to take care of any sexual needs and desires that I may have"*);
3. Sexual satisfaction: Tendency to be highly satisfied with the sexual aspects of one's life (*"I am satisfied with the way my sexual needs are currently being met"*); *"I am satisfied with the status of my own sexual fulfillment"*);
4. Sexual anxiety: Tendency to feel tension, discomfort, and anxiety about the sexual aspects of one's life (*"I feel anxious when I think about the sexual aspect of my life"*); *"I worry about the sexual aspects of my life"*);
5. Sexual depression: Experience of feelings of sadness, unhappiness, and depression regarding one's sex life (*"I feel unhappy about my sexual experiences"*); *"I am disappointed about the quality of my sex life"*);
6. Sexual fear: Fear of engaging in sexual relations with another individual (*"I have a fear of sexual relationships"*); *"I am afraid of becoming sexually involved with another person"*);
7. Sexual consciousness: Tendency to think and reflect about the nature of one's sexuality (*"I am very aware of my sexual motivations and desires"*); *"I am very aware of my sexual feelings and needs"*);
8. Sexual motivation: The desire to be involved in a sexual relationship (*"I'm motivated to be sexually active"*); *"It's important to me that I involve myself in sexual activity"*).

Items in the selected SSC subscales were translated into Chinese and reviewed by six researchers in sexuality studies and two professors with experience in using Chinese questionnaires to study sexuality in Hong Kong. The reliability and validity of the subscales were tested in a community survey of adult sexuality in Hong Kong and found to be satisfactory (Cronbach's $\alpha = .80-.90$) (Ng & Boey, 2019). Principal Component Analysis revealed that the items in the subscales comprised three principal components, viz., Positive SSC (sexual self-esteem, sexual self-

efficacy, sexual satisfaction), Negative SSC (sexual anxiety, sexual depression, and sexual fear), and Situational SSC (sexual consciousness and sexual motivation). The empirical grouping of SSC was similar to that reported by researchers in Iran (Ziaei et al., 2013), demonstrating the factorial validity of the SSC subscales. In testing the construct validity of the subscales, contrast groups were formed by women who experienced vaginal intercourse difficulty. This item was included in the community survey by Ng and Boey (2019). As expected, women who experienced vaginal intercourse difficulty scored lower on Positive SSC and higher on Negative SSC than individuals without experience of vaginal intercourse difficulty. The results supported the contrast-group validity of the subscales. Additionally, sexual consciousness and sexual motivation were significantly associated with sexual frequency, which provided evidence for the construct validity of the Situational SSC subscales.

Each subscale comprises 5 items; respondents are asked to rate the extent to which each item is characteristic of her (1 = not at all, 2 = slightly, 3 = somewhat, 4 = moderately, 5 = very). Possible scores of each subscale range from 5 to 25, with higher scores indicating a stronger tendency as measured by the respective subscale.

Self-evaluation

Self-evaluation was measured by the *Rosenberg Global Self-esteem Scale* and the *General Self-efficacy Scale*. Both scales have been widely used in Hong Kong, with satisfactory reliability and validity.

(a) Rosenberg Global Self-esteem Scale

Global Self-esteem Scale by Rosenberg (1965) consists of five positive items (e.g., “I feel that I have a number of good qualities,” “I feel that I’m a person of worth, at least on an equal plane with others”) and five negative items (e.g., “I certainly feel useless at times” “All in all, I am inclined to feel that I am a failure”). A 4-point Likert scale (1 = strongly disagree, 4 = strongly agree) is used for self-rating. Negative items are reverse-scored. The possible total score ranges from 10 to 40. A higher score indicates a higher level of self-

esteem. Reliability of the Chinese *Rosenberg Global Self-esteem Scale* was reported to be satisfactory (Cronbach’s α ranging from .70 to .84). Its significant correlations with measures of anxiety, functional status, and parent-child relationships supported its construct validity (Chou & Chi, 2001; Shek, 1998).

(b) General self-efficacy

Jerusalem and Schwarzer’s (1992) 10-item *General Self-efficacy Scale* had been validated in Hong Kong with satisfactory reliability (Cronbach’s $\alpha = .91$) (Zhang & Schwarzer, 1995). Respondents rate each item (e.g., “I can always manage to solve difficult problems if I try hard enough,” “If someone opposes me, I can find the means and ways to get what I want”) on a 4-point scale (1 = strongly disagree; 4 = strongly agree). Scores on the scale differentiated groups with different levels of mental health status, providing evidence of its construct validity (Cheung & Sun, 1999).

Psychological health

Psychological health was assessed by scales on positive well-being (life satisfaction) and negative well-being (absence of depression).

(a) Satisfaction with Life Scale

The *Satisfaction with Life Scale* of Diener et al. (1985) was validated in Hong Kong by Sachs (2003) with satisfactory reliability (Cronbach’s $\alpha = .82$). It consists of five items (e.g., “So far I have gotten the important things I want in life,” “If I could live my life over, I would change almost nothing”). Respondents are asked to rate each item on a 7-point scale (1 = strongly disagree, 7 = strongly agree). Construct validity of the scale was demonstrated by its correlation with general self-efficacy ($r = .25, p < .01$) and locus of control ($r = .25, p < .01$) (Sachs, 2003).

(b) 10-item Center for Epidemiological Studies Depression Scale (CES-D-10)

This short version of the *Center for Epidemiological Studies Depression scale* (Radloff,

1977) comprises ten items (e.g., “I had trouble keeping my mind on what I was doing,” “My sleep was restless”). Respondents are asked to indicate the occurrence of the symptoms (feeling or behavior) on a 4-point scale (0 = rarely, none or less than 1 day; 1 = occasionally, 1–2 days; 2 = sometimes, 3–4 days; 3 = often, 5 days or more). *CESD-10* had been applied to a Hong Kong community sample and clients of a marital counseling service, with satisfactory reliability (Cronbach’s $\alpha = .89$ and $= .75$, respectively) (Boey & Ng, 2019). Its negative correlation with emotional intimacy and positive correlation with marital distress ($r = .50$ and $= .42$, respectively) provided evidence for its construct validity, while positive changes in *CESD-10* scores after attending marital counseling demonstrated its longitudinal construct validity.

Interpersonal relationships

Difficulties in interpersonal relationships were measured by the *Social Avoidance Scale* and *Social Alienation Scale*. Both scales were validated in Hong Kong (Boey & Ng, 2021). Reliability was satisfactory (Cronbach’s $\alpha = .86$ and $= .92$, respectively). Construct validity of the scales was demonstrated by the predicted negative relationship with global self-esteem ($r = -.48$ and $= -.65$, respectively) and positive relationship with depression ($r = .51$ and $= .59$, respectively).

(a) Social Avoidance Scale

The Social Avoidance Scale, comprising 6 items, was adapted from the *Social Avoidance and Distress Scale* (Watson & Friend, 1969). Respondents are asked to rate each item (e.g., “I try to avoid formal social occasion,” “I would avoid walking up and joining a large group of people”) on a 4-point scale (1 = strongly disagree; 4 = strongly agree). Higher scores indicate a stronger tendency to avoid social situations.

(b) Social Alienation Scale

The Social Alienation Scale, consisting of ten items (e.g., “I often feel alone when I am with other people,” “I sometimes feel uncertain about who I really am”), was adapted from the

alienation scale developed by Jessor and Jessor (1977). A 4-point scale is also used for self-rating, with higher scores indicating a stronger tendency toward social alienation.

Data analysis

Descriptive analysis was performed to examine respondents’ demographic characteristics. Differences in CSA survivors’ and non-CSA respondents’ demographic characteristics were examined using Chi-square test. ANOVA was used to compare the SSC and psychological functioning of CSA survivors and non-CSA respondents. Path analysis was used to examine the moderating effect of demographic characteristics, the direct effects of CSA, and the mediating effects of SSC in the relationship between CSA and psychological functioning. The reliability of measuring instruments, descriptive analysis, Chi-square test, and ANOVA was analyzed using IBM SPSS Statistics (Version 27), whereas the path analysis was examined using Mplus 7 (Muthén & Muthén, 2012).

Results

Respondents’ characteristics

A total of 83 female CSA survivors (mean age = 36.2 years, SD = 11.9) participated in this study, 16 of whom were CSA-plus. CSA survivors’ demographic characteristics were compared with those of non-CSA respondents ($N = 89$, mean age = 36.8 years, SD = 13.5). No significant differences in demographic characteristics were found between CSA survivors (CSA-plus and CSA-only) and non-CSA respondents (see Table 1).

Reevaluation of reliability

Data on CSA survivors indicated that the reliability of the eight SSC subscales (Cronbach’s $\alpha .84$ to $.93$) and psychological functioning (Cronbach’s $\alpha .89$ to $.93$) was highly satisfactory. Data regarding non-CSA respondents also confirmed the satisfactory reliability of all the measures, Cronbach’s α of the eight SSC subscales ranging from $.77$ to $.92$, and of psychological functioning from $.85$ to $.92$.

SSC of CSA survivors

Compared with non-CSA respondents, CSA survivors, in general, scored significantly lower on Positive and Situational SSC, but higher on Negative SSC (see Table 2). Duncan’s post hoc multiple comparison test indicated that CSA-plus survivors scored significantly less well than non-CSA respondents on all SSC subscales, but CSA-only and non-CSA respondents differed in some aspects of SSC only.

Table 2 indicates the *F*-values of the three components of SSC, i.e., Negative, Positive, and Situational SSC in the between-group comparison were: 31.36, 11.58, and 4.62, respectively. The relative efficiency (see Liang et al., 1985) in

detecting differences was 1.00, 0.37, and 0.15, respectively. The relative efficiency of Situational SSC was only 15% of the efficiency of Negative SSC.

Psychological functioning of CSA survivors

Table 3 shows that CSA-plus survivors were less effective than non-CSA respondents in each of the three domains of psychological functioning. A similar trend was observed in CSA-only survivors, though to a lesser extent.

As shown in Table 3, CSA-plus survivors were significantly more negative in self-evaluation than CSA-only survivors. They showed greater difficulties in interpersonal relationships and more depressive symptoms than CSA-only survivors.

Given the disproportionate sample size of the between-group comparison, Welch’s test was run to examine if size effect unduly affected quantitative analysis (see Table 4). The results of Welch’s test were consistent with those of the ANOVA *F*-test. In most comparisons of SSC between CSA and non-CSA, the effect sizes as measured by partial eta squared (η^2) were moderate to large.

In practice, η^2 from .01 to <.06 is considered small; .06 to <.14, medium; and $\geq .14$, large (Norouzzian & Plonsky, 2018). Table 4 also shows that the effect sizes of CSA on Negative SSC, Positive SSC, and Situational SSC were large, medium, and small, respectively.

Similarly, the results of Welch’s test examining the effect of CSA on psychological functioning were also consistent with those of the ANOVA *F*-test. The effect sizes in terms of partial eta squared showed that the differences between CSA

Table 1. Participants’ demographic characteristics.

	CSA (N = 83) Freq. (%)	Non-CSA (N = 89) Freq. (%)	χ^2
Age:			
≤29	32 (38.6)	37 (41.6)	.41 <i>p</i> = .815
30–44	28 (33.7)	26 (29.2)	
≥45	23 (27.7)	26 (29.2)	
Education:			
Secondary	27 (32.1)	15 (18.1)	4.39 <i>p</i> = .111
College	19 (22.6)	23 (27.7)	
≥University	38 (45.2)	45 (54.2)	
Marital status:			
Unmarried	45 (54.9)	49 (59.0)	2.50 <i>p</i> = .287
Married	29 (35.4)	31 (37.3)	
Divorced/separated	8 (9.7)	3 (3.7)	
Religion:			
None	32 (39.5)	38 (43.2)	4.11 <i>p</i> = .128
Christian	47 (58.0)	42 (47.7)	
Others	2 (2.5)	8 (9.1)	
Income:			
None	14 (19.2)	6 (15.8)	4.53 <i>p</i> = .210
<5 K	12 (16.4)	13 (34.2)	
5 K–15 K	15 (20.5)	6 (15.8)	
>15 K	32 (43.8)	13 (34.2)	

Note. Freq. = Frequency; Sample size of different categories varied slightly due to missing data; “Others” (religion) included Muslim and Buddhist; Christian included Protestant and Catholic; Income = personal income (K = HK\$1000, HK\$1 = US\$0.13).

Table 2. SSC of CSA survivors and non-CSA respondents.

	CSA-plus (N = 16) M (SD)	CSA-only (N = 67) M (SD)	Non-CSA (N = 89) M (SD)	<i>F</i> -value
Sexual self-esteem	10.8 ^a (5.3)	12.2 ^b (5.2)	15.3 ^c (4.4)	11.21***
Sexual self-efficacy	11.9 ^a (5.3)	13.3 ^b (5.2)	16.0 ^c (4.4)	8.59***
Sexual satisfaction	10.0 ^a (4.3)	12.2 ^a (5.4)	15.3 ^b (4.7)	11.80***
Sexual anxiety	15.9 ^a (6.8)	12.9 ^b (6.0)	8.2 ^c (3.2)	26.58***
Sexual depression	15.2 ^a (6.4)	12.3 ^b (5.0)	7.1 ^c (2.6)	45.12***
Sexual fear	17.1 ^a (6.4)	14.5 ^a (5.1)	10.9 ^b (4.7)	13.40**
Sexual consciousness	12.8 ^a (4.4)	15.8 ^b (4.6)	15.9 ^b (4.6)	3.23*
Sexual motivation	9.7 ^a (4.2)	12.6 ^b (5.5)	14.1 ^b (5.3)	4.87**
Positive SSC	32.5 ^a (14.5)	37.7 ^a (15.2)	46.9 ^b (12.9)	11.58***
Negative SSC	48.1 ^a (18.8)	39.7 ^b (6.7)	26.2 ^c (8.7)	31.36***
Situational SSC	22.6 ^a (8.0)	28.4 ^b (8.8)	29.9 ^b (9.2)	4.62*

Note. Mean values with uncommon superscripts were significantly different using Duncan’s post hoc test. **p* < .05; ***p* < .01; ****p* < .001.

Table 3. Psychological functioning of CSA survivors and non-CSA respondents.

	CSA-plus (N = 16) M (SD)	CSA-only (N = 67) M (SD)	Non-CSA (N = 89) M (SD)	F-value
Self-esteem	25.1 ^a (6.4)	27.9 ^b (5.7)	30.3 ^c (3.7)	10.26***
Self-efficacy	19.6 ^a (6.4)	22.5 ^b (6.0)	23.6 ^b (4.9)	3.76*
Life satisfaction	16.8 ^a (6.7)	18.6 ^a (5.2)	21.5 ^b (4.4)	10.30***
Depression	17.5 ^a (5.8)	12.8 ^b (7.5)	9.5 ^c (6.0)	11.51***
Social avoidance	17.9 ^a (3.9)	15.3 ^b (4.2)	14.9 ^b (3.4)	4.17*
Social alienation	27.3 ^a (6.2)	24.5 ^b (5.5)	21.3 ^c (5.2)	11.79***

Note. Mean values with uncommon superscripts were significantly different using Duncan's post hoc test.

* $p < .05$; *** $p < .001$.

Table 4. Partial eta squared of CSA vs. non-CSA in SSC.

	Partial eta squared (vs. non-CSA)		Welch test
	CSA-plus	CSA-only	
Sexual self-esteem	.07	.09	10.72***
Sexual self-efficacy	.06	.07	8.21***
Sexual satisfaction	.09	.08	13.10***
Sexual anxiety	.17	.17	23.17***
Sexual depression	.24	.27	38.91***
Sexual fear	.10	.09	12.24***
Sexual consciousness	.04	.00	3.27*
Sexual motivation	.05	.02	6.51***
Positive SSC	.08	.09	11.34***
Negative SSC	.19	.20	26.74***
Situational SSC	.05	.01	5.32**

* $p < .05$; ** $p < .01$; *** $p < .001$. η^2 value .01 to $< .06$ = small; $.06$ to $< .14$ = medium; $\geq .14$ = large.

and non-CSA in psychological functioning were mostly moderate (see Table 5). Overall, the effect size of CSA on psychological functioning was generally smaller than that of CSA on SSC.

Indirect effects of CSA

A path analysis using MPlus 7 (Muthén & Muthén, 2012) examined the moderating effects of five demographic factors, i.e., age, education, marital status, religious affiliation, and income. The path analysis also examined the mediating effects of SSC on the relationship between CSA and psychological functioning.

In the path analysis, CSA was a 3-level factor, CSA-plus, CSA-only, and non-CSA, where non-CSA was set as the reference level and its β -values were fixed as zero. The β -values of CSA-plus and CSA-only represented their effects over non-CSA.

A full model with interaction terms of CSA severity and demographic factors, direct effects of CSA on psychological functioning, and mediating effects of SSC were considered in the path analysis. Based on a backward elimination, all interaction terms were found not significant and were removed. The non-significant interaction terms

Table 5. Partial eta squared of CSA vs. non-CSA in psychological functioning.

	Partial eta squared (vs. non-CSA)		Welch test
	CSA-plus	CSA-only	
Self-esteem	.09	.05	8.37**
Self-efficacy	.04	.01	3.08 ⁺
Life satisfaction	.07	.07	9.12**
Depression	.09	.05	9.99***
Social avoidance	.05	.00	3.95*
Social alienation	.09	.08	10.76***

+ $p = .06$; * $p < .05$; ** $p < .01$. η^2 value .01 to $< .06$ = small; $.06$ to $< .14$ = medium; $\geq .14$ = large.

indicated that there were no moderating effects of CSA characteristics and demographic factors on the outcomes of different CSA statuses (CSA-plus, CSA-only, and non-CSA).

The non-significant direct effects of CSA were also removed via backward elimination. Hence, only the indirect effects of CSA on psychological functioning via SSC were retained in the final model and are shown in Table 6. Compared with non-CSA, CSA-plus and CSA-only showed lower levels of self-esteem and life satisfaction, but higher levels of depression, social avoidance, and social alienation.

Results of the path analysis are illustrated in Figure 1, in which only the paths with significant β -values are shown. As reflected by the β -values, CSA-plus and CSA-only had a lower Positive SSC, but a higher Negative SSC compared with non-CSA. While no significant path was associated between CSA-only and Situational SSC, CSA-plus attained a lower level of Situational SSC than non-CSA.

Figure 1 shows that the associations of Positive SSC and Negative SSC with psychological functioning were generally in the expected direction. Situation SSC was least significantly associated with psychological functioning and adversely impacted life satisfaction only. The effects of

Table 6. Indirect effects of CSA on psychological functioning in the final model.

	Self-esteem	Self-efficacy	Life satisfaction	Depression	Social avoidance	Social alienation
CSA-plus	-.18**	-.09	-.11*	.19***	.10*	.17***
CSA-only	-.18**	-.08	-.13**	.19***	.09*	.16**

* $p < .05$; ** $p < .01$; *** $p < .001$.

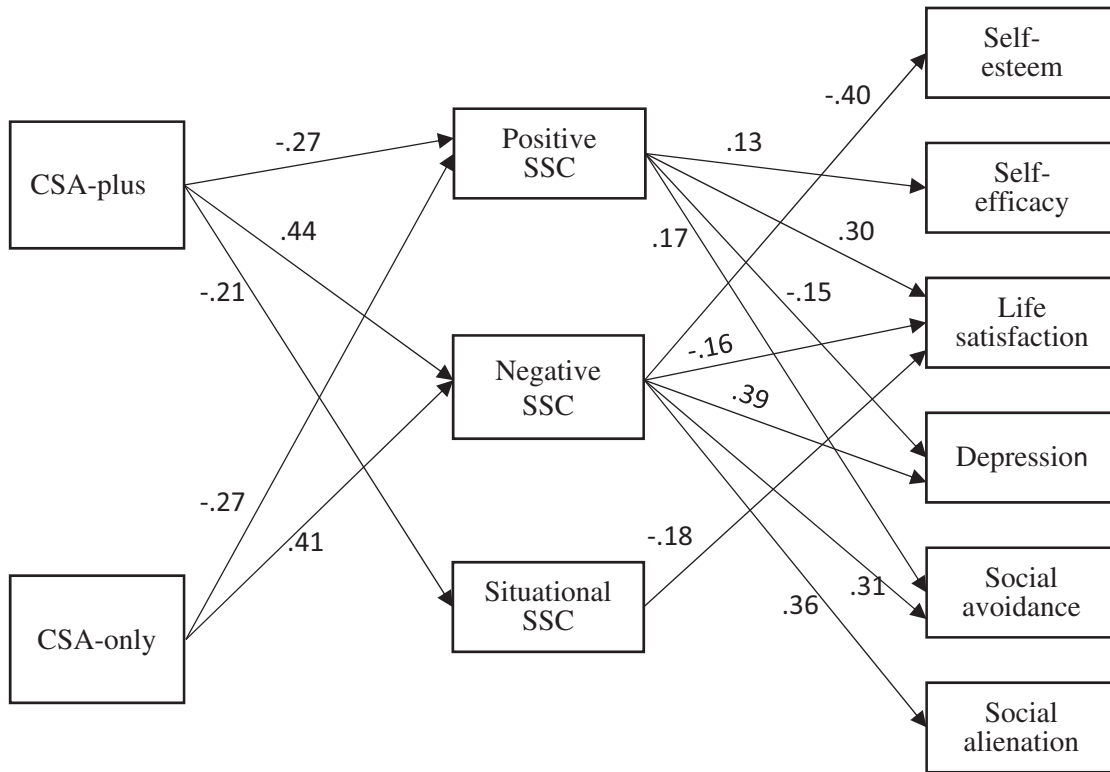


Figure 1. Path diagram with significant standardized coefficients.

CSA-plus on psychological functioning were mediated by Positive, Negative, and Situational SSC, while the indirect effects of CSA-only were mediated by Positive and Negative SSC, but not Situational SSC.

As Figure 1 shows, the paths with significant β -values demonstrated the mediating effects of SSC. Generally, the CSA effects on psychological functioning were mediated by Positive and Negative SSC, and to a less extent by Situational SSC. While the paths of mediation between CSA-plus and CSA-only were not entirely identical, they did support the mediating role of SSC.

Discussion and conclusion

SSC of CSA survivors

Previous studies on SSC of CSA survivors focused only on sexual self-esteem and sexual self-efficacy, both are Positive SSC. As far as the authors can ascertain, no previous research had

investigated the impact of CSA on different components of SSC. This study investigated the SSC of CSA survivors more comprehensively by looking into how Positive SSC, Negative SSC, and Situational SSC were affected by CSA. The results highlighted that Negative SSC was more adversely affected than were Positive SSC and Situational SSC.

Path analysis showed that Situational SSC was less significantly associated with psychological functioning, compared with Positive and Negative SSC. It played a relatively minor role in mediating the relationship between CSA and psychological functioning. Interestingly, the study findings are quite similar to those reported by Abadi et al. (2019) who found that Negative SSC was significantly associated with sexual distress as was Positive SSC in an opposite direction. However, no significant association was found between Situational SSC and sexual distress.

Of the three components of SSC, Positive and Negative SSC may be conceptualized as positive and negative sexual well-being, respectively, and are comparable to positive and negative psychological well-being. Positive and negative well-being are two independent constructs with differential antecedents. Negative life events are more predictive of negative than positive well-being (Stallings et al., 1997). Similarly, CSA, a negative stressful life event, has a greater influence on Negative SSC than on the other two components.

CSA exerts greatest effect on Negative SSC. In terms of relative efficiency, Negative SSC is a more sensitive measure of sexual well-being than are Positive SSC and Situational SSC. The use of Negative SSC subscales as a brief screening tool in the initial assessment of CSA survivors and as an outcome measure of intervention programs is recommended.

Hypothesis 1 was supported in that CSA survivors generally scored lower on Positive SSC and higher on Negative SSC. These results contrast with those reported by Andersen and Cyranowski (1994) who found no apparent relationship between CSA and sexual self-schema. It should be noted that Andersen and Cyranowski based their study on non-contact sexual abuse, whereas this study was based on CSA survivors who experienced mainly contact sexual abuse. A great majority (98.5%) of CSA victims experienced contact sexual activities. A total of 35.8% experienced severe sexual assaults of penetration, 32.8% involved oral sex or anal sex, 85.1% were abused sexually by touching or fondling of sex organ. Only one victim (1.5%) was abused by non-contact sexual activity (watching video of animal sex) without any contact sexual activity. We believe that the different levels of CSA severity account for the inconsistencies in SSC reported in different studies (see Lemieux & Byers, 2008; Senn et al., 2007).

Survivors' psychological functioning

The overall findings generally support Hypothesis 2, i.e., CSA was associated with negative self-evaluation, psychological ill-health, and difficulties in interpersonal relationships. The

lower self-esteem and psychological ill-health of CSA survivors observed in this study are consistent with studies reported in the West (Cheng & Furnham, 2003; Southall & Roberts, 2002). Additionally, this study showed that women with a history of CSA scored higher on both social avoidance and social alienation compared with non-CSA respondents, which are similar to findings reported by many researchers in the West (Feerick & Snow, 2005; Joiner, 2000). CSA survivors exhibited avoidance behavior tended to diminish social support and opportunities for learning social skills, which in turn led to further impairments in interpersonal relationships. Apparently, health professionals should help CSA survivors to break this vicious self-propagating cycle.

Mediating effects and implications

The path analysis supported Hypothesis 4 regarding the mediating role of SSC in the relationship between CSA and psychological functioning. Previous research on the mediating role of SSC was confined to sexual self-esteem, and with outcome measures focused on sexual behaviors (e.g., re-victimization or sexual interaction) (Krahé & Berger, 2017; Lemieux & Byers, 2008). The uniqueness of the present study is that the mediating role of SSC was examined more comprehensively, encompassing Positive, Negative, and situational SSC. Besides, instead of restricting the outcome measures to sexual behavior, this study examined three domains of psychological functioning. The study results showed that Negative SSC played a more significant mediating role than did Positive SSC of sexual self-esteem as reported by Lemieux and Byers (2008) and Van Bruggen et al. (2006).

Research showed that SSC was amenable to change via intervention and changing SSC helped to alleviate sexual dysfunction (Ziaei et al., 2018). Relatedly, pharmacological treatment using sildenafil citrate for CSA survivors did not meet with much success (Van der Made et al., 2009). For the small proportion of CSA survivors responsive to drug therapy, enhanced arousal made intercourse unpleasant or disturbing and brought no sexual satisfaction to CSA survivors. In contrast,

counseling focused on SSC helped resolve women's sexual dysfunction as regards sexual desire, sexual excitement, and orgasm (Ziaei et al., 2018). The present study suggests that diminution of Negative SSC and promotion of Positive SSC should help to resolve CSA survivors' sexual difficulties.

Impacts of CSA-plus

Results showed that CSA-plus and CSA-only were not a homogenous group. Generally, survivors of CSA-plus were less healthy in SSC and show greater psychosocial impairments. It is meaningful to separate the two groups in comparison with non-CSA respondents. Given the different severity of psychosocial impairments between CSA-plus and CSA-only survivors, it is conceivable that they did not show the same pattern of difference (in SSC and psychological functioning) when compared with non-CSA respondents. These findings are congruent with that of Oshima et al (2014) who found that multiple maltreatment survivors were more likely to report long-term negative outcomes than survivors who experienced only a single encounter. Practitioners should be aware of the different impacts of CSA-plus and CSA-only so that intervention can be planned for the two groups in a targeted manner.

The CSA-plus sample was rather small compared to the CSA-only sample. It was not practicable to compare the SSC and psychological functioning of different categories of CSA-plus. Future studies would need to recruit sufficiently large samples in the respective categories to ensure meaningful group comparisons.

Non-significant findings

None of the interaction terms in the path analysis was significant. Sexual health of survivors who experience less severe abuse was similar to those who experienced more severe sexual abuse. It is possible that the nonsignificant moderating effect of CSA severity might be due to the homogeneity of the sample. Almost all CSA victims experienced contact sexual activities, with only one victim did not experience contact sexual activity. However, other indicators of CSA severity (e.g.,

age of onset, duration, frequency, and relationship with abuser) did not show such homogeneity or skewed distribution. The non-significant moderating effects of CSA severity need further verification in future study.

The non-significant moderating effects of demographic factors implicate that CSA survivors should be afforded quality care regardless of demographic characteristics. It may be noted that certain demographic characteristics are not static. For example, intervention aiming at improving SSC (i.e., promoting sexual self-esteem or lowering sexual anxiety) could lead to a greater likelihood for CSA survivors to engage in marital relationship, whereby a change of marital status would occur. Likewise, CSA survivors with more effective psychological functioning are more likely to attain higher education, to get married, and to have higher income than are survivors of CSA with less effective psychological functioning. Indeed, the relationships between well-being and certain demographic characteristics are bidirectional.

The main effects of CSA on SSC were generally larger than that on psychological functioning. This could be partly due to the direct effect of CSA on SSC and indirect effect on psychological functioning. The greater effects on SSC may also be related to higher levels of generality within the same domain. Both CSA and SSC were within the same sexual domain, whereas CSA and psychological functioning belonged to two different domains. Relationships in the same domain were expected to be closer than those across different domains. Hence, the effect size of CSA on SSC was generally larger than its effect on psychological functioning.

Hypothesis 5 which postulated that CSA survivors would score lower on Situational SSC (sexual consciousness and social motivation) was not fully supported. As regards this non-significant finding, it may be relevant to refer to a separate analysis reported elsewhere (Boey & Ng, 2021) that found no difference in sexual frequency between CSA survivors and non-CSA respondents, though CSA survivors' sexual desires were significantly lower. This finding is relevant here because both sexual consciousness and sexual motivation were closely associated with sexual

frequency (Ng & Boey, 2019). As sexual frequency was not affected by CSA status, it was not unexpected that sexual consciousness and sexual motivation did not show any significant difference.

Jehu (1988) contended that CSA survivors were obligated to please their sexual partner and engage in sexual activities, even though they had no sexual desires. CSA survivors may also engage in sexual activities to exchange for affection and love. Additionally, cultural values in many Asian countries expected women to submit to their partner and obliged them to engage in sexual activities even if they had no sexual desire (Ng & Ho, 2013). Thus, even though their biological sexual drive is low, women may also be culturally motivated to engage in sexual activities. Engagement in sexual activities out of obligation, may partly explain why CSA survivors' sexual consciousness and sexual motivation did not decrease significantly. It should be highlighted here that even though CSA survivors' sexual frequency did not decline, their Positive SSC and Negative SS were still adversely affected. Their sexual well-being remains a matter of concern to health professionals.

Limitations of the study

The authors acknowledge the drawbacks in performing mediating analysis based on cross-sectional data. Cross-sectional correlational data do not yield definitive causal relationships. The mediating analysis informs how much variance between CSA and psychological functioning is shared by SSC. Nonetheless, on a conceptual level, CSA is not an outcome of SSC. Rather, SSC is considered as an outcome of CSA, which serves as a mediator between CSA and psychological functioning.

It has been suggested that CSA survivors may exhibit a "sleeper effect," i.e., showing little distress initially, but showing an increase of psychopathology over time (Briere, 1992). High levels of psychological symptoms followed by a decline of symptoms, or fluctuation of symptoms over time have also been reported (see Berliner & Elliott, 2002). Cross-sectional data in this study were unable to capture the sleeper effect or symptom fluctuation. Future longitudinal research may be

able to delineate sleeper and fluctuation effects of CSA outcomes and qualitative research may explore the sleeper effect or symptom fluctuation.

Both SSC and psychological functioning were measured by self-report scales. Bias associated with self-report measures, e.g., social desirability bias, is acknowledged despite the researchers' efforts to reduce this by ensuring respondents' anonymity. Space constraints prevented the inclusion of a measure of social desirability in the questionnaire; hence, it was not possible to control for the effect of social desirability.

Some researchers considered that using similar methods for data collection created the potential for common method variance (CMV) inflating the observed relationships and threatening the validity of the relationships among the measures (Jordan & Troth, 2020). To examine the possible CMV effect, Harman's one-factor test was conducted. The principal axis factoring revealed that the percentage of total variance was 27.6%, which was well below the 50% threshold (Hair et al., 2010). Hence, CMV was not considered a threat to the validity of the study's quantitative findings.

Psychological functioning as measured in this study focused on self-evaluation, psychological health, and interpersonal relationships. The three domains had robust associations with a wide range of outcomes across the life course (Hawkey & Capitano, 2015; Kupferberg et al., 2016; Lee et al., 2014). Nonetheless, the domains were concerned with internalizing problems. Previous research suggested that CSA survivors may exhibit externalizing problems (e.g., aggressive social behavior, health-compromising behaviors) (Polusny & Follette, 1995; Williams, 2001). Hence, there would be value in investigating externalizing problems in future studies of CSA survivors' psychological functioning. Certainly, the three domains are not the only components of psychological functioning associated with CSA. Each domain of psychological functioning may also be assessed by other measures (e.g., attribution style, symptoms of PTSD, or communication style) in future studies.

Conclusion

Notwithstanding some limitations, the findings of this study indicate that women with a history of

CSA, particularly survivors who also experienced other types of child trauma, exhibited significantly inadequate SSC and ineffective psychological functioning compared to women without a history of CSA. The lower levels of sexual health and ineffective psychological functioning indicate poorer quality of life. The effects of CSA on psychological functioning were mediated by SSC. To safeguard the effective psychological functioning of women with a history of CSA, intervention programs should aim to promote Positive SSC and reduce Negative SSC. As Negative SSC has good relative efficiency, it can serve as a screening tool or an outcome measure of intervention programs.

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