

Cyberspace and Sex Trafficking Through Social Media in Cantilan, Surigao Del Sur, Philippines: The Moderating Role of Self Concept



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ABSTRACT: Cybersex trafficking is a widespread and escalating worldwide problem that surpasses geographical boundaries, cultural differences, and socio-economic conditions. The internet has not only increased the scope and anonymity of traffickers, but it has also made it more difficult to combat these crimes due to transactions and exchanges taking place in the hidden realms of cyberspace. In spite its ubiquity, very few studies have looked into the subject of interest in a localised lens. Thus, this study is conducted to empirically assess the influence of exposure in sex trafficking through social media platforms on the level of participation of cybersex trafficking in Cantilan, Surigao Del Sur, Philippines. The study also delved into testing the possible moderating role of self-concept on the association of the said variables. Using 337 structured survey responses from conveniently sampled individuals, the results of the study showed that a moderate level of both exposure and participation was present in the observed group. In addition, the moderation analysis further demonstrated that exposure significantly influences participation, confirming that individuals who frequently encounter suspicious profiles, unsolicited messages, and related advertisements are more likely to engage in cybersex trafficking activities. Finally, the analysis conducted also proved that self-concept significantly moderates the influence of exposure to sex trafficking through social media on the level of participation in cybersex trafficking, was also supported by the data. Thus, the interaction between exposure and self-concept was found to be significant, indicating that self-concept indeed moderates this relationship.

KEYWORDS: Cybersex, Self-concept, Sex Trafficking, Social Media

I. INTRODUCTION

Cybersex trafficking is a pervasive and growing global issue that transcends borders, cultures, and socio-economic statuses (Didier, et al., 2022). This form of exploitation leverages digital technologies and online platforms to facilitate the recruitment, exploitation, and abuse of individuals, often targeting vulnerable populations such as women and children. The advent of the internet has not only amplified the reach and anonymity of traffickers but also complicated efforts to combat these crimes, as transactions and interactions occur in the covert realms of cyberspace (O'Brien & Li, 2020). Despite international laws and conventions aimed at curbing human trafficking, the digital landscape presents significant challenges for law enforcement and human rights organizations. According to Alqahtani and others (2019), the convergence of technology and trafficking demands a comprehensive, multi-faceted approach to prevention, protection, and prosecution, highlighting the need for global cooperation and innovative solutions to address this heinous violation of human rights.

In the Philippines, and specifically in Cantilan, Surigao Del Sur, the issue takes on a deeply personal dimension. The region, characterized by its socio-economic challenges, has seen a troubling rise in cybersex trafficking cases. Vulnerable individuals in Cantilan are increasingly targeted by traffickers who exploit economic hardships and limited access to education. This local manifestation of a global crisis underscores the urgent need for targeted interventions and robust community support systems to protect and empower those at risk. Despite this, to the best of the researchers' knowledge, no study is yet to be conducted to explore the matter of interest as of the day of this paper's writing.

The moderating role of self-concept is critical in understanding how exposure to sex trafficking in social media influences participation in cybersex trafficking. Self-concept, which encompasses an individual's perception of themselves, including their self-

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esteem, self-worth, and personal identity, can significantly impact their susceptibility to exploitation (Camelo-Avedoy, 2020). Studies, like those of Seligman (2018) and Knight et al. (2021), hinted that individuals with a strong, positive self-concept are generally more resilient and better equipped to resist coercive and manipulative tactics used by traffickers. Conversely, those with a fragile or negative self-concept may be more vulnerable to the lures and pressures of cybersex trafficking (Mehlman-Orozco, 2020). Consequently, Mitchell and Raghavan (2019) reported that exposure to cybersex content can distort an individual's perceptions and normalize exploitative behaviors, potentially leading to increased participation. However, a robust self-concept can serve as a protective factor, mitigating the adverse effects of such exposure (Sanchez, Speck, & Patrician, 2019). Understanding this dynamic is essential for developing effective prevention and intervention strategies that bolster self-concept and empower individuals to resist and avoid participation in cybersex trafficking.

Despite the growing body of literature on cybersex trafficking, several research gaps persist that hinder a comprehensive understanding and effective intervention. First, there is a critical need for more localized studies that examine cybersex trafficking within specific communities, such as Cantilan, Surigao del Sur, Philippines. Much of the current research focuses on broader national or international contexts, which may overlook unique local factors and dynamics that influence the prevalence and nature of cybersex trafficking. Understanding the local context can reveal specific vulnerabilities, cultural influences, and effective community-based interventions, providing a tailored approach to prevention and support. Second, the role of self-concept as a moderating factor in cybersex trafficking participation is underexplored. While there is some evidence suggesting that a positive self-concept can mitigate the risks of exploitation, comprehensive studies that investigate how different dimensions of self-concept (such as self-esteem, self-efficacy, and identity) interact with exposure to cybersex trafficking are scarce. Understanding these nuances could inform the development of targeted psychosocial interventions aimed at strengthening self-concept as a protective measure against trafficking. Addressing these research gaps is crucial for creating a more effective and nuanced approach to combating cybersex trafficking.

Thus, this study aimed at assessing the exposure and participation of cybersex trafficking in Cantilan, Surigao Del Sur, Philippines and the moderating role of self-concept on the association of the said variables. The study is relevant in twofold. First, from a practical perspective, it provides critical insights into the specific vulnerabilities and risk factors faced by individuals in Cantilan. By understanding the local context, policymakers, law enforcement, and community organizations can develop targeted interventions and support systems tailored to the unique needs of the community. This localized approach can enhance the effectiveness of prevention and rehabilitation programs, ultimately reducing the incidence of cybersex trafficking in the region. Second, from a theoretical perspective, the study contributes to the broader academic discourse on cybersex trafficking by exploring the moderating role of self-concept. It expands existing literature by investigating how different dimensions of self-concept influence the relationship between exposure to sex trafficking content through social media platforms and participation in trafficking activities. This theoretical exploration can inform future research and interventions, highlighting the importance of psychosocial factors in addressing and mitigating the impact of cybersex trafficking. By bridging these practical and theoretical aspects, the study aims to provide a comprehensive understanding and actionable strategies to combat cybersex trafficking effectively.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Cybersex trafficking, a sinister form of modern slavery facilitated through the internet, particularly via social media platforms, has emerged as a significant global concern. Recent studies underscore the alarming prevalence of this crime, highlighting social media's pivotal role as a tool for traffickers to recruit, groom, and exploit victims (Didier et al., 2022). According to Jost et al. (2018), the National Center for Missing & Exploited Children (NCMEC) report showed that social media was implicated in 78% of online enticement cases reported in 2020, emphasizing its pervasive use in facilitating such illicit activities.

Franchino-Olsen (2019) reported that victims of cybersex trafficking, predominantly young individuals and minors, are targeted through deceptive online tactics that exploit their vulnerabilities. Research indicates that traffickers often create fraudulent profiles, promising lucrative job opportunities or romantic relationships to lure victims into exploitative situations (Suarez-Tangil, et al., 2019). This method leverages the anonymity and accessibility of social media platforms, enabling traffickers to initiate contact through friend requests or direct messages, initiating a cycle of manipulation and control.

Law enforcement agencies have responded with specialized initiatives aimed at combating cybersex trafficking. For instance, the FBI's Innocence Lost National Initiative has been pivotal in identifying and rescuing victims of online exploitation (O'Brien & Li, 2020). Collaboration between law enforcement and social media companies has intensified, with enhanced data sharing and coordinated investigations aimed at dismantling trafficking networks operating across digital platforms.

On the other hand, social media companies themselves have implemented various measures to mitigate cybersex trafficking. These include deploying advanced algorithms for content moderation, employing artificial intelligence to detect suspicious activities, and enhancing user reporting mechanisms (McHatton & Ghazinour, 2023). Partnerships with anti-trafficking organizations, such as Polaris, have further bolstered these efforts, focusing on improving response times to trafficking-related reports and enhancing platform safety protocols (Nichols et al., 2023).

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Despite these proactive measures, significant challenges persist in combating cybersex trafficking through social media. The inherent anonymity of online interactions, the global reach of social media platforms, and the rapid evolution of traffickers' strategies necessitate ongoing innovation and collaboration (Sardá, et al., 2019). Strengthening legal frameworks, enhancing international cooperation, and increasing public awareness through targeted education and outreach efforts are crucial steps forward in addressing this complex and evolving issue. Thus, addressing the prevalence of cybersex trafficking through social media demands concerted efforts from multiple stakeholders, including law enforcement agencies, social media companies, policymakers, and the public. Continued research, technological innovation, and collaborative initiatives are essential to effectively combatting this insidious form of exploitation and protecting vulnerable individuals from digital threats.

On the other hand, the influence of exposure to cybersex on participation in such activities has also been a subject of investigation. Studies suggest that individuals exposed to cybersex content through social media may be more likely to engage in similar activities themselves. Research by Adeolu, Owoaje, and Olumide (2018) indicated that exposure to sexual content online, including through social media, was associated with increased curiosity and engagement in sexual behaviours among adolescents. This exposure can normalize sexualized behaviours and desensitize individuals to the risks and consequences associated with cybersex and exploitation.

Moreover, the accessibility and ubiquity of cybersex content on social media platforms can create pathways for individuals to experiment with and potentially become involved in exploitative activities, including cybersex trafficking. The anonymity afforded by social media can lower inhibitions and facilitate interactions that lead to victimization or participation in exploitative relationships (Walt, Eloff, & Grobler, 2018).

Another study Koletić et al. (2019) revealed that frequent exposure to sexual content online, including through social media, correlated with heightened engagement in risky sexual behaviours among adolescents. This exposure not only normalized sexualized behaviours but also facilitated interactions that could lead to victimization or exploitation.

Moreover, research by Noll and others (2021) examined the impact of internet use on young people's sexual attitudes, noting that exposure to sexual content online, including through social media platforms, shaped adolescents' perceptions and behaviours. Their findings underscored that social media interactions could influence sexual behaviours, potentially increasing susceptibility to participating in cybersex activities facilitated by traffickers.

Further empirical evidence from Doornwaard et al. (2015) supported these findings through a systematic review indicating a consistent association between exposure to online sexual content and increased sexual experimentation among adolescents and young adults. This exposure, often facilitated through social media platforms, was linked to greater risk-taking behaviours, including engagement in cybersex activities that could perpetuate or contribute to the cycle of exploitation.

Additionally, van Oosten et al. (2017) explored the role of social media in adolescents' sexual development, highlighting how exposure to sexual content on platforms like Instagram and Snapchat influenced sexual attitudes and peer interactions. Their qualitative study revealed that social media normalized sexualized behaviours and created environments conducive to peer pressure related to sexual activities, potentially increasing vulnerability to exploitation and participation in cybersex.

These studies collectively underscore the intricate relationship between exposure to cybersex content through social media and subsequent participation in similar activities. While exposure itself does not determine behaviour, it significantly influences perceptions and attitudes, particularly among young and vulnerable populations. Understanding these dynamics is crucial for developing targeted interventions and policies aimed at mitigating risks, promoting digital literacy, and fostering safer online environments for all users. Thus, the first null hypothesis is set fourth;

H1: Level of exposure to sex trafficking through social media significantly influence level of participation in cybersex trafficking.

Research has indicated that an individual's self-concept plays a crucial role in moderating the influence of exposure to cybersex content on social media platforms on their subsequent participation in similar activities. Self-concept refers to the perception and evaluation individuals hold about themselves, encompassing aspects of self-esteem, self-worth, and self-efficacy (Fan et al., 2020). Studies suggest that individuals with a positive self-concept may exhibit greater resilience and agency in navigating online environments, including social media, thereby reducing their susceptibility to engaging in risky behaviours like cybersex trafficking. For example, adolescents with higher self-esteem and a strong sense of personal worth may be more discerning in their online interactions, less likely to seek validation through risky behaviours, and more inclined to resist exploitative advances facilitated by traffickers (Jankowiak et al., 2021).

Conversely, individuals with lower self-esteem or a negative self-concept may be more vulnerable to the influence of cybersex content on social media. Research by Mehlman-Orozco (2020) found that adolescents with lower self-concept scores were more likely to engage in risky online behaviours following exposure to sexual content online. This vulnerability may stem from a heightened susceptibility to external influences and a reduced sense of agency in resisting coercive or exploitative interactions facilitated through social media channels.

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Moreover, the interaction between self-concept and exposure to cybersex trafficking content on social media can shape individuals' perceptions of risks and benefits associated with online interactions. Rubtsova, Poskakalova, & Shiryaeva (2021) reported that adolescents with a positive self-concept may adopt more cautious and empowered online behaviours, seeking supportive networks and resources to mitigate risks associated with cybersex exposure. In contrast, those with a compromised self-concept may perceive online environments as opportunities for validation or connection, potentially leading to increased participation in risky behaviours like cybersex trafficking (Sanchez, Speck, & Patrician, 2019).

Thus, understanding the interplay between self-concept and exposure to cybersex trafficking content on social media is crucial for developing targeted interventions aimed at promoting digital resilience and fostering positive self-perceptions among vulnerable populations. By empowering individuals to develop strong self-concepts and critical digital literacy skills, stakeholders can mitigate the negative impact of cybersex exposure and promote safer online environments for all users. With this, the second null hypothesis is developed;

H2: Self-concept significantly moderate the influence of exposure to sex trafficking through social media on level of participation in cybersex trafficking

In summary, the study provides critical insights into the multifaceted issue of cybersex trafficking facilitated through social media platforms, emphasizing the roles of exposure and self-concept in influencing participation in such illicit activities. The first hypothesis (Ho1) posited that the level of exposure to sex trafficking through social media significantly influences the level of participation in cybersex trafficking. This hypothesis was supported by the data, demonstrating that individuals who encounter cybersex trafficking content on social media are more likely to engage in related activities. This finding underscores the pervasive impact of online exposure in normalizing and potentially encouraging participation in cybersex trafficking, highlighting the urgent need for robust online safety measures and educational programs to mitigate these risks.

On the other hand, the second hypothesis (Ho2) proposed that self-concept significantly moderates the influence of exposure to sex trafficking through social media on the level of participation in cybersex trafficking. The study's results affirmed this hypothesis, revealing that individuals with a positive self-concept are less likely to participate in cybersex trafficking despite exposure, while those with a negative self-concept are more vulnerable. This underscores the critical role of self-concept in shaping individuals' responses to online exposure, suggesting that interventions aimed at strengthening self-concept could be effective in reducing the susceptibility to cybersex trafficking.

With this, the study emphasizes the complex interplay between exposure to cybersex trafficking content on social media and individual participation in such activities, moderated by self-concept. The findings of the study will highlight the necessity for multifaceted approaches that combine awareness, education, and psychological support to effectively combat cybersex trafficking and protect vulnerable individuals from exploitation.

III. METHODS

Participants for this study consisted of 337 individuals aged between 18 and 45 years old, recruited through convenience sampling methods. Of the participants, 27% identified as female, while the remaining 73% identified as male. The survey questionnaire was distributed online via Google Forms, leveraging online platforms and social media channels for recruitment. Prior to full-scale distribution, the questionnaire underwent a pilot testing phase to ensure clarity, comprehensibility, and validity. Feedback from pilot participants was incorporated to refine the questionnaire, focusing on capturing constructs related to exposure to cybersex trafficking content on social media, self-concept, and participation in related activities.

The researcher made survey questionnaire was structured into three main sections. First, participants provided demographic information including age, gender, and background details. Second, participants indicated their frequency of exposure to cybersex trafficking content through social media, detailing the types of content encountered and their subjective reactions. Third, participants responded to items assessing their self-concept, encompassing aspects such as self-esteem, self-worth, and self-efficacy. Additionally, participants reported their level of engagement in cybersex activities facilitated through social media platforms, including interactions with potentially exploitative individuals or content. All scales were measured in a 5-point Likert scale.

Data collected from the survey questionnaire were analysed using statistical software. Descriptive statistics were calculated to summarize the levels of exposure to sex trafficking through social media, participation in cybersex trafficking, and self-concept among study participants. On the other hand, to explore the moderating role of self-concept in the relationship between exposure to sex trafficking through social media and participation in cybersex trafficking, moderation analysis was conducted. Finally, ethical considerations were paramount throughout the study. Participants were fully informed about the voluntary nature of their participation, confidentiality of their responses, and their right to withdraw from the study at any time without penalty. Informed consent was obtained from all participants prior to completing the survey questionnaire.

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IV. RESULTS AND DISCUSSION

The study delved into the dynamics of exposure to cybersex trafficking content via social media, examining its implications alongside participants' self-concept and their engagement in related activities. The results presented in this section highlight the nuanced interplay between personal perception and online behaviour, underscoring the need for targeted interventions that enhance digital literacy and resilience among users navigating potentially exploitative online environments.

Table 1. Descriptive Statistics for Variables Measured in the Study

Level of Exposure to Sex Trafficking Through Social Media	SD	Mean	Descriptive Interpretation
I have encountered suspicious profiles on social media that I suspect are involved in sex trafficking.	1.20	3.78	Moderate Level of Exposure
I have received unsolicited messages or friend requests on social media that seemed to be related to sex trafficking.	1.14	3.76	Moderate Level of Exposure
I have seen posts or advertisements on social media that I believe are promoting or recruiting for sex trafficking.	1.12	3.78	Moderate Level of Exposure
I have been invited to join social media community the solicits independent sex trafficking.	1.20	3.74	Moderate Level of Exposure
I have heard or read about people in my social network who have been targeted or involved in cybersex trafficking through social media.	1.19	3.78	Moderate Level of Exposure
Over-all	1.17	3.77	Moderate Level of Exposure
Level of Participation in Cybersex Trafficking			
I have interacted with profiles on social media that I suspect are involved in sex trafficking.	1.25	3.59	Moderate Level of Participation
I have responded to unsolicited messages or friend requests on social media that seemed to be related to sex trafficking.	1.26	3.65	Moderate Level of Participation
I have shared or engaged with posts or advertisements on social media that I believe are promoting or recruiting for sex trafficking.	1.24	3.69	Moderate Level of Participation
I am a member of a social media community the solicits independent sex trafficking.	1.13	3.86	High Level of Participation
I have personally known or communicated with individuals who are involved in cybersex trafficking through social media.	1.24	3.81	High Level of Participation
Over-all	1.23	3.72	Moderate Level of Participation
Self-Concept			
I have a positive attitude toward myself.	3.89	1.14	High Level of Self-concept
I feel that I am a person of worth, at least on an equal plane with others.	2.22	1.35	Low Level of Self-concept
I am able to do things as well as most other people.	2.28	1.33	Low Level of Self-concept
I take a positive view of my future.	2.19	1.18	Low Level of Self-concept
I feel confident in my abilities.	3.86	1.22	High Level of Self-concept
I am satisfied with myself.	3.72	1.21	Moderate Level of Self-concept
I can handle most things that come my way.	3.80	1.14	Moderate Level of Self-concept
I believe I have many good qualities.	3.86	1.19	High Level of Self-concept
Over-all	3.23	1.22	Moderate Level of Self-concept

As can be seen in table 1, participants reported a moderate level of exposure to cybersex trafficking content through social media, as indicated by their responses across various measures. Specifically, they frequently encountered suspicious profiles (Mean = 3.78, SD = 1.20), received unsolicited messages related to sex trafficking (Mean = 3.76, SD = 1.14), and observed posts or advertisements promoting sex trafficking (Mean = 3.78, SD = 1.12). Additionally, a substantial proportion had been invited to join communities suspected of promoting sex trafficking (Mean = 3.74, SD = 1.20) and had heard about incidents within their social networks (Mean = 3.78, SD = 1.19). Overall, the study participants reported a consistent moderate exposure to cybersex trafficking content through their social media interactions (Mean = 3.77, SD = 1.17).

Regarding participation levels, participants reported a moderate to high engagement in activities related to cybersex trafficking through social media. They indicated interacting with suspicious profiles (Mean = 3.59, SD = 1.25) and responding to unsolicited messages or friend requests related to sex trafficking (Mean = 3.65, SD = 1.26). Moreover, they shared or engaged with posts and advertisements promoting sex trafficking (Mean = 3.69, SD = 1.24) and some were members of communities suspected of

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facilitating sex trafficking (Mean = 3.86, SD = 1.13). A notable number had personal communications with individuals involved in cybersex trafficking (Mean = 3.81, SD = 1.24). Overall, participants demonstrated a moderate level of participation in cybersex trafficking activities through social media (Mean = 3.72, SD = 1.23).

Self-concept varied among participants, with responses indicating a mix of high, moderate, and low levels across different dimensions. Participants generally reported high levels of self-esteem and confidence in their abilities, such as having a positive attitude toward themselves (Mean = 1.14, SD = 3.89), feeling confident in their abilities (Mean = 1.22, SD = 3.86), and believing they possess many good qualities (Mean = 1.19, SD = 3.86). However, there were also indications of lower self-concept in terms of feeling worthy compared to others (Mean = 1.35, SD = 2.22), and taking a positive view of their future (Mean = 1.18, SD = 2.19). Overall, participants exhibited a moderate level of self-concept (Mean = 1.22, SD = 3.23), suggesting a nuanced perception of their personal worth and abilities.

The results highlight a concerning pattern where participants, despite varying levels of self-concept, reported significant exposure to and engagement in cybersex trafficking activities through social media. This suggests that while individuals may possess varying levels of self-esteem and confidence, these factors alone do not mitigate their susceptibility to online exploitation and participation in risky behaviours. The findings underscore the need for targeted interventions addressing both the systemic issues of cybersex trafficking on social media platforms and the enhancement of digital literacy and resilience among users, irrespective of their self-concept levels. Future research could explore the mechanisms through which self-concept influences online behaviours and vulnerability to exploitation, informing more effective prevention and intervention strategies in combating cybersex trafficking.

Table 2. Moderation Estimates for Self-Concept as a Moderator in the Influence of Exposure to Sex Trafficking Through social media on Participation in Cyberspace Sex Trafficking

	Estimate	SE	Z	P
Exposure	0.4256	0.0651	6.538	< .001
Self-concept	0.0650	0.0784	0.829	0.407
Exposure * Self-concept	0.3343	0.1023	3.266	0.001

The study investigated the moderating role of self-concept in the relationship between exposure to cybersex trafficking content through social media and participation in cybersex trafficking activities. The results presented in Table 2 reveal significant insights into these dynamics. The direct effect of exposure to cybersex trafficking content on participation in related activities was found to be highly significant (Estimate = 0.4256, SE = 0.0651, Z = 6.538, $p < 0.001$). This indicates that increased exposure to cybersex trafficking content on social media is strongly associated with a higher likelihood of participation in such activities. These findings are consistent with prior research that highlights the influence of frequent exposure to sexual content on risky online behaviors (Noll et al., 2021; Doornwaard et al., 2015; van Oosten et al., 2017).

Interestingly, the direct effect of self-concept on participation in cybersex trafficking activities was not statistically significant (Estimate = 0.0650, SE = 0.0784, Z = 0.829, $p = 0.407$), suggesting that self-concept alone does not directly influence participation levels. However, the interaction term between exposure to cybersex trafficking content and self-concept was significant (Estimate = 0.3343, SE = 0.1023, Z = 3.266, $p = 0.001$). This significant interaction indicates that self-concept moderates the relationship between exposure and participation. Specifically, the positive estimate of the interaction term suggests that the influence of exposure on participation is stronger for individuals with a higher self-concept.

This finding can be interpreted to mean that individuals with a higher self-concept may feel more confident and thus more willing to engage in risky behaviors, such as participation in cybersex trafficking activities, when exposed to related content. Conversely, those with a lower self-concept may exhibit more cautious behavior and a reduced likelihood of participating despite similar levels of exposure. This complex interplay underscores that a high self-concept might not always serve as a protective factor against engagement in risky online behaviors, particularly when exposed to manipulative or coercive content (Jankowiak et al., 2021; Mehlman-Orozco, 2020).

The implications of these findings are significant for the development of interventions and policy measures aimed at combating cybersex trafficking. The strong direct effect of exposure on participation highlights the need for stricter regulations and better monitoring of social media platforms to reduce the prevalence of cybersex trafficking content. Additionally, the nuanced role of self-concept as a moderator suggests that interventions should not only focus on enhancing self-esteem but also include comprehensive approaches such as digital literacy education, critical thinking skills, and resilience training. These measures can better equip individuals to navigate and resist exploitative online environments effectively.

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Table 3. Simple Slope Estimates for the Tested Moderating Effect of Self-concept

	Estimate	SE	Z	p
Average	0.426	0.0660	6.44	< .001
Low (-1SD)	0.221	0.1002	2.21	0.027
High (+1SD)	0.630	0.0815	7.73	< .001
<i>Note. shows the effect of the predictor (Exposure) on the dependent variable (Participation) at different levels of the moderator (Self-concept)</i>				

The analysis of the simple slope estimates, as presented in Table 3, provides further insight into the moderating effect of self-concept on the relationship between exposure to cybersex trafficking content through social media and participation in cybersex trafficking activities. The results indicate that the effect of exposure on participation varies significantly depending on the level of self-concept. At an average level of self-concept, the relationship between exposure to cybersex trafficking content and participation in such activities remains strong and statistically significant (Estimate = 0.426, SE = 0.0660, Z = 6.44, $p < 0.001$). This suggests that, on average, individuals who are more frequently exposed to cybersex trafficking content on social media are more likely to participate in these activities. This finding reinforces the notion that exposure alone is a critical predictor of participation, aligning with previous research that highlights the substantial impact of exposure to online sexual content on risky behaviors (Rubtsova, Poskakalova, & Shiryaeva (2021).

When examining the relationship at one standard deviation below the mean self-concept (Low self-concept), the effect of exposure on participation remains significant but is notably weaker (Estimate = 0.221, SE = 0.1002, Z = 2.21, $p = 0.027$). This indicates that individuals with lower self-concept are still influenced by exposure to cybersex trafficking content, but the extent of this influence is reduced compared to those with average self-concept. This finding suggests that individuals with lower self-concept might exhibit some degree of resilience or caution, potentially due to their less confident self-perception, which could act as a partial buffer against participation in risky online behaviors.

Conversely, at one standard deviation above the mean self-concept (High self-concept), the effect of exposure on participation is significantly stronger (Estimate = 0.630, SE = 0.0815, Z = 7.73, $p < 0.001$). This demonstrates that individuals with higher self-concept are more significantly influenced by exposure to cybersex trafficking content, leading to a higher likelihood of participation in these activities. This finding is particularly intriguing as it suggests that a higher self-concept, which typically correlates with positive self-esteem and confidence, may paradoxically increase susceptibility to engaging in risky behaviors when exposed to exploitative content. This could be due to the increased confidence and perceived invulnerability associated with high self-concept, leading individuals to underestimate the risks involved.

The graph presented illustrates the moderating effect of self-concept on the relationship between exposure to cybersex trafficking content through social media and participation in cybersex trafficking activities. The x-axis represents the level of exposure, while the y-axis denotes the level of participation. Three lines are depicted on the graph, each representing different levels of self-concept: average (blue line), low (gray line), and high (orange line). The overall trend indicates a positive relationship between exposure to cybersex trafficking content and participation in related activities across all levels of self-concept. Specifically, as exposure increases, participation also rises. This general trend aligns with previous findings, reinforcing the critical role of exposure as a predictor of participation in cybersex trafficking activities.

Examining the blue line, which represents individuals with an average level of self-concept, it is evident that there is a moderate and significant relationship between exposure and participation. This is consistent with the results from Table 3, where the effect of exposure on participation at the average level of self-concept was strong and highly significant (Estimate = 0.426, SE = 0.0660, Z = 6.44, $p < 0.001$). This finding underscores the importance of exposure in influencing participation, even for those with an average self-concept. For individuals with low self-concept, represented by the grey line, the slope is less steep compared to the other lines, indicating a weaker relationship between exposure and participation. The findings from Table 3 corroborate this, showing a significant but reduced effect of exposure on participation for individuals with low self-concept (Estimate = 0.221, SE = 0.1002, Z = 2.21, $p = 0.027$). This suggests that individuals with lower self-concept may exhibit a degree of resilience or caution, reducing their susceptibility to participating in cybersex trafficking activities despite similar levels of exposure.

Conversely, the orange line represents individuals with a high level of self-concept, and its steep slope indicates a stronger relationship between exposure and participation. This is confirmed by the results in Table 3, which showed a highly significant and stronger effect of exposure on participation for those with high self-concept (Estimate = 0.630, SE = 0.0815, Z = 7.73, $p < 0.001$). This finding implies that individuals with higher self-concept, characterized by greater confidence and perceived invulnerability, are more likely to participate in cybersex trafficking activities when exposed to related content.

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These findings highlight the complex interplay between exposure and self-concept in influencing participation in cybersex trafficking activities. While exposure remains a potent predictor of participation across all levels of self-concept, the strength of this relationship is significantly moderated by the individual's level of self-concept. For individuals with low self-concept, interventions should focus on further reducing engagement by bolstering self-esteem and providing protective measures. For those with high self-concept, it is crucial to emphasize the potential risks associated with overconfidence and to foster critical thinking and awareness about the dangers of engaging with exploitative online content.

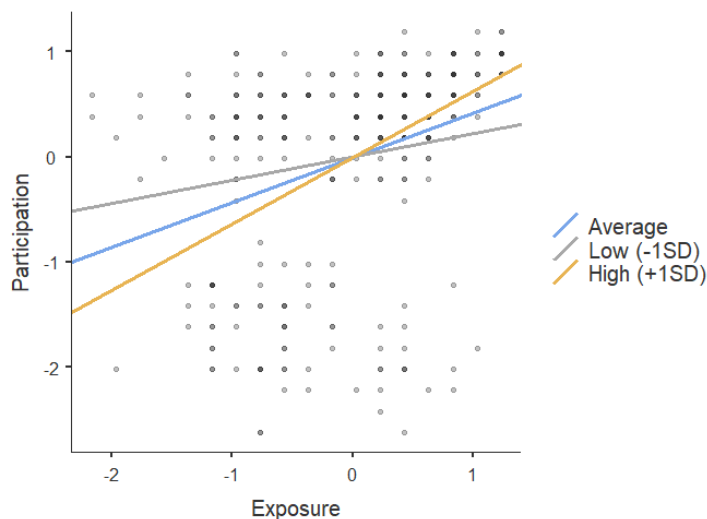


Figure 1. Graphical representation of level of exposure vis a vis level of participation

The implications of these findings are profound for developing targeted interventions to combat cybersex trafficking. The significant variation in the effect of exposure on participation across different levels of self-concept highlights the need for customized approaches. These findings contribute to a deeper understanding of the dynamics at play and inform the development of nuanced, effective interventions to mitigate the risks associated with cybersex trafficking on social media platforms.

V. CONCLUSIONS

This study provides substantial insights into the dynamics of cybersex trafficking through social media, focusing on the roles of exposure and self-concept. The analysis, involving 337 individuals aged 18 to 45, tested two primary hypotheses. The first hypothesis, which posited that the level of exposure to sex trafficking through social media significantly influences the level of participation in cybersex trafficking, was strongly supported. The descriptive statistics revealed a moderate level of both exposure and participation. The moderation analysis further demonstrated that exposure significantly influences participation, confirming that individuals who frequently encounter suspicious profiles, unsolicited messages, and related advertisements are more likely to engage in cybersex trafficking activities. Consequently, the first hypothesis is accepted, highlighting exposure to sex trafficking content on social media as a critical predictor of participation in these activities.

The second hypothesis, suggesting that self-concept significantly moderates the influence of exposure to sex trafficking through social media on the level of participation in cybersex trafficking, was also supported by the data. The interaction between exposure and self-concept was found to be significant, indicating that self-concept indeed moderates this relationship. The simple slope estimates clarified this moderating effect, showing that the influence of exposure on participation is significantly stronger for individuals with high self-concept compared to those with low self-concept. Therefore, the second hypothesis is accepted, underscoring the critical role of self-concept as a moderating factor.

These findings have significant theoretical and practical implications. The acceptance of both hypotheses emphasizes the need for comprehensive intervention strategies. The strong influence of exposure on participation suggests that efforts should focus on reducing individuals' exposure to sex trafficking content on social media. This can be achieved through stricter regulation of social media platforms, increased monitoring, and awareness campaigns to educate users about the risks and signs of cybersex trafficking.

Additionally, the moderating role of self-concept indicates that interventions should be tailored to address individual differences in self-concept. For individuals with lower self-concept, enhancing self-esteem and providing robust support systems could further reduce their susceptibility to engaging in cybersex trafficking activities. Conversely, for those with higher self-concept, interventions should focus on fostering critical thinking and awareness about the potential risks associated with overconfidence in online interactions.

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From a theoretical perspective, this study contributes to the understanding of how personal factors such as self-concept can influence the relationship between exposure and participation in online illicit activities. It highlights the importance of considering individual psychological factors when developing models to predict online behavior. Practically, the findings underscore the need for a dual approach in intervention strategies, combining measures to reduce exposure with efforts to strengthen individual self-concept.

Ultimately, this study underscores the significant influence of exposure to cybersex trafficking content through social media on participation in such activities, with self-concept playing a crucial moderating role. These insights are essential for developing targeted and effective interventions to combat the rising prevalence of cybersex trafficking on social media platforms.

VI. RECOMMENDATIONS

Based on the findings and implications of this study, several specific recommendations are proposed to address both the practical and theoretical aspects of combating cybersex trafficking, particularly in Cantilan, Surigao Del Sur, Philippines. Firstly, from a practical perspective, it is essential for policymakers and community organizations to develop interventions tailored to the specific vulnerabilities and risk factors identified in Cantilan, Surigao Del Sur, Philippines. This could include targeted awareness campaigns and educational programs designed to inform residents about the dangers of cybersex trafficking and how to recognize suspicious online behaviours. Enhanced training for law enforcement agencies on the nuances of cybersex trafficking within the local context is also crucial. This training should focus on identifying and investigating online trafficking activities, as well as collaborating with social media platforms to track and shut down trafficking networks. Additionally, establishing robust community support systems that provide resources and assistance to individuals at risk of being targeted by cybersex trafficking is imperative. This includes creating safe spaces for victims to seek help, providing psychological counselling, and offering vocational training to reduce economic vulnerabilities that may lead to trafficking participation. Public-private partnerships should also be fostered between government bodies, non-governmental organizations, and social media companies to implement comprehensive monitoring and reporting mechanisms, ensuring early detection of trafficking activities and rapid response and support for victims.

From a theoretical perspective, further research should continue to explore the role of self-concept in the context of cybersex trafficking. Future studies should investigate how different dimensions of self-concept, such as self-esteem and self-efficacy, specifically influence individuals' susceptibility to exposure and participation in trafficking activities. The development and testing of psychological interventions aimed at enhancing self-concept, based on the findings that self-concept moderates the relationship between exposure and participation, are also recommended. These interventions could include cognitive-behavioral therapy (CBT) and other psychosocial support programs that build resilience and reduce the likelihood of participation in trafficking activities. Additionally, conducting comparative studies across different regions and cultural contexts to understand how self-concept and other psychosocial factors influence cybersex trafficking globally can help identify universal patterns and unique local factors that inform more effective and culturally sensitive interventions. Finally, integrating the study's findings into educational curricula at various levels to raise awareness about the impact of cybersex trafficking and the importance of self-concept is crucial. This education should aim to empower young people with the knowledge and skills to protect themselves from online exploitation.

By implementing these practical and theoretical recommendations, stakeholders can develop more effective strategies to combat cybersex trafficking in Cantilan, Surigao Del Sur, Philippines and beyond. The localized approach ensures that interventions are tailored to the unique needs of the community, enhancing their effectiveness. Simultaneously, the continued exploration of self-concept and its moderating role can provide valuable insights for future research and intervention development. Bridging these practical and theoretical aspects is essential for a comprehensive understanding and actionable strategy to effectively mitigate the impact of cybersex trafficking.

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