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Artículo

Inhibitory Control, Use of Online Sexual Material And Sexual Compulsivity In High School Adolescents From Northern México

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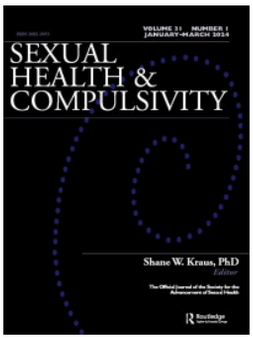

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Inhibitory Control, Use of Online Sexual Material and Sexual Compulsivity in High School Adolescents from Northern Mexico

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ABSTRACT

This cross-sectional predictive correlational study hypothesizes the influence that the inhibitory control and online sexual material has on sexual compulsivity in high school adolescents. Simple random sampling was performed to select groups of high school adolescents ($n = 347$). Two instruments with acceptable psychometric properties and a neuropsychological test were used. A significant positive relationship was identified between phase 1 reaction time ($r_s = .16$, $p < .01$), type of online sexual material ($r_s = .36$, $p < .01$), coercive use ($r_s = .44$, $p < .01$), problematic use ($r_s = .15$, $p < .01$) and sexual compulsivity. The omission of both phases, reaction time, consultation of fetish sexual material, dominant, exploratory, and dependence, explained 22.1% of the variance in the sexual compulsivity of adolescents. The simple linear regression model was statistically significant ($F_{[7,267]} = 10.840$, $p < .001$). Our findings show that omission (lack of attention), reaction time (impulsivity), and online sexual material influence sexual compulsivity.

Introduction

Sexual compulsivity is a disorder of compulsive sexual behavior, it is included in the eleventh revision of the International Classification of Diseases (ICD-11). It should be noted that this diagnosis is still considered new and has some limitations, both theoretical and methodological, that are fundamental for the development of scientific evidence on sexual compulsivity (Bőthe, Koós, & Demetrovics, 2022; Grubbs et al., 2020). According to the World Health Organization (WHO, 2022), sexual compulsivity is characterized by repetitive and poorly controlled participation in risky sexual impulses and conduct as well as different behaviors like neglection of responsibilities, interests and health. Therefore, sexual

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compulsivity may be as common as other mental health disorders (e.g. mood or substance use disorders). However, it has received less attention than the aforementioned disorders (Bőthe et al., 2023).

Studies indicate that sexual compulsivity is one of the behaviors consistently related to risky sexual activities, including vaginal and anal sexual relations without a condom, having multiple sexual partners, and occasional sexual relations, causing, as a consequence, the probable acquisition of HIV (Coleman et al., 2010; Gonsalves, Castellá, & Carlotto, 2007; Miner & Coleman, 2013). Kalichman et al. (1994) first explored the relationship between sexual compulsivity and HIV risk behavior. They defined sexual compulsivity as insistent, repetitive, intrusive, and unwanted impulses to perform specific acts, often in a ritualized or routine manner, which, in turn, may include concerns about risky sexual desires and activities (Lew-Starowicz, Lewczuk, Nowakowska, Kraus, & Gola, 2020).

One of the factors that can influence sexual compulsivity is executive function, defined as the ability to retain information, inhibit rapid and thoughtless responses to stimulation, and flexibly change the focus of the mental structure; therefore, the cognitive skills that make up this construct help limit impulsive responses, regulate emotions, and avoid bad decisions (Blair, 2016). One of the most accepted models of executive function classifies it into three components: working memory, cognitive flexibility, and inhibitory control (Diamond, 2013; Ferreira, Sacramento, & Gotuzo, 2015). In this study inhibitory control was defined as, allowing you to consciously direct your attention, course of thought, behavior, and emotions as a measure of behavioral control that prevents one from reacting impulsively (Santa-Cruz & Rosas, 2017; Rosales, Mendez, & Cuenca, 2021). Sexual compulsivity can be related to inhibitory control, where a deficit could indicate greater impulsivity, explaining why sexually compulsive subjects perform worse on tasks evaluating inhibitory control (Gay & Villoria, 2021).

On the other hand, viewing images with high sexual content online releases dopamine in the brain. Dopamine affects the frontal lobe, the area in charge of executive functions and inhibitory control (Velasco & Gil, 2017). Excessive use of visual sexual stimuli online can be a predictive factor for sexual compulsivity in adolescents (Prause, Steele, Staley, Sabatinelli, & Hajcak, 2015). Some of the characteristics of sexual compulsivity are that it follows a pattern of intense cognition, impulses, and sexual behaviors, such as excessive masturbation, consumption of pornography, excessive use of erotic websites, and an excessive search for sexual relations, which could lead to adopting risky sexual behaviors (Messina, Fuentes, Tavares, Abdo, & Scanavino, 2017).

The Internet and mobile devices (computers, smartphones, tablets) are part of the daily lives of adolescents (Loeza & Escobedo, 2021). Whom

may face various risks from Internet use, including access to sexual material online (Jiménez-Vázquez, Onofre-Rodríguez, Benavides-Torres, Garza-Elizondo, & Torres-Obregon, 2018; Tamayo & Otero, 2020). It is worth mentioning that, in 2012, there were more than two billion Internet users, representing 34.3% of the general population worldwide (Gonsalves, Hodges, & Scalora, 2015). Recent years have witnessed a rapid increase in Internet access and use by adolescents and the majority of them own multiple devices that allow them to be online throughout the day (Madden et al., 2013). With the increase in online activity, more research has been initiated unto the problematic impact of using online sexual material on adolescents (Gonsalves et al., 2015).

Ahorsu et al. (2023) demonstrated that the use of online sexual material in adolescents has increased internationally, even in very conservative countries, which has consequently led to an increase in problematic use of pornography. With the increase in online activity, more research on the problematic impact that online sexual material has on adolescents has increased (Gonsalves et al., 2015; Jiménez-Vázquez et al., 2018). There is growing concern about the possible sexual risks to which this population is exposed due to the significant influence that sexual material can have on risky sexual behaviors, which can compromise their sexual health (Doornwaard, Bickham, Rich, ter Bogt, & Van den Eijnden, 2015). For this reason, this study hypothesizes: the influence that the inhibitory control and online sexual material has on sexual compulsivity in high school adolescents from northern Mexico.

Method

Study design

A predictive correlational design was used for this study (Grove & Gray, 2019). The sample was calculated with the Creative Research Systems statistical program, with a 95% confidence level and 5% error. The data was collected digitally using a link placed on the computer desktop of the computer lab of the institution under study.

Participants

The sample size was 347 students, 15 to 19 years of age, from a public high school in northern Mexico. Simple random sampling using a random number in Excel was used to select groups of adolescents. Adolescents who were married or in a common-law relationship were excluded. Those who self-reported receiving neurological or psychiatric treatment were eliminated. The demographic data considered were age, sex, type of

relationship, and whether they received any neurological and/or psychiatric treatment.

Procedure

The study complied with the Regulations of the General Health Law on Health Research (Secretaría de Salud [SSA], 1987). It was approved by the Ethics and Research Committee of the Universidad Autónoma de Sinaloa with registration number CEI-000-32. It was also authorized by the directors of the educational institutions. Information about the number of students, the number of groups, and their attendance lists were requested from the school services personnel to select the groups randomly. The randomly selected groups were then approached to explain the study objective and invite them to participate.

Informed consent and assent were explained to adolescents under 18 years of age. Those over 18 years of age were given an informed consent letter. The questionnaires and the neuropsychological test (Go/No-Go) were answered in the computer room using a link anchored to the computer desktop to facilitate access. The instruments began with sociodemographic data, followed by the instrument for online sexual material and sexual compulsivity, and finally, the Go/No-Go test. The duration of the application was approximately 35 to 40 min.

Measures

The online sexually explicit material instrument by Gonsalves, (2010) which was adapted to Spanish by Valdez-Montero (2020) was used to measure the use of online sexual material. It consists of three scales: types of sexual material online, coercive use of sexual material online, and problematic use of online sexual material.

The type of online sexual material scale measures the frequency with which images, films, and animations with sexual content are used and viewed. The scale has three subscales: fantasies, fetishism, and violent sex, with twenty items. The scale has 4-point Likert responses from 1 (never) to 4 (frequently). Higher scores represent greater viewing of different types of sexual material online. In the present study, the general scale type of online sexual material reported a Cronbach's Alpha of .93, and the subscales, fantasy (.88) fetish (.87) and violent sex (.83) reported acceptable Cronbach's Alpha scores.

The Coercive Use of Online Sexual Material Scale measures the frequency with which young people take ideas based on the use of erotic and sexual material online to exert pressure or force their peers to engage in sexual behavior. It consists of two subscales, dominant and exploratory,

with eight items. The general scale for coercive use of online sexual material reported a Cronbach's Alpha of .77, and the subscales, dominant and exploratory reported a Cronbach´s Alpha of .74.

Problematic use of online sexual material is when viewing or interacting with online sexual content results in adverse consequences for the individual, such as creating false personas or dependency. This scale contains two subscales, fictional characters and dependence, with eight items. The general scale the problematic use of online sexual material reported a Cronbach's Alpha of .79, and the subscales, fictitious characters a Cronbach´s of .88 and dependence a Cronbach's Alpha of .50.

The sexual compulsivity scale by Kalichman et al. (1994) was applied. It was adapted and validated by Ballester-Arnal, Gómez-Martínez, Llario, and Salmerón-Sánchez (2013). The scale has two subscales, interference of sexual behavior and failure to control sexual impulses, with ten items. The interference subscale consists of 5 items. The subscale of failure to control sexual impulses has 5 items, with a score that ranges between 10 and 40. In the present study, the general scale the sexual compulsivity reported a Cronbach's Alpha of .84, and the subscales, behavioral interference a Cronbach's Alpha of .84, sexual and failure to control sexual impulses Cronbach's Alpha of .83. The internal consistency of the scales and subscales presented acceptable reliability coefficients (Grove & Gray, 2019), except for the dependence subscale.

Finally, the Go/No-Go test, which is a response inhibition test in which a task must be executed or inhibited, is a virtual neuropsychological test applied with software, using a link that allows the participant to access the test (Bezdjian, Baker, Lozano, & Raine, 2009). During this test, two types of stimuli are presented: Go and No-Go. The test consists of two phases with a training of 10 trials in each of the phases. The presentation of the Go stimuli is 80%, and the No-Go stimulus is 20%. In each phase, 160 responses are presented with a total of 320, without considering the training trials.

In phase 1, the Go stimulus is the letter P, and the No-Go stimulus is the letter R. The presentation of both throughout the test is random. In the second phase of the experiment, the stimuli are reversed, with the letter R being the Go stimulus and the letter P the No-Go stimulus. The following aspects were considered to evaluate the participants' responses: phase 1 and phase 2 of the Go omission errors, referring to the absence of a response to an objective, and the No-Go commission error, which refers to responses that occur when they are not required, assigning dichotomous values of 0 and 1 to each type of error. Regarding the response reaction time (Rt), a maximum of 1,800 milliseconds was considered for the participant to respond or not to the indicated stimulus; however, it is considered a correct response if the participant responds correctly in an equal or shorter time of 1500 milliseconds. Schulz et al. (2007) point out

that the Go/No-Go test has convergent validity (r = .40 to r = .60). A factor analysis with varimax rotation was performed, and the Kaiser-Meyer-Olkin measure indicated that the analysis was appropriate (KMO= .61) and Bartlett's sphericity test was significant (χ^2= 1904.36, p < .001). Component 1, which refers to omission, explains 44.19% of the variance, and component 2, which refers to commission, explains 35.64%. A factor analysis regarding the validity of the Go/No-Go test was carried out. Waltz, Strickland, and Lenz (2005) point out that factor analysis is appropriate to obtain the validity of a measure.

Data analysis

Statistical Package for Social Sciences (SPSS) version 25 for Windows was used to analyze the data. The internal consistency of the instruments was analyzed using Cronbach's alpha for the instruments, use of online sexual material and sexual compulsivity, and for the Go/No-Go test, an exploratory factor analysis with varimax rotation was considered (Waltz et al., 2005). Inferential statistics were used for the participants characteristics. The Kolmogorov-Smirnov (K-S) test with Lilliefors correction was used to identify the normality of the data distribution. Indices were made for the variables use of online sexual material and sexual compulsivity, and for the Go/No-Go test with sums (0-1) of the 160 responses from phases 1 and 2, considering the errors of commission and omission and the mean reaction time. Since there was no normality in the data the Spearman correlation was used. A simple linear regression model was carried out using the backward technique considering the final model, where the independent variables were the commission and omission of phases 1 and 2, reaction time, and the scales and subscales of use of sexual material online, with the dependent variable determined by sexual compulsivity.

Results

The mean of the age in the participants was 15.76 years (SD = .828); 52.4% were female adolescents and 47.6% were male adolescents. Regarding relationships, 76.7% of the adolescents were single, 19.6% were in a dating relationship, 3.2% were starting a dating relationship, and .3% were in a committed relationship for marriage.

Descriptive data of the study variables

Adolescents presented greater omission errors in phase 1 (M = 18.09, SD = 25.46) and in phase 2 (M = 13.18, SD = 20.89) compared to commission errors in phase 1 (M = 4.93, SD = 4.75) and phase 2 (M = 4.50, SD = 4.71).

The Rt of phase 1 was a *mean* of 712.60 milliseconds ($SD = 247.14$), while in phase 2, it was 742.50 milliseconds ($SD = 287.46$) considering the omission and commission of responses and the Rt. Omission is when the participant does not respond to the indicated letter, while commission is when the participant does not conceive inhibiting the response when he should. Finally, reaction time refers to the time the participant takes to respond. Regarding the use of online sexual material according to the type of sexual material subscale, adolescents mostly viewed and/or consulted fetishism ($M = 23.16$, $SD = 20.83$), followed by violent sex ($M = 18.84$, $SD = 19.03$) and fantasies ($M = 15.06$, $SD = 18.50$). According to coercive use, it was exploratory ($M = 7.93$, $SD = 14.37$) and dominant ($M = 2.46$, $SD = 9.77$), and in problematic use of the material, the participants viewed and/or consulted sexual material with fictional characters ($M = 20.21$, $SD = 24.12$) and dependence ($M = 46.42$, $SD = 22.67$). In the sexual compulsivity scale, the highest mean was the subscale of failure to control sexual impulses ($M = 6.70$, $SD = 15.95$). The data are presented in Table 1.

Correlations between inhibitory control, use of online sexual material, and sexual compulsivity

A Spearman correlation test was performed to identify the correlations between the study variables. Table 2 shows the results of the correlations between inhibitory control, use of online sexual material, and sexual compulsivity with their respective scales and subscales. The results show

Table 1. Descriptive statistics and Kolmogorov-Smirnov test of inhibitory control, use of online sexual material and sexual compulsivity.

Variables	*M*	*SD*	*Min.*	*Máx.*	D^a	*p*
Go/No-Go						
Omission Phase 1	18.09	25.46	0	160	.24	.00
Omission Phase 2	13.18	20.89	0	160	.27	.00
Commission Phase 1	4.93	4.75	0	31	.16	.00
Commission Phase 2	4.50	4.71	0	30	.19	.00
Rt Phase 1	712.60	247.14	10	1672.50	.09	.00
Rt Phase 2	742.50	287.46	7	1786.00	.11	.00
TMSL	19.03	17.08	0	93.33	.13	.00
Fantasies	15.06	18.50	0	95.24	.21	.00
Fetichism	23.16	20.83	0	100	.15	.00
Violent sex	18.84	19.03	0	100	.16	.00
UCMSL	5.88	11.12	0	62.50	.30	.00
Dominant	2.46	9.77	0	88.89	.50	.00
Exploratory	7.93	14.37	0	93.33	.32	.00
UPMSL	32.72	19.43	0	100	.10	.00
Fictional characters	20.21	24.12	0	100	.21	.00
Dependence	46.42	22.67	0	100	.13	.00
CS	5.90	14.71	0	100	.34	.00
Interference	5.11	14.54	0	100	.42	.00
FCIS	6.70	15.95	0	100	.36	.00

Note: TOSM = Type of Online Sexual Material; CUSMO = Coercive Use of Sexual Material Online; PUSMO = Problematic Use of Sexual Material Online; SC = Sexual Compulsivity; FCSI = Failure to Control Sexual Impulses; Rt = Reaction time.

a negative correlation between phase 1 and 2 of omission and the viewing of fetishes and a positive correlation between phase 1 of omission and dependence on online sexual material. Regarding errors of commission in phase 2, there was a significant positive correlation with the dominant use of online sexual material. Likewise, adolescents' reaction time in phase 1 positively correlated with sexual compulsivity and the failure to control sexual impulses subscale.

Regarding the relationship between the use of online sexual material and sexual compulsivity, correlations were found between the type of online sexual material (fantasies, fetishism, and violent sex), coercive use (dominant and exploratory), and the problematic use of online sexual material (fictional characters and dependency) and sexual compulsivity (interference and failure to control sexual impulses). The identified results show that the coefficients were positively significant, except for violent sex, which did not show a relationship with failure to control sexual impulses. The results indicate that adolescents who have consulted and/or interacted with different types of sexual material online and who made coercive and indicated problematic use of it present greater sexual compulsivity.

Effects of inhibitory control on the use of online sexual material and sexual compulsivity

A simple linear regression was conducted. Table 3 shows the final linear regression model with the backward method. The omission of both phases, reaction time, consultation of fetish sexual material, dominance, exploratory, and dependence, explains 22.1% of the variance in adolescent sexual compulsivity. The model was statistically significant ($F_{[7,267]} = 10.840$, $p < .001$), and the values of the omission variables of both phases, reaction time, and consultation of dominant, exploratory, and dependent sexual material were significant within the model.

This cross-sectional predictive correlational study hypothesizes the influence that the inhibitory control and online sexual material has on sexual compulsivity in high school adolescents.

Discussion

This study hypothesized the influence that the inhibitory control and online sexual material has on sexual compulsivity in high school adolescents from northern Mexico. Regarding the determination of whether inhibitory control and the use of online sexual material influence sexual compulsivity in adolescents, the present study demonstrates that inattention, impulsivity, and consulting sexual material of a dominant, exploratory, and dependent type influences adolescents to present sexual

Table 2. Spearman correlation matrix between the variables inhibitory control, use of online sexual material, and sexual compulsivity.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. O (F1)	_																		
2. O (F2)	.71**	_																	
3. C (F1)	−0.04	.03	_																
4. C (F2)	−0.13*	−0.14*	.55**	_															
5. Rt (F1)	.09	.15**	.16**	−0.049	_														
6. Rt (F2)	.06	.08	.01	−0.060	.25**	_													
7. TMSL	−0.09	−0.10	−0.02	−0.074	.06	.01	_												
8. Fantasies	−0.06	−0.08	−0.06	−0.094	.05	.01	.89**	_											
9. Fetiches	**−0.18****	**−0.15****	.02	−0.042	.02	.01	.89**	.73**	_										
10. VS	.02	−0.02	−0.02	−0.048	.11	−0.01	.81**	.62**	.56**	_									
11. UCOSM	−0.04	−0.07	.07	−0.00	.05	.02	.46**	.47**	.43**	.31**	_								
12. Dominant	.05	.05	.09	**.12***	.04	−0.04	.29**	.30**	.25**	.25**	.51**	_							
13. Exploratory	−0.05	−0.08	.06	−0.02	.04	.04	.45**	.46**	.43**	.30**	.98**	.39**	_						
14. PUSMO	.01	−0.06	.01	−0.02	.07	−0.02	.22**	.22**	.24**	.12*	.24**	.10	.26**	_					
15. FC	−0.07	−0.02	.05	−0.02	.09	.01	.31**	.30**	.34**	.15**	.38**	.20**	.38**	.86**	_				
16.Dependence	**.11***	.07	.02	.01	−0.05	−0.04	−0.05	−0.05	−0.06	−0.01	−0.11*	−0.12*	−0.08	.62**	.20**	_			
17. SC	−0.02	−0.06	−0.02	−0.01	**.16****	.05	**.36****	**.37****	**.38****	**.18****	**.44****	**.40****	**.41****	**.15****	**.27****	**.16****	_		
18. Interference	.04	−0.004	.08	.01	.11	.06	**.28****	**.30****	**.29****	**.15****	**.38****	**.43****	**.35****	**.12***	**.23****	**.14***	.80**	_	
19. FCSI	−0.02	−0.05	−0.01	.01	**.17****	.01	**.37****	**.38****	**.39****	**.19**	**.46****	**.38****	**.43****	**.16****	**.29****	**.16****	.93**	.63**	_

Note: F1= Phase 1; Phase 2= Phase 1; O = Omission; C = Commission; Rt = Reaction time; TOSM = Type of Online Sexual Material; VS = Violent Sex; UCOSM = Use of Coercive Online Sexual Material; PUSMO = Problematic Use of Sexual Material Online; FC = Fictional Characters; SC = Sexual Compulsivity; FCSI = Failure to Control Sexual Impulses.
**$p < .01$. *$p < .05$.

Table 3. Simple linear regression of inhibitory control, use of online sexual material, and sexual compulsivity.

Dependent variable	*B*	Standard error	Beta	*p*-value
(Constant)				
Omission Phase 1	.127	.049	.195	.011
Omission Phase 2	−0.146	.065	−0.170	.024
Reaction time	.008	.004	.113	.039
Fetiches	.086	.049	.116	.080
Dominant	.193	.091	.131	.035
Exploratory	.256	.071	.248	.001
Dependence	.097	.038	.140	.012

Note: $n = 347$.
**$p < .01$. *$p < .05$.

compulsiveness. The above agrees with Miner, Raymond, Mueller, Lloyd, and Lim (2009), who reported that the lack of attention and impulsivity (cognitive), according to measurements with neuropsychological tests, influence the sexual compulsivity of adolescents, while the study by Blais-Lecours, Vaillancourt-Morel, Sabourin, and Godbout (2016) reported that excessive use of sexual content online predicts sexual compulsivity in adolescents.

Regarding the relationship between inhibitory control and the use of online sexual material and sexual compulsivity in adolescents, adolescents who omitted their responses to the stimuli consulted fetish-type sexual content less frequently but consulted dependent sexual material more frequently. The study also showed that adolescents with impulsive responses (commission) exerted greater pressure or force on their partner to carry out the sexual behavior they consulted and/or interacted with online. According to the study by Bőthe et al. (2019), impulsivity may not contribute as substantially to the use of pornography but could be more related depending on the sexual material consulted, as is the case with dominant sexual material. Likewise, the study indicates that the reaction time of adolescents' responses in the neuropsychological test was related to greater sexual compulsivity.

On the other hand, adolescents who used sexual material online presented greater sexual compulsivity. This finding is consistent with Efrati and Amichai-Hamburger (2021), who demonstrated that adolescents with greater sexual activities online had greater sexual compulsivity. According to Riemersma and Sytsma (2013), sexual compulsivity has emerged with the explosive growth of technology.

Adolescents presented greater omission, which represents a lack of attention, and a lower commission response, indicating impulsivity. This finding agrees with Weidacker, Whiteford, Boy, and Johnston (2017), who showed that as the use of executive function increases, the capacity for omission (lack of attention) decreases. The above can be explained because

adolescents are in a stage of neurological development and tend to present a greater lack of attention than impulsiveness. Likewise, it was found that the reaction time was greater compared to the study by Ramos, Guevara, Bolaños, and Ramos (2015), who found a shorter reaction time to the stimuli presented, representing that the adolescents in this study have a greater lack of attention.

Regarding the findings related to the use of online sexual material, adolescents mostly consumed problematic online sexual material, made dependent use of sexual content, used fictional characters, and viewed sexual content that involved fetishes. This finding is similar to that pointed out by Gonsalves et al. (2015), who identified that young people view sexual material online that involves sexual contact between men and women. Likewise, Smith (2013) identified that adolescents who viewed and/or interacted with sexually explicit material varied from a minimal number of times to frequent and consistent viewing, where adolescents considered it a safe means to learn about their sexuality. However, at the same time, they reported finding disturbing content and feeling that sexual behaviors and interactions were unrealistic, incorporating ideas from sexually explicit material into their sexual experiences. In turn, Valdez-Montero, Benavides-Torres, Onofre-Rodríguez, Castillo-Arcos, and Gámez-Medina (2019) indicated that young people viewed sexual content online to arouse themselves, take ideas from what is explored online, and perform real sexual behaviors.

On the other hand, the findings concerning sexual compulsivity show that adolescents reported that thinking about and desiring sex led them to harm their relationships and daily life. Participants reported that they caught themselves thinking about sex at school and thinking about sex more than they would like. These findings agree with Winder (2016), who mentions that spending too much time satisfying sexual needs can impact a person's life, leading to neglect of their responsibilities and a lack of control of emotions. Additionally, sexual compulsivity can lead the individual to more extreme sexual excursions and increased aggression.

Conclusions

This research demonstrated that adolescents have greater inattention than impulsiveness. In addition, they showed greater consultation and/or interaction with sexual content online, producing adverse consequences, such as investing more time in the use of sexual material online, creating dependency, and creating fictitious sexual characters. It is concluded that there is less lack of attention and less use of objects to provoke excitement and sexual desire, but the longer the time spent consulting and/or interacting with online sexual material, the greater the impulsivity and more use of sexual material where pressure or force is exerted to convince a

sexual partner to perform a sexual behavior that was consulted and/or interacted with online.

Regarding the reaction time, it was related to sexual compulsivity, showing that adolescents usually lose control of their sexual temperament, with strong sexual feelings and thoughts for prolonged periods, manifesting difficulties in controlling sexual behaviors that prevent them from fulfilling their commitments and responsibilities in their daily lives. Furthermore, adolescents who have consulted and/or interacted with different types of sexual material online and have engaged in coercive and/or problematic use tend to be more sexually compulsive. Finally, the lack of attention and impulsivity and the use of sexual material influence adolescents to present sexual compulsivity.

It is important to mention that a limitation of this study was the type of phenomenon investigated since it is a sensitive topic for adolescents because sexuality is still considered taboo in the context in which the study was carried out, and although software and techniques were used to care for the privacy of the participant, the comfort and privacy that the adolescents felt when participating in filling out the instruments was not evaluated. In In regards to the KMO being low, this could be due to the sample size. For future studies, it is recommended to use the Compulsive Sexual Behavior Disorder Scale (CSBD-19), since for the Go/No-Go neuropsychological test, subtle body images that represent sexuality could be used to understand the behavior of this type of content in inhibitory control. It would be especially relevant to carry out a similar study in the adult population. Based on the findings of this study, it is suggested to carry out interventions aimed at preventive measures for adolescents and young people regarding the consequences of online sexual material and sexual compulsivity.

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