

RESEARCH ARTICLE

Stability of the online grooming victimization of minors: Prevalence and association with shame, guilt, and mental health outcomes over one year

Manuel Gámez-Guadix¹ | Estíbaliz Mateos-Pérez² | Miguel A. Alcázar¹  |
Jone Martínez-Bacaicoa¹ | Sebastian Wachs³ 

¹Autonomous University of Madrid, Madrid, Spain

²University of Basque Country, Leioa, Spain

³Institute of Education, University of Münster, Münster, Germany

Correspondence

Manuel Gámez-Guadix, Department of Biological and Health Psychology, Faculty of Psychology, Autonomous University of Madrid, Madrid 28049, Spain.

Email: manuel.gomez@uam.es

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Abstract

Introduction: Online grooming is the process by which an adult manipulates a minor by using information and communication technologies to interact sexually with that minor. The objective of this study was to analyze the stability of online grooming victimization among minors and its relationship with demographic variables (e.g., gender, age, and sexual orientation), emotions of shame and guilt, and depression and anxiety symptoms.

Methods: The participants were 746 adolescents aged 12–14 years when the study started ($M_{age} = 13.34$, $SD = 0.87$) who completed self-reports at Time 1 (T1) and 1 year later at Time 2 (T2). Among them, 400 were girls, 344 were boys, and two were nonbinary. At each time point, the minors self-reported their online grooming experiences during the previous year.

Results: The results showed that 11.8% ($n = 89$) of the participants were T1-victims, 13% ($n = 95$) were T2-victims, and 11% ($n = 81$) were stable victims of online grooming. Stability in victimization was related to being older, being a sexual minority, being born abroad, having separated or divorced parents, and having parents with a lower education level. Stable victims showed higher shame and guilt scores at T1 than did T1-victims, indicating that elevated levels of shame and guilt could contribute to the persistence of online grooming over time.

Conclusions: Overall, adolescents in the stable victim category presented more depression and anxiety symptoms. Intervention strategies should address emotions related to victimization, such as shame and guilt, as well as depression and anxiety symptoms.

KEYWORDS

adolescents, cyber grooming, online victimization, sexual abuse

1 | INTRODUCTION

The sexual exploitation of minors on the internet is a serious and worrying problem that can include a range of behaviors carried out by adults, such as online sexual solicitation of minors or the creation and dissemination of sexual content involving minors (Finkelhor et al., 2022; Gámez-Guadix, Sorrel, et al., 2022). Online child grooming is a particular form of sexual exploitation of minors. Online grooming refers to the process by which an adult builds a trusting relationship with a minor through the internet, manipulates the minor to obtain sexual content (e.g., images or videos) or meets in person with the minor to sexually abuse them (De Santisteban et al., 2018; Ringenberget al., 2022; Wachs et al., 2020). This form of abuse

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occurs through an adult's position of authority, trust, or superiority over the minor, who cannot legally provide sexual consent (Ainsaar & Lööf, 2011). Offenders may employ different strategies to manipulate children and trap them in an abusive relationship, such as using deception (e.g., about one's age or hobbies), giving gifts or goods to the minor, taking an interest in and studying the minor's problems, sexualizing conversations, or using subtle or open aggression (Gámez-Guadix et al., 2021; Ringenberget al., 2022). Online grooming can lead to solicitations to engage in sexual talk or sexual activities with the adult, which can progress to sexual interactions, such as cybersex or meeting offline to have a sexual relationship (Calvete et al., 2021).

Online grooming is a complex process; it can take days, months, or years to gain access to a minor, gain the minor's trust, maintain a relationship, and avoid disclosure by the minor (De Santisteban et al., 2018; Kloess et al., 2019; Whittle et al., 2013). Previous studies have found that women, older adolescents, sexual minorities, and vulnerable minors (e.g., with depression symptoms) are at increased risk of online sexual victimization (e.g., De Santisteban & Gámez-Guadix, 2018). Despite the importance of constructing an abusive relationship over time, little research has been done internationally on the correlates of the stability of online grooming over time. Little is unknown about whether cases that persist over time have different demographic and psychological profiles. Therefore, the purpose of this study was to analyze the stability of online grooming over 1 year and the demographic variables and psychological factors, such as mental health outcomes, that may be associated with the stability of this type of victimization.

1.1 | Stability in online grooming and mental health outcomes

The "stability" of victimization refers to the consistency of episodes of victimization for a given victim over a period of time (e.g., 1 year) (Rueger et al., 2011). Stability analysis related to the cyber-sexual abuse of minors has focused mainly on potential outcomes of online grooming, such as sexual solicitation and sexual interactions (Ortega-Barón et al., 2022) rather than on the grooming process itself. For example, Gámez-Guadix and Mateos-Pérez (2019) found a significant correlation between being sexually solicited at T1 and being solicited again 1 year later (.37). Similarly, Calvete et al. (2021) found a stable correlation of .55 for sexual solicitation and .28 for sexual interactions 1 year apart. Recently, Ortega-Barón et al. (2022) found that 6.7% of minors in their sample were stable victims of online sexual solicitations or sexualized interactions with adults over 13 months.

Research on other forms of victimization, such as bullying or cyberbullying, has shown that the duration of victimization over time (i.e., stability) plays an essential role in victims' psychological adjustment. In particular, it has been proposed that stable victimization over a long period of time can lead to worse psychological maladjustment symptoms than transient victimization (Gámez-Guadix et al., 2015; González-Cabrera et al., 2021; Rueger et al., 2011). This seems to be the case for the stability of online sexual solicitation and sexual interactions between minors and adults, both of which are associated with a worse quality of life (Ortega-Barón et al., 2022). However, it is unknown how the stability of the online grooming process is related to psychological adjustment, including feelings of shame and guilt and symptoms of depression and anxiety.

Shame and guilt are common reactions following exposure to traumatic events (Bryan et al., 2015; Capone et al., 2021; Kubany et al., 1996). Shame is a powerful self-conscious emotion indicative of negative self-evaluation and loss of standing in one's own eyes or in the eyes of others (Bedford & Hwang, 2003). Specifically, people who experience trauma judge both their actions and their entire being as bad or damaged due to their role in the trauma (Capone et al., 2021; Kubany & Watson, 2003). Guilt has been defined as an unpleasant feeling with an accompanying belief (or beliefs) that one should have thought, felt, or acted differently to avoid all or part of the trauma (Kim et al., 2011; Kubany et al., 1996). Some authors have specifically highlighted the importance that guilt and shame play in the lives of grooming victims (O'Connell, 2003; Whittle et al., 2015). These basic emotions could favor the minor's erroneous or extreme interpretations of the traumatic event's causes and consequences, leading the minor to remain in the grooming situation and not reveal it to significant adults (Olafson, 2011). Disclosure of the abusive situation might be avoided because the child feels that it is their fault, that they are bad, or that no one will believe them (Craven et al., 2006; Warner, 2000). In short, the minor's increased emotions of guilt and shame could be related to the continuity and maintenance of the grooming situation, suggesting a positive relationship between shame/guilt and stability of the online grooming victimization.

Additionally, it has been found that minors who are victims of abuse and sexual exploitation through the Internet are more prone to the development of anxiety and depressive symptoms (De Santisteban & Gámez-Guadix, 2018; Mitchell et al., 2007; Whittle et al., 2013; Zetterström Dahlqvist & Gillander Gådin, 2018). Additionally, the relationships between online grooming and depression could be longitudinal and reciprocal (De Santisteban & Gámez-Guadix, 2018). Several mechanisms could explain the relationship between online grooming victimization and victims' symptomatology. First, increased victimization could lead to more symptoms of anxiety and depression through various traumatic dynamics, including stigmatization, traumatic sexualization, betrayal, and helplessness (Finkelhor & Browne, 1985). These dynamics could, in turn, make it difficult for the victim to leave the abusive relationship. Alternatively, victims with more depression or anxiety symptoms could be perceived as more vulnerable by potential abusers, making these victims the targets of longer

abusive relationships (De Santisteban et al., 2018). However, no study has analyzed the relationship between the stability of grooming victimization and the victims' depression and anxiety symptoms.

1.2 | The present study

Most studies on online grooming have been carried out using a cross-sectional design (De Santisteban et al., 2018), making it challenging to analyze the duration of victimization. Additionally, while studies on the stability of the online sexual abuse of minors have provided valuable information (Ortega-Barón et al., 2022), they have focused mainly on adults' sexual solicitation and interactions with minors rather than on the process of manipulating the minor—a process characteristic of online grooming (Ringenberg et al., 2022). For this reason, this study seeks to contribute to the international scientific evidence by analyzing the stability of online grooming over time, as well as the demographic and psychological variables of the minor associated with higher stability. Thus, the first aim of this study was to analyze the prevalence and stability of grooming victimization over 1 year.

Likewise, little is known about the vulnerability factors associated with the greater continuity of victimization over time. Therefore, the second aim was to analyze the sociodemographic characteristics (e.g., gender, age, and sexual orientation) of adolescents trapped in stable grooming situations at two-time points 1 year apart and to compare those participants to the individuals who were victims at a single time point or non-victims. Because the existing literature is sparse, we proceeded in an exploratory manner without prior hypotheses.

The third aim was to analyze the relationship between stability in victimization and victims' emotions of shame and guilt. Because it has been suggested that perpetrators could induce these emotions so that the victims remain in the abusive relationship and continue to conceal the abuse (Olafson, 2011), we hypothesized that greater stability in online grooming would be associated with more emotions of shame and guilt in victims. Finally, we analyzed the relationship between stability in online grooming victimization and victims' depression and anxiety symptoms. We hypothesized that greater stability in victimization would be associated with more symptoms of depression and anxiety, which is in line with what has been reported in previous studies on other forms of victimization (Gámez-Guadix et al., 2015; Rueger et al., 2011).

2 | METHODS

2.1 | Participants

The initial study sample consisted of 1509 adolescents aged 12–14 years at Time 1 (T1) from eight public schools and two private schools. Considering that the age of sexual consent in Spain is 16 years old, being 15 years old or younger was established as an inclusion criterion for both T1 and Time 2 (T2). The exclusion criterion in the study was to complete only one time of measurement (either T1 or T2). T1 data were collected between November 2019 and March 2020, while T2 data were collected 1 year later. Because of postpandemic restrictions in schools, approximately half of the participants completed T2 (retention rate = 49.4%). Thus, the final sample comprised 746 adolescents ($M_{age} = 13.34$, $SD = 0.869$) who completed the questionnaires at both T1 and T2. Among them, 400 were girls, 344 were boys, and two were nonbinary. Most of the adolescents (89.2%) were heterosexual, 5.2% were bisexual, 2.5% were gay/lesbian, 2% indicated other sexual orientations, and 1.1% did not indicate their sexual orientation. Regarding place of birth, most participants were Spanish (90.3%). The parents of most of the adolescents were married or living together (73.7%), while 11.3% were divorced, 9.9% were separated, 3.7% were single parents, and 0.9% were widowed. Participants who completed both time points were compared with participants who completed only one-time point in the study variables (grooming strategies, shame, guilt, and mental health outcomes). No significant differences were found between those who completed one-time point and those who completed both time points.

2.2 | Measures

2.2.1 | Demographic questionnaire

Adolescents were asked to indicate their gender (boy, girl, and nonbinary), age, country of birth, sexual orientation (heterosexual, homosexual, bisexual, and other), as well as their parents' education level (1 = no education, 2 = primary education, 3 = secondary education, 4 = high school/technical degree, 5 = university education, and 6 = master's degree or Ph.D) and marital status (married/living together, separated/divorced, single parent, and widowed).

2.2.2 | The Multidimensional Online Grooming Questionnaire (MOGQ)

This questionnaire was used to assess the different strategies used by adults with the aim of manipulating a minor to obtain sexual content or interactions in online grooming situations (Gámez-Guadix et al., 2021). These strategies include deception, gift giving, the interest of the victim's environment, sexualization, and the use of aggression. Participants were required to indicate how often during the last 12 months these things had happened to them through the Internet or a mobile phone with a person who was 18 years or older and who had sexual intentions toward them (e.g., "He/she told me that he/she was younger than he/she really was" and "He/she asked me about my family and friends"). The questionnaire included 20 items with the following response scale: 0 (never), 1 (once or twice), 2 (3–4 times), and 3 (5 or more times). The questionnaire has shown good psychometric properties among Spanish adolescents (Gámez-Guadix et al., 2021). The internal consistency (Cronbach's α) of the present study for the subscales of deception, gift giving, the interest of the victim's environment, sexualization, and the use of aggression was .82, .62, .87, .89, and .67 at T1 and .76, .65, .85, .90, and .65 at T2, respectively.

2.2.3 | Guilt and shame questionnaires

Considering the absence of previously validated measures to assess guilt and shame in grooming situations, we developed two subscales based on existing instruments that measure these variables in other types of abuse contexts (Capone et al., 2021; Kubany et al., 1996; Pereda et al., 2011). The guilt subscale consisted of the following five items: (a) I blame myself for what happened; (b) I blame myself for what I did, thought, or felt; (c) I could have prevented what happened; (d) I consider myself responsible for what happened; and (e) I did things I should not have done. The shame subscale included the following items: (a) I am too embarrassed to tell anyone about what happened; (b) I am ashamed of what I did, thought, or felt; (c) I feel that other people would judge me for what happened; (d) I wish I could hide what happened; and (e) I am embarrassed to admit what happened. The participants were asked to use a 5-point scale to indicate the extent to which they experienced emotions of guilt or shame about their experiences of online grooming, sexual solicitation, and sexual interactions with adults: 0 (*nothing*), 1 (*very little*), 2 (*moderately*), 3 (*quite a lot*), and 4 (*very much*). The internal consistency (Cronbach's α) of the present study was .93 (T1) and .92 (T2) for the guilt subscale and .95 (T1) and .93 (T2) for the shame subscale.

2.2.4 | Depression and anxiety symptoms

The depression and anxiety subscales of the Brief Symptom Inventory (BSI; Derogatis & Fitzpatrick, 2004) were used to assess the presence of depression and anxiety symptoms among adolescents. Participants were required to indicate how frequently they had experienced each symptom (e.g., "feeling sad" or "feeling fearful") during the past 2 weeks. Each subscale included six items with a response format that ranged from 1 (*not at all*) to 5 (*extremely*). These subscales have good psychometric properties among Spanish adolescents (Gámez-Guadix et al., 2022). The internal consistency (Cronbach's α) of the present study was .88 (T1) and .90 (T2) for the depression subscale and .87 (T1) and .90 (T2) for the anxiety subscale.

2.3 | Procedure

A total of 37 schools from a central region in Spain were randomly selected from the official list of schools in that area to participate in the study, of which 10 agreed to take part in the research. Data were collected on two measurement occasions spaced 1 year apart. Parents received a letter asking for signed consent for their children's participation in the study. Students were given a document of informed consent containing all the information about the study and the treatment of their personal data. This document was read and signed by the participants before starting the study, and it ensured that no individual data would be disclosed to any person by any means. To pair the questionnaires from T1 and T2, a code known only by the participants was used. Responses were anonymous to promote honesty, and participation was voluntary. Participants were told that they could choose not to answer questions and that their participation in the study could be interrupted at any time for any reason without consequences. The questionnaires were administered in the classroom during regular class hours. Participants were encouraged to ask questions if they had trouble responding to any of the items. After completing the questionnaire, the participants were given written information containing community resources and the researchers' email addresses. This study followed the ethical standards and norms of the Declaration of Helsinki. This study is part of a larger research project on the online sexual abuse of minors that was reviewed and approved by the Autonomous University of Madrid Ethics Committee.

2.4 | Data analyses

First, items of the online grooming questionnaire were dichotomized into 0 = never and 1 = more than once, and participants were classified into one of the following groups: 0 = no grooming experiences at any point in time, 1 = grooming at T1, 2 = grooming at T2, and 3 = grooming at both T1 and T2. Next, we analyzed the distribution of variables in the study (shame, guilt, and mental health outcomes at both time points). This distribution was found to be non-normal, so we used the Kruskal–Wallis test to analyze the differences between the groups. The Kruskal–Wallis test is a nonparametric test that is used when the assumptions of ANOVA are not met. We employed the Dwass–Steel–Critchlow–Fligner (DSCF) test for performing nonparametric multiple comparisons between groups. The Jamovi project (2022) and R Core Team (2021) were used for data analysis.

3 | RESULTS

We identified participants who reported any type of grooming victimization at T1 (T1-victims), at T2 (T2-victims), or at both time points (stable victims). Overall, 11.8% ($n = 88$) of the participants were T1-victims, 12.7% ($n = 95$) were T2-victims, and 10.9% ($n = 81$) were stable victims. Table 1 shows the differences between T1-victims and stable victims and between T2-victims and stable victims regarding each grooming strategy. As can be seen, overall the stable victims presented higher scores for the strategies of online grooming than the participants who had been victims at only one of the time points. Exceptions were observed for the aggression strategy, which did not demonstrate significant differences between transient victims (either T1-victims or T2-victims) and stable victims, and for the interest in the victim's environment strategy, which approached significance when T2 victims and stable victims were compared ($p < .10$).

Next, we examined the relationship between the stability of victimization and the included sociodemographic variables. The results are presented in Table 2. T1-victims and stable victims were significantly older than non-victims and T2-victims. Regarding sexual orientation, there was a significantly higher prevalence of sexual minorities in the T1-victim group and the stable victim group. Regarding country of birth, T2-victims and stable victims were significantly more likely to have been born outside Spain. Finally, parental education level was significantly lower among stable victims and T2-victims than among non-victims. Adolescents in the stable victim group had a significantly lower ratio of parents married/living together compared to the non-victim group. The group of stable victims also presented a higher proportion of separated or divorced parents.

The victims who experienced grooming at only one point in time were compared with the stable victims in terms of feelings of shame and guilt (Table 3). Thus, the T1-victims were compared with the stable victims at T1, and the T2-victims were compared with the stable victims at T2. The stable victims showed higher levels of shame and guilt at T1 than did the T1-victims (shame: Kruskal–Wallis χ^2 [1, $n = 169$] = 6.83, $p < .01$; guilt: Kruskal–Wallis χ^2 [1, $n = 169$] = 4.63, $p < .05$).

TABLE 1 Differences in grooming strategies between T1-victims and stable victims and between T2-victims and stable victims.

	T1-victims ($n = 88$)	T2-victims ($n = 95$)	Stable victims ($n = 81$)	χ^2 (Kruskal–Wallis)	p
Time 1	Mean (SD)				
Use of deception	0.26 (0.34)		0.50 (0.64)	4.09	<.05
Gift giving	0.09 (0.31)		0.19 (0.32)	8.02	<.01
Interest in the victim's environment	0.44 (0.65)		0.68 (0.72)	7.86	<.01
Sexualization	0.14 (0.42)		0.37 (0.66)	11.77	<.001
Aggression	0.09 (0.22)		0.19 (0.42)	1.72	.189
Time 2					
Use of deception		0.34 (0.42)	0.54 (0.58)	6.20	<.05
Gift giving		0.09 (0.25)	0.26 (0.43)	10.50	<.01
Interest in the victim's environment		0.38 (0.49)	0.58 (0.71)	2.95	.09
Sexualization		0.26 (0.54)	0.49 (0.71)	7.81	<.01
Aggression		0.17 (0.38)	0.15 (0.31)	0.10	.75

Note: Nonvictims ($n = 482$, 64.6%) presented a score equal to 0 in each strategy analyzed. T1-victims and T2-victims presented scores equal to 0 at T2 and T1, respectively. Range of scores for each strategy = 0–3.

TABLE 2 Relationship between the stability of grooming victimization and sociodemographic variables.

	Nonvictims (<i>n</i> = 482)	T1-victims (<i>n</i> = 88)	T2-victims (<i>n</i> = 95)	Stable victims (<i>n</i> = 81)	χ^2/F
Gender					10.92 (<i>p</i> = .09)
Girls	61.5%	11.7%	13.2%	13.6%	
Boys	68.4%	11.9%	12.2%	7.5%	
Nonbinary	50%	50%	0%	0%	
Age [<i>M</i> (<i>SD</i>)]	13.26 (0.87) ^a	13.61 (0.84) ^b	13.23 (0.81) ^c	13.66 (0.86) ^d	8.59*** (<i>a</i> < <i>b</i> ; <i>a</i> < <i>d</i> ; <i>c</i> < <i>b</i> ; <i>c</i> < <i>d</i>)
Sexual orientation (% sexual minorities)	8.2%	18%	11.6%	17.3%	11.63**
Country of birth					19.04***
Spain	94.4%	90.9%	84.6%	82.5%	
Outside Spain	5.6%	9.1%	15.4%	17.5%	
Parental education level [<i>M</i> (<i>SD</i>)]	4.19 (1.31) ^a	4.11 (1.36) ^b	3.59 (1.51) ^c	3.76 (1.48) ^d	6.52*** (<i>a</i> < <i>c</i> ; <i>a</i> < <i>d</i>)
Marital status					26.27**
Married/living together	76.9%	69.5%	67%	57.1%	
Separated/divorced	19.8%	22.9%	27.0%	34.9%	
Single parent	2.7%	6.7%	4.3%	5.6%	
Widowed	0.5%	1%	1.7%	2.4%	

Note: Bold values = Frequencies higher or lower than expected with standardized residuals ± 1.96 .

p* < .01; *p* < .001.

TABLE 3 Differences in shame and guilt between T1-victims and stable victims and between T2-victims and stable victims.

	T1-victims (<i>n</i> = 88)	T2-victims (<i>n</i> = 95)	Stable victims (<i>n</i> = 81)	χ^2 (Kruskal–Wallis)	<i>p</i>
T1 shame	0.27 (0.63)		0.76 (1.24)	6.83	<.01
T1 guilt	0.38 (0.80)		0.67 (1.09)	4.63	<.05
T2 shame		0.51 (0.88)	0.54 (0.99)	0.18	.67
T2 guilt		0.60 (0.99)	0.52 (0.92)	0.01	.91

Note: Mean scores and standard deviations.

However, the stable victims displayed comparable levels of shame and guilt at T2 when compared to the T2 victims (shame: Kruskal–Wallis χ^2 [1, *n* = 176] = 0.18, *p* = .67; guilt: Kruskal–Wallis χ^2 [1, *n* = 176] = −0.01, *p* < .91).

Finally, T1-victims, T2-victims, and stable victims presented higher levels of depression and anxiety than non-victims (Table 4). Remarkably, T2 victims showed more symptoms of depression, but not anxiety, at T1 (before they were victimized) than non-victims. Similarly, the stable victims presented more depression and anxiety symptoms at T1 than the T1 victims. However, the stable victims showed similar levels of depression or anxiety symptoms at T2 when compared to the T2-victims. Likewise, T1-victims and T2-victims did not differ from each other in terms of depression or anxiety at any time.

4 | DISCUSSION

The present study analyzed the stability of online grooming at two-time points 1 year apart and explored their correlates in terms of demographic variables, emotions of shame and guilt, and symptoms of depression and anxiety. In each wave of the study, the participants reported the victimization they had experienced in the previous year. The findings showed that approximately 1 out of 10 adolescents were stable online grooming victims over 1 year. The stable victims reported having

TABLE 4 Relationship between stability of grooming victimization and depression and anxiety symptoms.

	Nonvictims (<i>n</i> = 482)	T1-victims (<i>n</i> = 88)	T2-victims (<i>n</i> = 95)	Stable victims (<i>n</i> = 81)	χ^2 (Kruskal–Wallis)	Post hoc comparisons
T1 depression	1.71 (0.82)	2.01 (0.83)	2.01 (0.95)	2.50 (1.14)	52.5***	Nonvictims < T1-victims Nonvictims < T2-victims Nonvictims < Stable victims T1-victims < Stable victims T2-victims < Stable victims
T2 depression	1.92 (0.94)	2.26 (0.93)	2.52 (1.19)	2.79 (1.25)	56.1***	Nonvictims < T1-victims Nonvictims < T2-victims Nonvictims < Stable victims T1-victims < Stable victims
T1 anxiety	1.49 (0.67)	1.81 (0.92)	1.68 (0.87)	1.14 (0.13)	52.2***	Nonvictims < T1-victims Nonvictims < Stable victims T1-victims < Stable victims T2-victims < Stable victims
T2 anxiety	1.65 (0.82)	2.05 (1.02)	2.10 (1.06)	2.33 (1.20)	44.1***	Nonvictims < T1-victims Nonvictims < T2-victims Nonvictims < Stable victims

****p* < .001.

experienced more grooming than the participants who were victims at only one of the two-time points, indicating that the manipulation that characterizes this type of abuse may increase the probability that it will continue over time (Kloess et al., 2019; Whittle et al., 2013).

The prevalence rates found in the current study are higher than those recently found by Ortega-Barón et al. (2022), who found that 6.7% of minors in their sample were stable victims of sexual solicitations/interactions with adults over a 13-month period. One possible explanation for this discrepancy is the variables analyzed. While we examined online grooming strategies, Ortega-Barón et al. (2022) analyzed potential grooming outcomes (i.e., sexual solicitations/interactions). A possible explanation for these results is that not all grooming strategies result in sexual solicitations/interactions with an adult. While all grooming strategies aim to manipulate the minor, only a percentage of them will achieve their goal (e.g., obtaining sexual content from the minor). Therefore, it is reasonable to expect that the prevalence of online grooming strategies is higher than the actual instances of sexual interactions between adults and minors. In any case, the percentage of adolescents who admit that an adult has tried to manipulate them somehow to obtain sexual content is considerable and should be considered in preventive efforts.

Our second objective was to analyze the relationship between grooming stability and different sociodemographic variables. We did not find significant differences based on sex, although the differences approached significance (*p* < .10). In fact, 13.6% of the girls and 7.5% of the boys were stable victims. Regarding age, stable victims were significantly older than nonvictims. Likewise, stable victims were more likely to belong to sexual minorities, to have been born outside of Spain, to have parents with a lower education level, and to have separated or divorced parents. Some family variables (e.g., divorced parents) could be associated with having fewer material and emotional resources, which in turn could weaken parents' supervision and protection of their children (Chen et al., 2018). Therefore, stable victims appear to present a specific risk profile. These findings are consistent with previous studies that found that aggressors may seek out more vulnerable victims to manipulate and trap in an abusive relationship (De Santisteban et al., 2018; Webster et al., 2012). The aggressor could show interest in the victim's needs to provide the victim with apparent support to achieve and maintain sexual interactions with them (Ringenberg et al., 2022).

This study also analyzed the emotions of shame and guilt and their relationship to victimization stability. The findings revealed a noteworthy pattern in the participants' emotional responses. Stable victims had higher shame and guilt scores at T1 than T1-victims. This outcome suggests that elevated levels of shame and guilt could contribute to the persistence of online grooming over time. These results underscore the pivotal role of shame and guilt as factors that potentially reinforce the continuity of online grooming. Despite their disparate victimization trajectories, the stable victims and T2-victims showed similar levels of shame and guilt at T2. The comparable emotional responses exhibited by stable victims and T2-victims at the T2 assessment could suggest a shared emotional trajectory, possibly stemming from the complex interplay of victimization and personal coping mechanisms. Further exploration is necessary to unravel the nuanced mechanisms underlying these emotional responses. Overall, the results indicate that grooming victims present a negative self-evaluation based on shame about what happened to them and an unpleasant feeling accompanied by beliefs that they should have thought, felt, or acted differently to avoid a relationship with the adult (e.g., O'Connell, 2003; Olafson, 2011).

Regarding depression and anxiety symptoms, stable victims showed higher depression scores than occasional victims at T1. In turn, occasional victims (T1-victims and T2-victims) presented higher scores than non-victims. Regarding anxiety symptoms, the occasional victims at T1 and T2 both had higher scores than the non-victims during the period in which they were victimized. However, stable victims did not present more depression or anxiety symptoms than T2-victims at T2. Remarkably, T2 victims showed more symptoms of depression, but not anxiety, at T1 (before they were victimized) than non-victims. These results could indicate that symptoms of depression are a risk factor for subsequent victimization. This is consistent with previous studies in which depression symptoms predicted an increase over time in minors experiencing sexual solicitation and sexual interactions with adults (De Santisteban & Gámez-Guadix, 2018). In general, according to the results of previous studies (Whittle et al., 2013), our findings indicate that grooming victims could present a profile characterized by more depression and anxiety symptoms. In turn, these symptoms could be a risk factor for future victimization.

This study has several limitations that need to be considered when interpreting the results. First, the study was conducted using adolescent self-report measures. Thus, the results were subject to the participants' self-perceptions. Since online grooming is characterized by an adult's subtle psychological manipulation of a minor, some victims may not recognize the abuse or its consequences. Second, although the study design allowed us to follow up with participants over time, it was impossible to establish cause-effect relationships between the variables. For example, symptoms of depression and anxiety could be an antecedent of grooming, a consequence of grooming, or both. Third, the sample is not representative of adolescents. It should be noted that approximately 50% of the adolescents between T1 and T2 dropped out of the study. Because T1 and T2 evaluations were carried out in pre- and post-COVID pandemic times, respectively, we encountered difficulties accessing some classes and schools at T2, which resulted in a lower retention rate between the two-time points than expected and reduced sample size in some comparison groups. Future studies should replicate these results using larger and more representative samples from different cultural contexts.

In conclusion, the present study advances knowledge about online child grooming by examining the stability of victimization over a 1-year period. It is noteworthy that this study's results indicate that 11% of victims experience victimization over time. A demographic profile of stable victims was also identified. Older adolescents, sexual minorities born abroad, and those whose parents have a lower education level and are separated or divorced reported higher victimization over time. The findings can inform primary prevention strategies. Such efforts should prioritize the emotional aspect of victimization, particularly addressing the feelings of shame and guilt that often accompany grooming situations. These emotions can serve minors as valuable cues for seeking assistance. Furthermore, prevention should emphasize that offenders may seek to take advantage of vulnerable minors to obtain sexual content or interactions. To achieve this, adults may use psychological manipulation strategies such as deception (e.g., lying about shared interests with the victim), giving gifts to the victim, showing interest in the victim's environment (e.g., problems the victim may have with parents or friends), or engaging in aggression and progressive sexualization of the victim. Perhaps as a result of these strategies, victims may experience higher levels of emotions such as guilt, shame, depression, and anxiety symptoms compared to non-victims. Interventions should address the emotional and cognitive aspects linked to victimization to help adolescents cope with and overcome potential negative outcomes. Resilience variables, such as family cohesion or social support (e.g., Wachs et al., 2022), could make a fundamental contribution to coping with the adverse results of victimization. In this sense, it seems important to provide unconditional support to victimized minors to mitigate any additional guilt, shame, or mental health outcomes derived from victimization.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ETHICS STATEMENT

This study followed the ethical standards and norms of the Declaration of Helsinki. This study is part of a larger research project on the online sexual abuse of minors that was reviewed and approved by the Autonomous University of Madrid Ethics Committee.

ORCID

Miguel A. Alcázar  <http://orcid.org/0000-0003-1650-2606>

Sebastian Wachs  <http://orcid.org/0000-0003-2787-6646>

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