

California Bullying Victimization Scale-Retrospective (CBVS-R): Validation of the Spanish Adaptation

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Abstract

Background: Bullying in childhood and adolescence is a worldwide problem. There is a general lack of validated retrospective measures of bullying, especially in Spanish-speaking populations. The present study aimed to adapt the retrospective version of the California Bullying Victimization Scale (CBVS-R) to Spanish and examine its psychometric properties. **Method:** The CBVS-R was translated and adapted into Spanish, and school victimization was evaluated in a sample of 1,855 Spanish adults (69.3% women). Factor structure, test-retest reliability, and predictive validity were explored. The types of victimization by educational level and the total victimization score for each participant were analyzed. **Results:** Factor analysis showed a one-factor structure. Values of internal consistency ($\alpha = .80$) and test-retest reliability ($r = .87$, $\kappa = .73$) were satisfactory. Victimization was associated with self-reports of mental health. Victimization patterns peaked around adolescence, the most frequent victimizing behavior was being teased or called names. **Conclusions:** Results support the usefulness and suitability of the Spanish adaptation of the CBVS-R as a retrospective self-report measure of bullying victimization in adults.

Keywords: Bullying, victimization, retrospective, Spanish, adaptation.

Resumen

California Bullying Victimization Scale-Retrospective (CBVS-R): Validación de la Adaptación Española. Antecedentes: el acoso escolar o bullying es un problema generalizado en la infancia y la adolescencia a nivel mundial. Existen pocas medidas retrospectivas de bullying validadas, especialmente en población de habla hispana. El objetivo del presente estudio fue adaptar al español la versión retrospectiva de la California Bullying Victimization Scale (CBVS-R) y examinar sus propiedades psicométricas. **Método:** se tradujo y adaptó al español la CBVS-R y se evaluó la victimización escolar en una muestra de 1.855 adultos españoles (69,3% mujeres). Se exploró la estructura factorial, la fiabilidad test-retest y su validez predictiva. Se analizaron los tipos de victimización por nivel educativo y la puntuación total de victimización para cada participante. **Resultados:** el análisis factorial mostró una estructura unifactorial. Los valores de consistencia interna ($\alpha = .80$) y fiabilidad test-retest ($r = .87$, $\kappa = .73$) fueron satisfactorios. La victimización estuvo asociada con medidas autoinformadas de salud mental. Los patrones de victimización mostraron su valor más elevado en torno a la adolescencia, siendo la conducta más frecuente ser objeto de burla o insultos. **Conclusiones:** los resultados respaldan la utilidad y conveniencia de la adaptación española del CBVS-R como autoinforme retrospectivo de victimización por acoso escolar en adultos.

Palabras clave: acoso escolar, victimización, retrospectivo, español, adaptación.

Bullying can be generally defined as an intentional aggressive behavior carried out repeatedly over time within the context of a power imbalance (Olweus, 2013; Volk et al., 2017). Although these general principles (intentionality, repetitiveness, and power imbalance) may apply to people of all ages across different environments, research has primarily focused on studying bullying in children and adolescents in school settings. Unfortunately, bullying is a common problem among youth worldwide: the overall prevalence is 10-12% in boys and girls between ages 11 and 15,

although rates can greatly vary across countries. Developmentally, peer bullying can be seen initially in Preschool, although it usually peaks during the middle school years, and declines later (Hymel & Swearer, 2015).

In the specific case of Spain, a national survey promoted by *Save the Children* and administered to a representative sample of nearly 21,500 Spanish students aged between 12 and 16 showed that 9.3% of the respondents considered that they had suffered school bullying in the last two months (Sastre et al., 2016). In this vein, international surveys from Health Behaviour in School-aged Children (Craig & Harel, 2004; Currie et al., 2008, 2012; Inchley et al., 2016) provided wider ranges of prevalence (up to 10.8%), suggesting that about one out of ten Spanish students is potentially experiencing bullying. In other words, of the nearly 8 million schoolchildren in Spain (Ministerio de Educación y Formación Profesional, 2020a), hundreds of thousands would be

affected. Even though the interest in bullying has considerably increased (Olweus, 2013; Volk et al., 2017), Spain still lacks a comprehensive approach to fight against all forms of violence in childhood, especially bullying (Rubio Hernández et al., 2019; Sastre et al., 2016).

Based on the aforementioned, the accurate assessment of bullying becomes essential to respond to increasing clinical and research interest involving this subject. Specifically, the retrospective assessment of bullying is interesting for evaluating patterns of bullying throughout the lifespan and allows assessing its long-term correlates. Thus, the existing evidence seems to demonstrate that being bullied in childhood and adolescence is associated with long-term adverse outcomes, such as new symptoms or diagnoses of mental health (especially with anxiety and depression), poorer physical health, or lower socioeconomic status (Arseneault, 2018). Another important interest refers to the examination of possible modulating factors. In these terms, increasing research is thoroughly identifying the existence of social, emotional, cognitive, and temperamental factors that might have a modulating role in the onset, persistence, and long-term impact of the consequences of bullying victimization.

Although a longitudinal approach probably becomes the most appropriate research method at this point, it is associated with considerable respondent attrition and demands strong expenditures in terms of time and money (Rindfleisch et al., 2008). On the other hand, the retrospective recall allows developing cross-sectional studies, ensuring a better convenience of sampling, having a relatively low cost, lacking the need to wait for results (Hardt & Rutter, 2004). Despite retrospective data present limitations concerning causal inference and raise doubts about their validity (confounding memory, the degree of forgetfulness, the tendency to seek meaning in memories, etc.), previous literature has evidenced that the retrospective recall in adult life of adverse experiences in childhood can be sufficiently valid to warrant its use (Hardt & Rutter, 2004; Rivers, 2001). In sum, retrospective self-report methods have a worthwhile place in research to study the long-term effects of bullying, especially mental health symptoms, as well as identifying prior bullying experiences among adults (Green et al., 2018).

Nevertheless, in contrast to childhood or youth bullying questionnaires, there are few validated instruments focused on the retrospective assessment in adults. This is even more pronounced when referring to Spanish-speaking populations. One of these instruments is the Retrospective Bullying Questionnaire (Schäfer et al., 2004). This questionnaire begins with a definition of bullying that highlights the three general principles of intentionality, repetitiveness, and power imbalance (Olweus, 2013). However, previous evidence seems to show that data obtained from this definition-based self-report strategy may be significantly influenced by the self-perceptions of bully or victim status, presumably underestimating its prevalence (Green et al., 2013; Kert et al., 2010). That is, the fact that they present a definition seems to emotionally bias respondents and influences victims or bullies not to endorse experiences associated with the (stigmatizing) *bully* and *victim* labels (Green et al., 2013; Kert et al., 2010). Other handicaps of this definition strategy are that it relies on a not yet standardized theoretical framework of bullying (Volk et al., 2017) or the uncertainty that respondents remember the initially given definition of bullying instead of using their previous understanding of the term (Smith et al., 2002). In contrast, in a behavior-based self-report strategy, a list of specific bullying-related behaviors is

presented, and respondents are asked to specify if they have either experienced them (victim), committed them (bully), or both (bully-victim). In this line, the California Bullying Victimization Scale (Felix et al., 2011), a self-report method specifically designed to evaluate bullying in school students without using the term *bully* or a definition of bullying, can be considered a good candidate for evaluation.

The CBVS asks participants about the three fundamental components of bullying; that is, their experiences with several forms of intentional victimization, including whether victimization was repeated or involved a power imbalance between the student and their main aggressor. This instrument was initially developed for its use with children and adolescents and has been administered to school-aged children in different countries, evidencing a good test-retest reliability, internal consistency (including a single-factor structure), and convergent and predictive validity (Atik & Guneri, 2012; Felix et al., 2011; Green et al., 2013; Soares et al., 2015). The existing research using the CBVS reports that teasing is, generally, the most frequent form of repeated victimization (Atik & Guneri, 2012; Felix et al., 2011; Green et al., 2013).

A retrospective version of the CBVS has been recently developed for assessing childhood bullying experiences in adult samples (Green et al., 2018; Holt et al., 2014). The CBVS-Retrospective includes items asking about eight specific forms of victimization that respondents might have experienced across their educational life, and the intentionality, frequency, intensity, and power imbalance of these behaviors. There is evidence about the validity of the CBVS-R as a retrospective self-report measure for adults when recalling their childhood bullying victimization. As in the school-directed version, teasing emerges as the most frequent form of victimization during childhood and adolescence (Green et al., 2018; Holt et al., 2014). Analyses predicting the functioning at college by past bullying victimization, as assessed by the CBVS-R, reveal that bullying victimization exposures are significantly associated with higher self-reported ratings of depression and anxiety, and with lower global ratings of mental and physical health (Green et al., 2018; Holt et al., 2014).

Therefore, the main advantages of the CBVS-R for the advance of the field in Spanish-speaking populations are that it offers a retrospective assessment (thus allowing developing cross-sectional studies), it is based on a behavior-based self-report strategy, and it already presents evidence of its validity. Accordingly, considering the need for adequate bullying measures to address clinical and research objectives, having ascertained the limited availability of validated retrospective bullying instruments in Spanish, and having evidenced the potential benefits of the CBVS-R, the main aim of this study was to translate it and adapt it to Spanish, and to examine the psychometric properties of the CBVS-R for its use in the Spanish-speaking adult population.

Method

Participants

From 2,454 people who initially accessed the survey, a total of 1,855 participants completed the online CBVS-R (completion rate = 75.6%). Regarding the valid sample, 69.3% were women (4 people, 0.2%, reported their sex as “other”), and ages from 18 to 79 years old were represented ($M = 28.67$, $SD = 10.23$). Referring to their educational level, 3.3% of participants reported that the

highest grade reached was Elementary Education, 9.2% Secondary Education, 23.3% Baccalaureate, and 64.2% University or higher.

Additionally, 216 participants from the sample (86.4% of those requested by invitation) joined in a retest assessment (73.1% women; 18 to 62 years old; $M = 30.18$, $SD = 10.29$). Their educational level distribution was: 1.4%, Elementary Education; 9.7%, Secondary Education; 19.4%, Baccalaureate; and 69.4%, University.

Based on the responses on the CBVS-R, participants were categorized as reported-bullying victims (hereinafter *bullying victims* or *victims*) if they reported at least one type of intentional victimization, indicated that it was repeated over time when it was at its “worst” (at least 2 or 3 times per month; Solberg & Olweus, 2003), and endorsed perceived power advantage to the main person bullying them in at least one domain.

Instruments

The survey was composed of an ensemble of sociodemographic questions and the CBVS-R itself. In the sociodemographic part, the questions covered sex, age, higher educational level achieved, having received psychological or psychiatric support or treatment, and suffering or having suffered anxiety disorder and/or depression, among other information.

The CBVS-R included eight items asking about specific forms of victimization that respondents might have experienced across their educational life: teasing, rumor spreading, social exclusion, hitting, threatening, sexual comments/gestures, stealing, and aggression via the Internet (Green et al., 2018). The wording of these eight core items specified that the form of victimization occurred “in a mean or hurtful way” to establish intentionality. Next, respondents were asked to indicate the frequency of each of these experiences on a 5-point scale: *a few times a year*, *about once a month*, *2 or 3 times a month*, *about once a week*, and *several times a week*. If respondents reported repeated victimization (2 or 3 times a month or more), the CBVS-R also assessed power imbalance by asking people to compare themselves to the person who was the main aggressor during the victimization period. Thus, respondents had to rate perceived comparative popularity, intelligence, physical strength, attractiveness, athleticism, economic status, and age through a three-point scale: *less than me*, *same as me*, *more than me*. This way, the CBVS-R was able to distinguish between non-victims, peer victims (i.e., intentional and repeated victimization, but no power differentiation; Hunter et al., 2007), and bullied victims. A complete copy of the Spanish adapted CBVS-R can be found on the website <https://idel.uib.eu/spanish-cbvs-r/>

Procedure

The translation and adaptation of the CBVS-R into Spanish followed the recommendations for test translation and adaptation (Hambleton & Zenisky, 2010; Hernández et al., 2020; International Test Commission, 2018). Initially, three members of our research group carried out, each one, an English to Spanish translation of the CBVS-R (forward-translation). At that time, minor adaptation changes were made; basically, the USA school grades were converted into seven Spanish educational levels. Then, a committee composed of other three researchers, focusing on the translation quality, achieved a consensual version, which was sent to an English native speaker who translated the test back to the

original language (back-translation). This version was sent to the authors of the English CBVS-R (Green et al., 2018), who revised and approved the equivalence of the original and back-translated versions of the test.

An online survey was created using Qualtrics Research Core, LLC (Provo, Utah). A pilot test of the survey was administered to 32 adults (46.88% women; 21 to 64 years old; $M = 37.68$, $SD = 9.77$) to provide feedback on item wording and clarity, comprehensibility, and to get feedback on the test, its instructions, and completion time (Hambleton & Patsula, 1999).

After inspection, the survey was distributed (in a non-probability sampling approach) by the research group website, social networks, mailing, and posters and flyers, advertising it as a retrospective behavioral and learning school-associated problems research only for adults (> 18 y/o). To encourage responsiveness, respondents were informed of a monetary reward lottery (5 prizes of €100 each) to which they were included if they answered the complete survey (Gideon, 2012). To avoid respondents answering the survey more than once, participation was controlled by IP address restriction. The survey was accessible from May to November 2019. Six months after responding, 250 participants who provided contact information (13.5% of the sample) were invited to answer the survey again to examine test-retest reliability, of which 86.4% successfully completed it.

The research ethics committee of the University approved the study and provided full consent. All participants agreed to participate and provided explicit consent at the beginning of testing.

Data Analysis

First, the underlying factor structure of the CBVS-R was assessed using a two-step strategy with consecutive exploratory and confirmatory statistical approaches. The sample was randomly divided into two subsamples ($n = 927$ and $n = 928$). Exploratory factor analysis (EFA) and confirmatory factor analyses (CFA) were performed on the first and the second subsample, respectively. These factor analyses were conducted on the eight core items of victimization of the CBVS-R. The EFA conducted on the first subsample was based on the tetrachoric correlation matrix, and the number of factors to be retained was determined by the optimal implementation of parallel analysis. The robust unweighted least-squares (RULS) estimation method was adopted. To confirm the factor structure obtained by the EFA, a CFA with maximum likelihood estimation method was performed on the second subsample. Bootstrap (500 samples) was implemented. As absolute fit indexes, we obtained the chi-square statistic (χ^2) and the Root Mean Square Error of Approximation (RMSEA). The Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI) were obtained as relative fit measures.

Second, to report test-retest reliability, a *total victimization* score was calculated by summing the eight core items of victimization of the CBVS-R for each participant. The test-retest reliability was computed with a bivariate Pearson correlation (r) between time 1 and time 2, and using the Cohen’s Kappa coefficient (κ) for measuring intra-rater reliability. Later, the eight victimization items were also used to compute internal consistency (Cronbach’s alpha; α).

Third, we analyzed the predictive validity of the CBVS-R on reports of psychological or psychiatric support or treatment,

anxiety disorder, and depression by calculating additional chi-square tests.

Finally, the percentages of the eight different bullying victimization behaviors were calculated separately for the seven Spanish standard educational levels (or equivalents).

The software used to calculate descriptive data, internal consistency, and test-retest reliability were SPSS Statistics (v.25, IBM) and JMP (v.5, SAS). FACTOR 10 (Ferrando & Lorenzo-Seva, 2017) and AMOS (v.23, IBM) were used for EFA and CFA, respectively.

Results

Factor Validity

Exploratory Factor Analysis

Kaiser-Meyer-Olkin's index was adequate, $KMO = 0.86$, and Bartlett's test of sphericity, $\chi^2(28, N = 927) = 4373.2, p < .001$, indicated that the sampling was adequate to conduct a factor analysis of the data. The parallel analysis determined one factor to be retained. Factor loadings for the one-factor solution (59.75% of variance explained) are presented in Figure 1.

Confirmatory Factor Analysis

Besides chi-square, $\chi^2(19, N = 928) = 83.08, p < .001$, that is highly sensitive to large sample sizes, the remaining indexes suggested an adequate fit for the one-factor model obtained in the EFA, $RMSEA = .06, CFI = .96$, and $TLI = .95$.

Internal Consistency and Test-Retest Reliability

The Pearson correlation between the total victimization scores at time 1 and time 2 (six months difference) for a sample of 216 participants was $r(214) = .87, p < .001$. Moreover, the agreement of the participants' classification as victims or non-victims across the two time periods was high (agreement = 87.04%), as indicated by Cohen's Kappa coefficient, $\kappa = .73$. The Cronbach's alpha

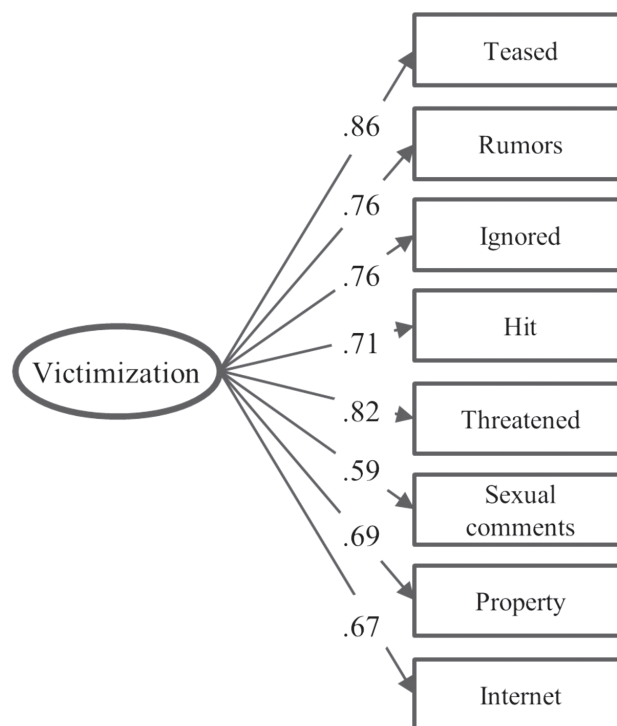


Figure 1. Loadings from the Exploratory Factor Analysis on the Core Items of the Spanish Version of the CBVS-R

coefficient for the eight victimization items was $\alpha = .80$, indicating a good internal consistency.

Predictive Validity

Bullying victims, as compared to non-victims, reported more frequently having received psychological or psychiatric support or treatment, 29.7 vs. 12.67%, $\chi^2(1, N = 1,855) = 63.45, p < .001$, and suffering or having suffered anxiety disorder, 18.54 vs. 6.63%, $\chi^2(1, N = 1,855) = 51.84, p < .001$, and/or depression, 2.43 vs. 0.70%, $\chi^2(1, N = 1,855) = 8.12, p = .004$.

Table 1
Retrospective Bullying Victimization Reports (Percentage Values) by Bullying Type and Educational Level ($N = 1,855$)

Victimization type	Educational levels ^a						
	$n = 1,855$		$n = 1,793$		$n = 1,623$	$n = 1,191$	
	1	2	3	4	5	6	7
Teased	3.8	16.7	30.7	37.1	26.8	9.4	1.8
Rumors	1.5	5.9	12.2	18.7	16.3	6.9	2.4
Ignored	3.6	12.4	20.8	24.1	19.1	8.5	2.6
Hit	2.0	5.1	7.6	7.0	4.6	0.7	0.0
Threatened	1.2	3.5	6.4	9.3	7.1	2.2	0.4
Sexual comments	1.0	3.1	8.0	14.6	12.4	4.8	1.1
Property	1.0	3.0	5.3	6.7	4.7	0.9	0.2
Internet	0.5	1.0	2.8	6.9	7.0	2.8	0.4
Any	5.8	20.8	36.7	44.0	34.5	15.4	4.8

Note: Percentage values. The highest value in each victimization type is presented in bold. Educational levels: 1 = Preschool (3-6 y/o); 2 = 1st cycle of Elementary (6-9 y/o); 3 = 2nd cycle of Elementary (9-12 y/o); 4 = 1st cycle of Secondary (12-14 y/o); 5 = 2nd cycle of Secondary (14-16 y/o); 6 = Baccalaureate (16-18 y/o); 7 = University (> 18 y/o).

^a Respondents could indicate experiencing victimization at multiple educational levels, thus being included in more than one column

Descriptive Analysis

From the final valid sample ($N = 1,855$), 59.5% of participants accomplished the criteria of bullying victimization, whereas 2.6% showed traits of peer victimization.

The percentages of respondents who reported victimization (i.e., bullying victims) were calculated to identify the rates of the different victimization forms occurring at each educational level (see Table 1).

Being teased or called names by other student was the most frequent form of victimization reported from Preschool to Baccalaureate, ranging from 3.8 to 37.1%. At University, the most frequent victimization type was being left out of a group or ignored by peers on purpose (2.6%).

All forms of victimization reached their highest rates at the 1st cycle of Secondary Education (ranges from 7 to 37.1%), except for hit, push, or physically hurt, which occurred mostly at previous levels (at the 2nd cycle of Elementary, 7.6%), and aggressions through the Internet, which mainly happened later (at the 2nd cycle of Secondary, 7%).

Prominently, 44% of respondents indicated having experienced any form of victimization at the 1st cycle of Secondary Education, while the lowest rate of any form of victimization occurred at University (4.8%). In general, the evolution in time showed that most of the victimization forms increased from Preschool, peaked at Secondary Education, and decreased later, with the lowest rates at University (see Figure 2).

Concerning power imbalance, 66.6% of bullying victims endorsed three or more forms of power mismatches, reporting main aggressors as more popular (82.7%), more athletic (61%), stronger (59.1%), more attractive (41.3%), having more money (36.4%), older (24.4%) and/or smarter (6.9%).

Discussion

This study aimed to analyze the psychometric properties of the Spanish version of the CBVS- R, administered to a large Spanish adult sample.

Current results regarding factor analyses are in line with those reported in a previous study using the CBVS in a Brazilian sample

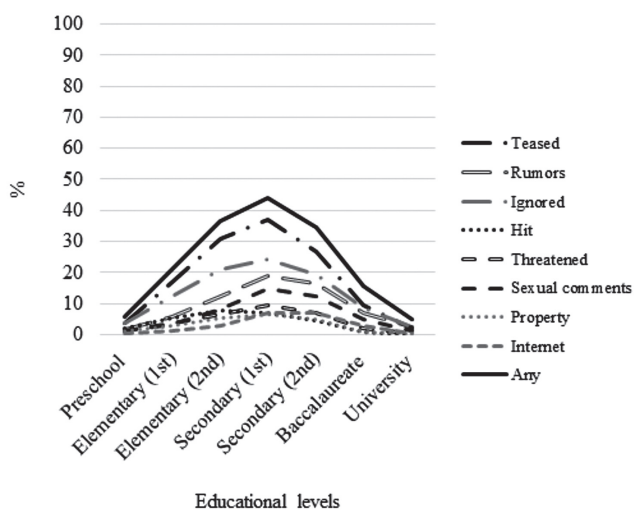


Figure 2. Percentage of Bullying Victimization Reported at Each Educational Level

of children where a one-factor solution was obtained (Soares et al., 2015). The unifactorial nature of both the CBVS and the CBVS-R is consistent with findings of substantial associations between direct and indirect types of aggression (see Card et al., 2008, for a meta-analytic review) and moderate inter-correlations between social, verbal, and physical victimization (Marsh et al., 2011) during childhood. Overall, these studies suggest that the different types of victimization tend to co-occur with the same person.

Concerning the survey's psychometric properties, they show adequate internal consistency, and an excellent six-month test-retest reliability, a key indicator of effective evaluation. Besides, bullying victims, as classified by the CBVS-R, were more likely to report having received psychological or psychiatric support or treatment, and to suffer or having suffered from anxiety disorder and/or depression. These reports are consistent with prior literature that points to the impact of bullying victimization on poor mental health and psychological distress, especially anxiety and depression (Arseneault, 2018).

The study of the retrospective patterns of bullying throughout the different academic stages allows providing crucial information about the extent and the severity of this phenomenon. Moreover, this information could contribute to clarify its long-term consequences, which can be manifested in terms of mental health, and possible intra- and interpersonal factors that could be acting as protective or risk factors for bullying experiences, as well as to provide data on bullying development across time.

Regarding the subtypes of bullying, results show that being teased or called names is generally the most frequent victimization behavior, paralleling both CBVS retrospective versions (Green et al., 2018; Holt et al., 2014) and several studies conducted on school samples (Atik & Guneri, 2012; Felix et al., 2011; Green et al., 2013). Teasing predominance is followed by being excluded or ignored by peers and having rumors or gossip spread, which are, in turn, the most prevalent at University. This pattern, shifting from direct (verbal) aggression to indirect or relational bullying, has been previously underlined in the literature (Pörhölä et al., 2019; Rivers & Smith, 1994).

Regarding bullying patterns throughout academic life, our results show a progressive increase of victimization from Preschool (3 to 6 years old) to the beginning of Secondary Education (12 to 14 years old), followed by a subsequent decrease, reaching the minimum values at University. This developmental pattern, with the peaking rates in the middle school years, is congruent with prior studies (Hymel & Swearer, 2015). Besides, it is interesting to highlight that almost one out of two participants experienced bullying behaviors at the onset of Secondary Education. Hence, the collected data point to this stage as critical for bullying in educational settings, suggesting that policies must focus on this period. Notably, it seems that the efforts should be directed to enhance the strategies of prevention and early detection in the case of Spain (Cerezo Ramírez & Rubio Hernández, 2017; Garaigordobil & Machimbarrena, 2019; Ortega-Ruiz et al., 2017; Sastre et al., 2016).

Another essential feature of the retrospective perception of bullying is the perceived power imbalance. This characteristic is crucial to distinguish bullying from generally isolated aggressive behavior, as bullied students perceive the situation to be more threatening and less under their control, report more severe depressive symptomatology, engage in more wishful thinking, and seek more social support (Hunter et al., 2007; Olweus, 2013).

Regarding this aspect, when the respondents of this study compared themselves to the person who was their main aggressor during the victimization period, most victims reported three or more perceived forms of power imbalances, usually acknowledging aggressors to be more popular, athletic, and stronger than themselves, resembling preceding research (Green et al., 2013, 2018; Hunter et al., 2007; Olweus, 2013).

Otherwise, results revealed a high rate of retrospective reports of bullying (59.5% of respondents), a larger figure than that of the previous studies using other retrospective instruments in adult Spanish samples. In Schäfer et al.'s study (2004), 13% of adults reported being bullied during Primary school, and 7% during Secondary school. Van der Meulen et al. (2003) exposed that 42% of 21-year old university students reported having been bullied in Primary education, 31% in Secondary education, and 19% in both educational stages. Similarly, Hunter et al. (2004) concluded that 48% of Spanish boys and 45% of girls experience some form of bullying during their schooling. Caravaca-Sánchez et al. (2016) informed that 62.2% of a college student sample reported having suffered from bullying victimization during the previous twelve months. At this point, it is worth noting that retrospective prevalence data are usually higher than those reported in school-based surveys, since the latter typically ask for information of the last 2 or 6 months (Smith et al., 1999), but are congruent if extrapolated to reports over the whole duration of schooling (Hunter et al., 2004).

However, the prevalence rates here reported should be interpreted with caution because there were some conditions in the study that might have affected them. In the first place, concerning the sampling strategies that took place during the research, a non-probability procedure was carried out since the only variable that was controlled for participation was being over 18 years old (besides not being able to respond to the survey more than once from the same IP). This could have biased the sociodemographic characteristics of the sample, such as the over-representation of people with tertiary education (64.2% in our sample vs. 38.6% in the Spanish adults of the general population; Ministerio de Educación y Formación Profesional, 2020b). In addition, the administration way might have influenced the participation, since all participants were able to quit the survey at any moment, thus dismissing their responses during the data processing (24.4% of recorded accesses). Besides, as it is known that respondents who voluntarily participate

and entirely complete a study may differ in important ways from people who choose not to participate (Gideon, 2012), we interpret that probably individuals who are especially sensitive to these issues (i.e., school-associated problems, bullying, being bullied, peer violence...) were more likely to initially access and fully answer the questionnaire. Thus, we encourage future investigations that aim to explore prevalence rates via the CBVS-R to do so using research stratification strategies for assuring representation of the population (controlling for age, occupation, sex, educational level, etc.), as well as by controlling for nonresponse, and by combining different survey methods.

Finally, basic aspects to consider about the CBVS-R assessment are the biases typically associated with the use of self-reported instruments (dishonesty or deception, social desirability, acquiescence, satisficing, or overclaiming; Hardt & Rutter, 2004) and the retrospective assessment commented previously. The biases related to self-report are usually addressed by combining multiple assessing approaches (Bouman et al., 2012). Concerning the biases of the retrospective assessment, our results on predictive validity are in line with previous evidence showing the validity of adult retrospective reports of adverse experiences in childhood (Hardt & Rutter, 2004).

In conclusion, the results of this study, which examines the psychometric properties of a retrospective measure of bullying in the Spanish population, indicate that the here introduced Spanish version of the CBVS-R appears to be a promising retrospective measure of bullying in our context. Therefore, the present study lays the groundwork for future research into bullying in educational settings in Spain and other Spanish-speaking countries, empowering further investigation to continue disentangling the scope of the problem and allowing to advance exploring cross-cultural consistencies (Ortega et al., 2012; Smith et al., 1999). Finally, we strongly encourage deeply investigating the Spanish version of the CBVS-R to confirm its validity by examining its relations with other bullying measures and/or by establishing its impact on psychosocial outcomes.

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