

## **RESUMEN**

Diferentes variables pueden influir en conductas agresivas, como el bullying o ciberbullying. Algunos estudios encuentran que la personalidad, concretamente, baja amabilidad, baja responsabilidad, alto neuroticismo y alta extraversión están relacionadas con el bullying (Giovazolias & Mitsopoulou, 2015). Los estudios sobre la asociación del Modelo de los Cinco Factores (FFM) y ciberbullying sugieren una asociación con amabilidad, responsabilidad, neuroticismo e introversión (Alonso & Romero, 2017). Además, la exposición a videojuegos violentos (VVGE) muestra una asociación significativa con agresividad (López-Fernández et al., 2021). El objetivo fue explorar las asociaciones entre FFM y VVGE con bullying y ciberbullying, así como los efectos de moderación del VVGE en la asociación de personalidad con bullying y ciberbullying. Se hipotetizó que responsabilidad baja, amabilidad baja y alto neuroticismo, estarían relacionados con bullying y ciberbullying; mientras que extraversión se relacionaría positivamente con bullying y negativamente con ciberbullying; y que la asociación de FFM con ambas estaría moderada por VVGE. La muestra estaba formada por 217 adolescentes entre 13-18 años (edad media=14,87 (1,21)). Se utilizó el JS-NEO-A60 para evaluar el FFM; SENA, EBIP-Q, MQSI-IV y CBIDAP para evaluar bullying y ciberbullying; y se evaluó VVGE preguntando los juegos más jugados y tiempo de uso. Como se hipotetizó, alto neuroticismo, amabilidad baja y responsabilidad baja estaban correlacionadas con bullying y ciberbullying. El análisis de regresión mostró asociación positiva entre extraversión y bullying. La asociación más fuerte entre FFM y bullying y ciberbullying fue con amabilidad, cosa que sugiere que bullying y ciberbullying comparten un perfil de personalidad consistente con el espectro externalizante de psicopatología. Nuestros resultados no apoyan el efecto de moderación de VVGE en la asociación entre personalidad y bullying y ciberbullying. Futuras investigaciones con mayor muestra deberían explorar más el efecto de la VVGE en conductas agresivas, incluyendo bullying y ciberbullying.

**Palabras clave:** personalidad, videojuegos, bullying, ciberbullying, agresividad

---

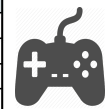
## **ABSTRACT**

Different variables can influence aggressive behaviour, such as bullying or cyberbullying. Some studies find that personality, namely low agreeableness, low conscientiousness, high neuroticism and high extraversion are related to bullying (Giovazolias & Mitsopoulou, 2015). Studies on the association between the Five Factor Model (FFM) and cyberbullying suggest an association with agreeableness, conscientiousness, neuroticism and introversion (Alonso & Romero, 2017). In addition, exposure to violent video games (VVGE) shows a significant association with aggression (López-Fernández et al., 2021). The aim was to explore the associations between the FFM and VVGE with bullying and cyberbullying, as well as the moderation effects of VVGE on the association of personality with bullying and cyberbullying. It was hypothesized that low conscientiousness, low agreeableness, and high neuroticism would be related to bullying and cyberbullying; whereas extraversion would be positively related to bullying and negatively related to cyberbullying; and that the association of the FFM with both would be moderated by VVGE. The sample consisted of 217 adolescents aged 13-18 years (mean age=14.87 (1.21)). The JS-NEO-A60 was used to assess the FFM; SENA, EBIP-Q, MQSI-IV and CBIDAP were used to assess bullying and cyberbullying; and VVGE was assessed by asking the most played games and time of use. As hypothesized, high neuroticism, low agreeableness, and low conscientiousness were correlated with bullying and cyberbullying. Regression analysis showed positive association between extraversion and bullying. The strongest association between the FFM and bullying and cyberbullying was with agreeableness, suggesting that bullying and cyberbullying share a personality profile consistent with the externalizing spectrum of psychopathology. Our results do not support the moderation effect of VVGE on the association between personality and bullying and cyberbullying. Future research with larger sample sizes should further explore the effect of VVGE on aggressive behaviours, including bullying and cyberbullying.

**Key words:** personality, video games, bullying, cyberbullying, aggressiveness.

# PERSONALITY AND VIOLENT VIDEO GAMES USE AND THEIR RELATION TO BULLYING AND CYBERBULLYING

Melanie Millán Casas (54020129Y), Laura Mezquita Guillamón



RESULTS



DISCUSSION

INTRODUCTION

There are different biological, psychological and environmental variables that may influence in aggressive behavior, such as bullying or cyberbullying. Among the psychological variables, previous meta-analyses have found that personality, specifically, low agreeableness (A), low conscientiousness (C), high neuroticism (N) and high extraversion (E) are related to bullying (Giovazolias & Mitsopoulou, 2015). The number of studies about the association of the Five Factor Model (FFM) of personality and cyberbullying is smaller, but suggest a similar association with A, C and N, while higher levels of introversion, rather than higher E, would be related to cyberbullying (Alonso & Romero, 2017). In addition, the exposition to violent video games (VVGE) is an environmental variable that has showed a small but significant association with aggressiveness, and that has also showed to moderate the association between personality and aggression (López-Fernández et al., 2021). Specifically, VVGE moderated the associations between E and A with aggressive behavior, and between low C and E with anger (López-Fernández et al., 2021).

OBJETIVE

To explore the associations of the FFM and the VVGE with bullying and cyberbullying, and the moderation effects of the VVGE in the association of the FFM with bullying and cyberbullying

HYPOTHESIS

- 1) Low C, Low A and high N would be related to bullying and cyberbullying
- 2) E would be related positively with bullying and negatively with cyberbullying
- 3) The association of the personality risk traits with bullying and cyberbullying would be moderated by the VVGE

METHOD

## SAMPLE

217 Subjects

13-18 years  
M= 14,87  
SD = 1,212

32,7%  
Women

67,3%  
Men

INSTRUMENTS

personality according to FFM ◀ JS-NEO-A60  
Ortut-Walker et al. (2020)

bullying and cyberbullying: was created from a number of items from the following questionnaires

- EBIP-Q ▶ Ortega-Ruiz et al. (2016)
- SENA ▶ Fernández-Pinto et al. (2015)
- MQSI-IV ▶ Caballo et al. (2012)
- CBIDAP ▶ Garaigordobil (2013)

VVGE. Top five most played games and frequency of use. ◀  $I_{VEG} = \frac{PEG118}{N} \times GF$

**ANALYSIS:** Correlation and regression analyses were performed with SPSS version 27 and interactions were represented using the InterActive application (McCabe et al., 2018).

table 1

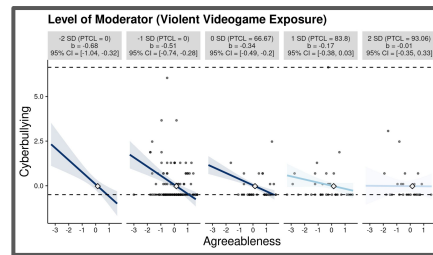
	Correlaciones	
	Bullying	Cyberbullying
VVGE	0,015	-0,012
N	,169*	,141*
E	0,109	0,052
O	-0,089	-0,003
A	-,308**	-,327**
C	-,236**	-,155*
Bullying	-	,595**

Note: \*  $p < ,05$  \*\*  $p < ,01$  \*\*\*  $p < ,001$

table 2

	Regression Analysis	
	Bullying	Cyberbullying
Age	-0,007	0,013
Gender	-0,134	-0,031
VVGE	-0,087	-0,026
N	0,147*	0,063
E	<b>0,23***</b>	0,132
O	-0,037	0,047
A	<b>-0,286***</b>	<b>-0,342***</b>
C	-0,156*	-0,074
N x VVGE	0,06	-0,04
E x VVGE	0,068	-0,085
O x VVGE	-0,025	0,023
A x VVGE	0,078	0,161*
C x VVGE	0,017	-0,053
R <sup>2</sup>	0,051	0,011***

in bold, the significant beta coefficients after correcting by Bonferroni (i.e.,  $p$  should be higher than 0.0038 to consider the beta coefficient significant).



As it was hypothesized, high N, low A and low C were correlated to bullying and cyberbullying (Giovazolias & Mitsopoulou, 2015; Alonso & Romero, 2017). In addition, regression analysis also showed a positive association between E and bullying (Giovazolias & Mitsopoulou, 2015), while a non-significant association was found between introversion and cyberbullying. Based on this result and also the inconsistent association between E and cyberbullying (e.g., Alonso & Romero, 2017), additional studies should be carry out to clarify the role of extraversion in this type of aggressive behavior. The fact that the stronger association between the FFM and bullying and cyberbullying was with the A trait, also suggest that bullying and cyberbullying shared a personality profile consistent with the externalizing spectrum of psychopathology, specifically with the antagonism spectra (Etkin et al., 2021; Kotov et al., 2021; Ringwald et al., 2021). Finally, our results did not support the moderation effect of VVGE in the association between personality and bullying and cyberbullying. Taking together our results with previous research (i.e., López-Fernández et al., 2021) it seems that the use VVGE moderate the association between personality and more direct assessment of aggressive behavior (i.e., aggression or anger) rather than in bullying / cyberbullying. In any case, as the sample size of the present study was low, future research with higher sample sized should further explore effect of VVGE in a variety of aggressive behaviors, including bullying and cyberbullying.

**PROCEDURE:** Cross-sectional data from a longitudinal study conducted in two high schools, in which bullying and cyberbullying were assessed, are used. The questionnaires were questionnaires were filled in pencil and paper. Consents were obtained from parents.

## **BIBLIOGRAFÍA**

- Caballo, V. E., Caldedero, M., Arias, B., Salazar, I. C., & Irurtria, M. J. (2012). Desarrollo y validación de una nueva medida de autoinforme para evaluar el acoso escolar (Bullying). *Psicología Conductual*, 20, 625–647. [https://www.behavioralpsycho.com/wp-content/uploads/2019/08/08.Caballo\\_20-3oa.pdf](https://www.behavioralpsycho.com/wp-content/uploads/2019/08/08.Caballo_20-3oa.pdf)
- Carrasco Ortiz, M. A., & del Barrio, M. V. (2007). El modelo de los cinco grandes como predictor de la conducta agresiva en población infanto-juvenil *Revista de Psicopatología y Psicología Clínica*, 12, 23-32. <http://revistas.uned.es/index.php/RPPC/article/view/4031/3885>
- Etkin, P., Mezquita, L., López-Fernández, F.J., Ortet, G., Ibáñez, M.I. Five Factor model of personality and structure of psychopathological symptoms in adolescents. *Personality and Individual Differences*, 163, 110063. <https://doi.org/10.1016/j.paid.2020.110063>.
- Fernández-Pinto, I., Santamaría, P., Sánchez-Sánchez, F., Carrasco, M. A. y del Barrio, V. (2015). SENA. Sistema de Evaluación de Niños y Adolescentes. Manual de aplicación, corrección e interpretación. Madrid: TEA Ediciones.
- Garaigordobil, M. (2013). Cyberbullying: screening de acoso entre iguales. Madrid: TEA
- López-Fernández, F. J., Mezquita, L., Etkin, P., Griffiths, M. D., Ortet, G., & Ibáñez, M. I. (2021). The Role of Violent Video Game Exposure, Personality, and Deviant Peers in Aggressive Behaviors Among Adolescents: A Two-Wave Longitudinal Study. *Cyberpsychology, Behavior, And Social Networking*, 24, 32-40. <https://www.liebertpub.com/doi/10.1089/cyber.2020.0030>
- Mezquita, L., Bravo, A. J., Pilatti, A., Ortet, G., & Ibáñez, M. I. (2021). Preliminary validity and reliability evidence of the Brief Antisocial Behavior Scale (B-ABS) in young adults from four countries. *Plos One*, 16, e0247528. <https://doi.org/10.1371/journal.pone.0247528>
- Mitsopoulou, E. & Giovazolias, T. (2015). Personality traits, empathy and bullying behavior: A meta-analytic approach. *Aggression and Violent Behavior*, 21, 61-72, ISSN 1359-1789, <https://doi.org/10.1016/j.avb.2015.01.007>
- Ortega-Ruiz, R., Del Rey, R., & Casas, J. A. (2016). Evaluar el bullying y el cyberbullying validación española del EBIP-Q y del ECIP-Q. *Psicología Educativa*, 22, 71–79. <https://doi.org/10.1016/j.pse.2016.01.004>
- Ortet-Walker, J., Mezquita, L., Vidal-Arenas, V. et al. (2020). Validation of an abridged, 60-item form, of the Junior Spanish NEO inventory (JS NEO-A60). *Current Psychology*. <https://doi.org/10.1007/s12144-020-01135-y>
- Ringwald, W. R., Forbes, M. K., Wright, A. G. C. (2021). Meta-analysis of structural evidence for the Hierarchical Taxonomy of Psychopathology (HiTOP) model. *Psychological Medicine*, 1–14. <https://doi.org/10.1017/S0033291721001902>