

Bullying involvement and psychopathic personality: disentangling the links among college students

Guilherme W. Wendt¹, Marli Appel-Silva², and Alice P. Jones-Bartoli¹

¹University of London (United Kingdom);

²Pontificia Universidade Catolica do Rio Grande do Sul (Brazil)

There is a good deal of research about the predictors of aggressive and antisocial behaviour in children, adolescents, and adults. Additionally, previous work has established a link between psychopathic personality and disruptive behaviours among youth, with clear links to bullying. However, little is known about the role of psychopathic personality traits in the manifestation of bullying in young adults. In order to shed additional understanding on the nature of the relationship between bullying and psychopathy, the current investigation proposes to compare psychopathic personality traits in relation to participants' roles in bullying and to examine the relationships between bullying and psychopathy. The sample comprised here involves 273 college students ($M_{age}=25.5$; $SD=6.1$), who responded to measures of psychopathy and bullying behaviours. With the exception of Carefree Non-Planfulness, Fearlessness, Stress Immunity and Social Influence, all other psychopathic domains measured by the PPI-R-40 were positively correlated with victimisation ($r_{range}=.07-.35$). Higher self-reporting of bullying others was linked with higher levels of Blame Externalisation, Machiavellianism, Rebellion Nonconformity, Self-Centred Impulsivity factor, Social Influence, and total psychopathy ($r_{range}=.08-.38$). Significant differences between participants' involvement with bullying for Blame Externalisation, Machiavellian Egocentricity, Rebellion Nonconformity, Social Influence, Total Psychopathy and Self-Centred Impulsivity factor. Implications of the study, along with limitations and directions for future research are discussed.

Key words: Bullying, Psychopathy, machiavellianism, blame externalisation, rebellion non-conformity.

Acoso y rasgos psicopáticos en adultos. Hay una buena cantidad de investigación sobre los predictores del comportamiento agresivo y antisocial en niños, adolescentes y adultos. Además, trabajos previos han establecido una asociación entre la personalidad psicopática y los comportamientos disruptivos entre los jóvenes, con asociaciones claras con el acoso escolar. Sin embargo, poco se sabe sobre el papel de los rasgos psicopáticos de la personalidad en la manifestación del acoso en adultos jóvenes. Con el fin de obtener una comprensión adicional sobre la naturaleza de la relación entre el acoso y la psicopatía, la investigación actual propone comparar los rasgos de la personalidad psicopática en relación con los papeles sociales de los participantes relativos al acoso. La muestra de este estudio se compone de 273 estudiantes universitarios (edad media=25.5; $DT=6.1$), que contestaran a medidas de psicopatía y conductas de acoso. Con la excepción del dominio Despreocupación/Falta de planificación, Ausencia de miedo, Inmunidad al estrés e Influencia Social, todos los demás dominios psicopáticos medidos por el PPI-R-40 se correlacionaron positivamente con la victimización ($r_{distancia}=.07-.35$). Un mayor auto relato de acosar a los demás se asoció con niveles más elevados de Externalización de la culpa, Maquiavelismo, Disconformidad/rebeldeía, Impulsividad autocentrada, Influencia social y Psicopatía total ($r_{distancia}=.08-.38$). Diferencias significativas entre estar involucrado en el acoso en relación a la Externalización de la culpa, el Maquiavelismo, la Disconformidad/rebeldeía, la Influencia social, la Psicopatía total y el Factor de impulsividad autocentrada fueron encontradas. Las implicaciones del estudio, junto con las limitaciones y las orientaciones para investigaciones futuras serán discutidas.

Palabras clave: Acoso, Psicopatía, maquiavelismo, externalización de la culpa, disconformidad rebeldeía.

Correspondence: Guilherme Welter Wendt. University of London. Department of Psychology. Unit for School and Family Studies. The Bungalow Building, Lewisham Way, London SE14 6NW, London (United Kingdom). E-mail: psp01gw@gold.ac.uk

A timely area of research is the intersection between bullying behaviours and psychopathic personality traits. For instance, not long ago, “there were no published research looking specifically at the relationship between psychopathy and involvement in bullying in adults” (Warren, 2009, p. 245). Bullying is a deliberate, deviant, repetitive, and aggressive act that occurs in a relational situation of imbalance of power (Olweus, 1991). Extensive research with children and adolescents have documented the negative consequences of being involved with bullying, either as a victim or as an aggressor (Méndez & Cerezo, 2010). Pure bullies (i.e., those predominantly perpetrators) use more proactive aggression and score higher in measures of antisocial behaviour and are at risk for developing antisocial features (Copeland, Wolke, Angold, & Costello, 2013; Craig, 1998; Sourander et al., 2007). Victims (or targets of bullying), in turn, do not present with a specific, clear-cut profile (Zych, Farrington, Llorent, & Ttofi, 2017). Nonetheless, risk factors for victimisation include the presence of externalising problems, interpersonal deficits, and limited number of friends (Garaigordobil & Oñederra, 2010; Menesini & Salmivalli, 2017). In addition, the chances of becoming a victim are contingent to the goals that perpetrators possess. This means that a very popular individual can be targeted if the bully aims status, for example (Reijntjes et al., 2016).

Sutton and his research collaborators have set important questions for the study of a special group of children who were ‘hard’ in responding to discipline, less responsive to anti-bullying policies and with elevated social skills when compared to their victims (Sutton, Smith, & Swettenham, 1999a). Interestingly, this same group of researchers detected that, contrary to prior expectations that bullying was a result of deficiencies in social skills (e.g., Crick & Dodge, 1994), the perpetrators of this process basically excelled tasks measuring Theory of Mind (Sutton et al. 1999a, 1999b).

Researchers in child and adolescent psychology have been interested in assessing what factors may put individuals at risk for bullying involvement across the lifespan. Fanti and Kimonis (2012) explored the role of conduct problems and callous-unemotional (CU) traits in a longitudinal investigation, discovering that those with combination of both CU+/CP+ showed greater initial intensity of bullying, and this pattern continued over time. In addition, youth who scored high on narcissism were more involved with victimisation and showed more bully-related behaviour, as well high scores on impulsivity were related to victimisation. In adults, experiences of bullying can predict aggression (Juvonen & Graham, 2014), antisocial behaviour (Bender & Losel, 2011) and delinquency (Barker, Arseneault, Brendgen, Fontaine, & Maughan, 2008). Psychopathy is as a heterogenic disorder; in other words, there exists substantial variance in the behavioural, physiological and emotional symptoms displayed by psychopaths and by those high on psychopathic personality traits (Thompson, Ramos, & Willett, 2014). This form of personality disorder is marked by absence of empathy and

fear, being linked with elevated involvement with crime and aggression (Lilienfeld & Andrews, 1996; Miller, Hyatt, Maples-Keller, Carter, & Lynam, 2016; Kiire, 2017). Few studies have looked into the precise role of psychopathic personality traits in explaining bullying in adults, regardless of the interesting fact that some bullies present a set of cruel actions and absence of empathy responsiveness towards their victims, which have clear similarities to certain behaviours labelled as ‘psychopathic’ (Baughman, Dearing, Giammarco, & Vernon, 2012; Frick, Cornell, Barry, Bodin, & Dane, 2003; Juvonen & Graham, 2014; Kimonis, Skeem, Cauffman, & Dmitrieva, 2011; van Geel, Toprak, Goemans, Zwaanswijk, & Vedder, 2016).

Among the self-report measures of psychopathy designed for use in non-clinical samples, the Psychopathic Personality Inventory Genetic Derived form is a recently developed tool, capturing the core personality traits related to this condition (PPI-R-40; Eisenbarth, Lilienfeld, & Yarkoni, 2015).

However, Ruchensky, Edens, Donnellan, & Witt (2017) highlighted that, although promising, it is imperative to perform further examinations on the psychometric properties of the PPI-R-40 in other samples and to explore its associations to external correlates.

Considering the literature reviewed, this study aims compare psychopathic personality traits in relation to participants’ roles in bullying. This study also aims to investigate the utility of the PPI-R-40 in exploring its associations to negative outcomes in a community sample. Hence, correlations between PPI-R-40 subscales will be investigated in regards to bullying and victimisation experiences. This study hypothesises that participants with higher involvement with bullying will also display elevated levels of psychopathic traits.

Similarly as detected in studies among children and adolescents, the co-occurrence of bullying and victimisation would play an important role in participant’s self-report measure of psychopathy (Ragatz, Anderson, Fremouw, & Schwartz, 2011). Specifically, it was predicted that bully-victims would show elevated psychopathic personality traits (cf. Fanti & Kimonis, 2013).

METHOD

Participants and design

The sample comprised here involves 273 college students ($M_{\text{age}}=25.5$; $SD=6.1$), being 82% female ($M_{\text{age}}=25$; $SD=5.9$) and 18% male ($M_{\text{age}}=27.5$; $SD=6.8$). To facilitate participant’s maximum ease in their reports on experiences of bullying and also in terms of psychopathic traits, demographic questions were reduced to a minimum as possible. The study received ethical approval from the Goldsmiths Psychology Research

ethics committee. A cross-sectional design was adopted, with use of correlational and multivariate data analysis.

Procedures

Participants were recruited via a Research Participation Scheme at two universities in the U.K. Prior to completing the measures, participants were presented with an outline of the study, which included information on data protection and privacy, and were asked to provide consent for participation. All participants received a debriefing form for this study.

Measures

The PPI-R is a self-report questionnaire arranged on a 4-point Likert scale ranging from False (0) to True (3), assessing a variety of domains associated to antisocial behaviour and psychopathy. In 2015, an alternative 40-item solution was presented by Eisenbarth and colleagues, and these items were analysed for this study to measure the impulsive aspects of psychopathy as well as its affective and interpersonal components (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003; Neumann, Malterer, & Newman, 2008). In the current study, adequate results of internal consistency were obtained ($\alpha_{\text{range}}=.60-.79$).

Illinois Bullying Scale (IBS; Espelage & Holt, 2001). This 18-item measure is designed to assess the frequency of bullying and items are presented on a 5-point scale. It is suited for screening bullying involvement among children, adolescents, and young adults. In the current study, the subscales of bullying (or perpetrator; 7 items; $\alpha=.72$) and victimisation (4 items; $\alpha=.80$) were used.

Data analysis

In line with previous research showing unique patterns of emotional and behavioural problems among bullies, bully-victims, pure victims and non-involved (Copeland et al., 2013; Craig, 1998; Sourander et al., 2007), 4 groups were created, namely: non-involved, pure victims, pure bullies, and bully-victims. For the behaviours of bullying others, the IBS's subscales of bully and fighting were combined into one composite ('bully'). As bullying requires repetition, participants were coded into one category only when reported '2 or more times' in the incidence of bullying others or being victimised in the past 30 days. Those who reported two or more times engagement in concomitant bullying others and being a victim were grouped as 'bully-victims'.

Correlations (Pearson) were used to better explore the links between bullying and psychopathy, exploring specifically the dimensions captured by the PPI-R-40 (Blame Externalisation, Carefree Nonplanfulness, Fearlessness, Machiavellian

Egocentricity, Rebellion Nonconformity, Stress Immunity, Coldheartedness and Social Influence). ANOVA was used to compare non-involved, pure victims, pure bullies, and bully-victims in regards to psychopathic traits.

RESULTS

Descriptive results

50.9% ($n=139$) of participants reported not having been involved with any behaviour related to bullying over the past month. The remainder 49.1% of participants reported that they had been involved in some sort of bullying, namely: 25.3% ($n=69$) reporting having bullied someone two or more times and were not themselves victims in the last month; 4.0% ($n=11$) were victims exclusively; 19.8% were bully/victims ($n=54$).

Inferential analyses

In order to present a complete picture of the links between bullying and psychopathic personality, a full correlation matrix is presented in table 1. 95% confidence intervals were provided due to multiple comparisons. Another reason for fully reporting correlational findings is because this type of procedure is important and informative for potential future inclusion in meta-analytical studies (Schmidt & Hunter, 2014). However, a text-description will be followed, highlighting those associations most relevant to the current work.

Table 2 displays the results of multiple 4(bullying roles) x 1(psychopathy subscales) ANOVA's that were run to detect possible differences between bullying roles in regards to PPI-R-40 scores.

With the exception of Carefree Non-Planfulness, Fearlessness, Stress Immunity and Social Influence, all other psychopathic domains measured by the PPI-R-40 were positively correlated with victimisation ($r_{\text{range}}=.07-.35$). This means that as more participants were victimised, the more were their self-reported levels of Blame Externalisation, Machiavellianism, Rebellion Nonconformity, Self-Centred Impulsivity factor and total psychopathy. On the other hand, Carefree Non-Planfulness, Fearlessness, and Stress Immunity were the dimensions of psychopathy which did not reach significant levels of association with perpetration of bullying. Hence, higher self-reporting of bullying others was linked with higher levels of Blame Externalisation, Machiavellianism, Rebellion Nonconformity, Self-Centred Impulsivity factor, Social Influence, and total psychopathy ($r_{\text{range}}=.08-.38$).

Table 1. Correlations between psychopathic personality traits with bullying and victimisation

		2	3	4	5	6	7	8	9	10	11	12	13
1 Blame	r	.05	.15	.36	.31	-.08	-.23	.32	-.05	.74	-.12	.28	.35
externalisation	p	.34	.01	<.001	<.001	.15	<.001	<.001	.42	<.001	.04	<.001	<.001

	Upper 95% CI	.18	.27	.47	.42	.03	-.11	.43	.07	.79	-.00	.39	.45
	Lower 95% CI	-.06	.03	.25	.19	-.21	-.34	.21	-.17	.68	-.24	.16	.24
	r	—	.13	.11	.22	-.03	-.02	.38	.05	.53	.26	.15	.05
	p	—	.03	.07	<.001	.60	.64	<.001	.43	<.001	<.001	.01	.38
2 Carefree	Upper 95% CI	—	.25	.23	.33	.09	.09	.48	.17	.62	.37	.27	.17
Nonplanfulness	Lower 95% CI	—	.01	-.01	.10	-.15	-.15	.27	-.07	.44	.14	.02	-.06
	r	—	.25	.47	.20	.18	.67	.72	.26	.10	.17	.16	
	p	—	<.001	<.001	.001	.003	<.001	<.001	<.001	.10	.007	.009	
3 Fearlessness	Upper 95% CI	—	.36	.56	.31	.30	.74	.77	.38	.22	.28	.28	
	Lower 95% CI	—	.13	.37	.07	.06	.60	.65	.15	-.02	.04	.04	
	r	—	.43	.21	-.12	.51	.17	.73	.20	.33	.14		
	p	—	<.001	<.001	.04	<.001	.004	<.001	<.001	<.001	<.001	.02	
4 Machiavellian	Upper 95% CI	—	.52	.32	-.00	.59	.29	.78	.32	.44	.26		
Egocentricity	Lower 95% CI	—	.32	.09	-.24	.41	.05	.66	.08	.22	.02		
	r	—	.27	.16	.74	.44	.47	.17	.30	.19			
	p	—	<.001	<.001	.01	<.001	<.001	<.001	.005	<.001	.002		
5 Rebellion non-	Upper 95% CI	—	.38	.27	.79	.54	.56	.29	.41	.31			
conformity	Lower 95% CI	—	.15	.03	.68	.34	.37	.05	.18	.07			
	r	—	.38	.51	.70	.04	.10	.17	.01	.60	.60		
	p	—	<.001	<.001	.001	<.001	.54	.10	.005	.83			
6 Social	Upper 95% CI	—	.48	.59	.76	.16	.22	.29	.11				
Influence	Lower 95% CI	—	.27	.41	.63	-.08	-.02	.05	-.13				
	r	—	.42	.69	-.20	.20	-.03	-.03					
	p	—	<.001	<.001	.001	.001	.60	.09	.09				
7 Stress	Upper 95% CI	—	.52	.75	-.08	.32	.09	.09					
Immunity	Lower 95% CI	—	.31	.62	-.31	.08	-.15	-.15					
	r	—	.77	.59	.43	.36	.20						
	p	—	<.001	<.001	.001	<.001	.001						
8 Total	Upper 95% CI	—	.82	.67	.52	.46	.32						
Psychopathy	Lower 95% CI	—	.72	.51	.32	.25	.08						
	r	—	.08	.18	.15	.07							
	p	—	.19	.003	.01	.25							
9 Fearlessness	Upper 95% CI	—	.20	.30	.27	.19							
factor	Lower 95% CI	—	-.04	.06	.03	-.05							
	r	—	.15	.38	.28								
	p	—	.01	<.001	<.001								
10 Self-Centred	Upper 95% CI	—	.27	.48	.39								
Impulsivity	Lower 95% CI	—	.03	.27	.17								
factor	r	—	.08	.18	.15								
	p	—	.16	.17									
11 Coldheartedness	Upper 95% CI	—	.20	.03									
factor	Lower 95% CI	—	-.03	-.20									
	r	—	.08	.50									
	p	—	.08	<.001									
12 Bully	Upper 95% CI	—	.58										
behaviour	Lower 95% CI	—	.40										

Table 2. Comparing the means for psychopathic personality traits and bullying roles

	Groups	M	SD	SE	Lower 95% CI	Upper 95% CI	Z (p)	n ²
Blame Externalisation	Non-involved	9.13	2.85	.24	8.65	9.62	9.72 (.001)	.10
	Pure victim	11.18	3.86	1.16	8.58	13.78		
	Pure bullies	10.56	3.20	.40	9.75	11.36		
	Bully-Victims	11.69	2.92	.43	10.81	12.57		
	Total	10.03	3.15	.19	9.64	10.42		
Carefree	Non-involved	8.49	2.48	.21	8.06	8.91	1.73 (.161)	.02

Nonplanfulness	Pure victim	9.00	2.68	.80	7.20	10.80		
	Pure bullies	9.27	2.83	.35	8.56	9.98		
	Bully-Victims	9.22	2.61	.39	8.44	10.01		
	Total	8.83	2.62	.16	8.51	9.16		
	Non-involved	10.79	4.03	.34	10.10	11.48		
Fearlessness	Pure victim	11.64	4.65	1.40	8.51	14.76	1.87 (.135)	.02
	Pure bullies	11.17	4.12	.51	10.14	12.21		
	Bully-Victims	12.42	3.77	.56	11.29	13.56		
	Total	11.21	4.06	.25	10.71	11.72		
	Non-involved	9.37	2.45	.21	8.95	9.78		
Machiavellian Egocentricity	Pure victim	9.36	3.04	.91	7.32	11.41	9.12 (.001)	.10
	Pure bullies	10.62	2.84	.35	9.90	11.33		
	Bully-Victims	11.60	2.91	.43	10.72	12.48		
	Total	10.08	2.79	.17	9.73	10.42		
	Non-involved	9.61	2.78	.24	9.14	10.09		
Rebellion Nonconformity	Pure victim	9.82	3.18	.96	7.68	11.96	5.80 (.001)	.06
	Pure bullies	10.48	2.90	.36	9.75	11.21		
	Bully-Victims	11.60	2.84	.42	10.74	12.46		
	Total	10.19	2.92	.18	9.83	10.55		
	Non-involved	12.75	3.16	.27	12.21	13.29		
Social Influence	Pure victim	11.36	3.64	1.09	8.92	13.81	2.86 (.037)	.03
	Pure bullies	13.65	2.78	.35	12.95	14.35		
	Bully-Victims	13.62	3.02	.45	12.71	14.53		
	Total	13.07	3.10	.19	12.68	13.45		
	Non-involved	12.13	3.11	.26	11.60	12.67		
Stress Immunity	Pure victim	12.18	3.76	1.13	9.65	14.71	.29 (.833)	.00
	Pure bullies	11.83	3.13	.39	11.03	12.62		
	Bully-Victims	11.71	2.85	.42	10.85	12.57		
	Total	11.98	3.09	.19	11.60	12.37		
	Non-involved	82.19	11.53	.99	80.22	84.17		
PPI-R-40 Total	Pure victim	82.73	13.92	4.19	73.37	92.08	8.90 (.001)	.09
	Pure bullies	87.44	11.95	1.50	84.43	90.45		
	Bully-Victims	91.89	10.80	1.61	88.64	95.14		
	Total	85.25	12.15	.76	83.74	86.75		
	Non-involved	35.67	7.26	.62	34.43	36.91		
Fearlessness Factor	Pure victim	35.18	9.87	2.97	28.55	41.82	1.06 (.363)	.01
	Pure bullies	36.65	7.08	.89	34.87	38.44		
	Bully-Victims	37.76	6.82	1.01	35.71	39.80		
	Total	36.26	7.27	.45	35.36	37.17		
	Non-involved	8.96	2.54	.22	8.52	9.39		
Coldheartedness factor	Pure victim	7.73	2.10	.63	6.32	9.14	1.47 (.222)	.01
	Pure bullies	9.32	2.62	.33	8.66	9.98		
	Bully-Victims	9.42	3.08	.46	8.50	10.35		
	Total	9.08	2.65	.16	8.75	9.40		
	Non-involved	26.99	5.24	.45	26.09	27.88		
Self-Centred Impulsivity Factor	Pure victim	29.55	5.95	1.79	25.54	33.55	14.07 (.001)	.14
	Pure bullies	30.44	5.89	.74	28.96	31.93		
	Bully-Victims	32.51	4.98	.74	31.01	34.01		
	Total	28.94	5.80	.36	28.22	29.66		
	Non-involved	26.99	5.24	.45	26.09	27.88		

Analyses of variance (ANOVA) demonstrated significant differences between participants' involvement with bullying for Blame Externalisation, Machiavellian Egocentricity, Rebellion Nonconformity, Social Influence, Total Psychopathy and Self-Centred Impulsivity factor (Table 2; $n^2_{\text{range}}=.03-14$). Post-hoc tests revealed that, for Blame Externalisation and Machiavellian Egocentricity, participants uninvolved in bullying differed significantly from pure-bullies and from bully-victims in these subscales. An analogous pattern was observed for PPI-R-40 total score and for the Self-Centred Impulsivity factor. For Rebellious Nonconformity, differences were statistically significantly different between non-involved and bully-victims only. Post-hoc tests yielded no further group differences for Social Influence.

DISCUSSION

This study sought to compare the levels of psychopathic traits in regards to participants' roles in bullying. In addition, it also checked for possible associations between bullying, victimisation and psychopathic personality traits as measured by the PPI-R-40.

In line with the prediction that participants would differ in terms of psychopathic personality traits according to bullying roles, interesting results emerged, specifically for Blame Externalisation, Machiavellian Egocentricity, Rebellion Non-conformity, Social Influence, Self-Centred Impulsivity factor and total psychopathy. As such, bully-victims scored higher on all domains assessed by the PPI-R-40 with the exception of Carefree Non-Planfulness, Stress Immunity and Social Influence, in which pure bullies scored slightly above bully-victims. These results speak to those presented by Ragatz et al. (2011) who found that bully-victims presented significantly higher scores for psychopathy, as well as for criminal thoughts, proactive aggression, and criminal offenses than those who neither were bullied nor perpetrated bullying acts. In addition, those who were bully-victims were more prone for reactive aggression than perpetrators or victims alone. Proactive aggression can be characterised as occurring in a pre-arranged and insensitive manner towards the victim(s), while reactive aggression occurs as an impulsive act in response to provocation (Dodge, 1991; Ragatz et al., 2011).

When considering that bullying is a relational phenomenon with imbalance of power being one of the key criteria (Rodkin, Espelage, & Hanish, 2015), differences detected in this study between pure bullies and bully-victims have theoretical reasoning and confirm past reports. For instance, previous work has shown a trend towards violence and delinquency behaviours among bully-victims (Carbone-Lopez, Esbensen, & Brick, 2010; DeCamp & Newby, 2015; Higgins, Khey, Dawson-Edwards, & Marcum, 2012). Supporting these findings, the results evaluated in this study suggested that concomitant perpetrators and victims of bullying tended to violate social rules (i.e., Rebellion Non-conformity), to exert power over others (i.e., Social Influence) and to equally not take responsibilities for their acts (i.e., Blame Externalisation).

Post-hoc analyses revealed differences in scores between uninvolved, pure-bullies and bully-victims for Blame Externalisation, Machiavellian Egocentricity, Self-Centred Impulsivity and PPI-R-40 total score. According to Losey (2011), those psychopathic traits are linked with negative emotions, such as resentment and even retaliatory behaviours. Thus, some victims of bullying might display aggressive behaviour as retaliation of the aggression suffered. In this way, victimisation can be a triggering factor for bullying others. This suggests an explanatory hypothesis to the

phenomenon found in this study that nearly a fifth of the respondents (19.8%) were both perpetrators and victims of bullying. With effect, DeCamp & Newby (2015) reported that victims of bullying are at special risk for aggressive behaviour because of a previous history of victimisation and violence exposure. However, the authors emphasised that this issue has not yet been fully clarified, possibly because the vast amount of research on bullying had considered its manifestation in youth. Thus, our study has revealed that adults can also be perpetrators and victims of bullying, and has shown that specific facets of psychopathic personality play an important part on this manifestation.

Correlations showed also an interesting picture. Machiavellian Egocentricity was more strongly related to bully behaviour than to victimisation (Table 1). The literature reveals that purely bullies tend to be more manipulative, insensitive, and less empathic than pure victims (Sutton et al., 1999a).

This suggests a greater tendency for psychopathic behaviours among those engaged exclusively in bullying others. Machiavellianism, in addition, has been also linked to successful psychopathy (Brankley & Rule, 2014), a variant presentation of the disorder commonly seen among college students (Warren, 2009). In turn, Blame Externalisation correlated positively with behaviours of bullying others, but had a stronger relationship with being a victim, indicating that people who were victims of bullying tended to blame others more often. Although direct comparisons with previous studies are not possible due to conceptual and methodological issues, these correlational results are congruent to those presented by Warren (2009), in which Machiavellian Egocentricity, Blame Externalisation and Rebellious Non-Conformity were positively linked with indirect aggression.

Given that bully-victims show a number of important differences when compared with bullies, it is not at all surprising to find that bully-victims are distinguishable from victims in their psychopathic traits (DeLisi et al., 2014; Ragatz et al., 2011). Therefore, data evaluated in this study suggested that specific traits of the psychopathic personality—especially Machiavellian Egocentricity, Blame Externalisation and Rebellion Non-conformity—are important in the comprehension of the bully-victim relationship. These findings are coherent with those detected in child and adolescent data. For instance, a recent meta-analysis including more than 40.000 participants found positive links between domains of youth psychopathy and bullying behaviours. Interestingly, impulsivity and narcissism were largely associated with bullying among older adolescents, whereas no age influences were detected for the links between CU traits and bullying (van Geel et al., 2016). It shall be noted, however, that not only psychopathy, but also others types of personality disorders may prone individuals to display behaviours on non-conformity to social norms and in similarity with bullying, such as narcissist personality disorder, borderline personality disorder, and paranoid personality disorder (Cleckley, 1988; McMains & Mullins, 2014).

Therefore, caution is warranted in interpreting these results. In the same direction, our results present numerous limitations due cross-sectional design, which impedes the establishment of casual relationships. Additionally, possible applications of these findings are limited to settings with similar cultural and demographical characteristics.

In summary, this study suggests that is clearly important to take into account the role of psychopathic personality traits in programmes aiming to deter the consequences of bullying and vice versa. For instance, most psychopathic characteristics were positively linked with victimisation, except Carefree Non-Planfulness, Fearlessness, Stress Immunity and Social Influence. Bullying others was positively correlated with Blame Externalisation, Machiavellian Egocentricity, Rebellious Nonconformity, Self-Centred Impulsivity factor, Social Influence, and total psychopathy ($r_{\text{range}}=.08-.38$). One hypothesis that might be raised is that perhaps the overlap between bullying and psychopathy is related to specific traits that usually load into Self-Centred Impulsivity factor, comprising the subscales of Blame Externalisation, Machiavellian Egocentricity, and Rebellious Nonconformity. Even though data here presented cannot firmly state this, future work could explore the overlap between both phenomena, once identifying common features could result into convergent, more effective interventions. Finally, given the relatively few studies that have objectively looked at adult bullying and psychopathy traits and variants, it is important to continue exploring the intersection between these problematic behaviours in order to deliver better strategies for prevention and intervention.

REFERENCES

- Barker, E., Arseneault, L., Brendgen, M., Fontaine, N., & Maughan, B. (2008). Joint development of bullying and victimization in adolescence: Relations to delinquency and self-harm. *Journal of the American Academy of Child and Adolescent Psychiatry*, *47*(9), 1030-1038. doi:10.1097/CHI.ObO13e31817eec98
- Baughman, H.M., Dearing, S., Giammarco, E., & Vernon, P.A. (2012). Relationships between bullying behaviours and the Dark Triad: A study with adults. *Personality and Individual Differences*, *52*(5), 571-575. doi:10.1016/j.paid.2011.11.020
- Bender, D., & Losel, F. (2011). Bullying at school as a predictor of delinquency, violence and other anti-social behaviour in adulthood. *Criminal Behavior and Mental Health*, *21*(2), 99-106. doi:10.1002/cbm.799
- Benning, S.D., Patrick, C.J., Hicks, B.M., Blonigen, D.M., & Krueger, R.F. (2003). Factor Structure of the Psychopathic Personality Inventory: Validity and Implications for Clinical Assessment. *Psychological Assessment*, *15*(3), 340-350. doi:10.1037/1040-3590.15.3.340
- Brankley, A.E., & Rule, N.O. (2014). Threat perception: How psychopathy and Machiavellianism relate to social perceptions during competition. *Personality and Individual Differences*, *71*, 103-107. doi:10.1016/j.paid.2014.07.015

- Carbone-Lopez, K., Esbensen, F., & Brick, B.T. (2010). Correlates and consequences of peer victimization: gender differences in direct and indirect forms of bullying. *Youth Violence and Juvenile Justice*, 8, 332-350. doi:10.1177/1541204010362954
- Cleckley, H.M. (1988). *The mask of sanity: An attempt to clarify some issues about the so called psychopathic personality* (5th ed.). Augusta: Emily S. Cleckley.
- Copeland, W.E., Wolke, D., Angold, A., & Costello, E.J. (2013). Adult Psychiatric Outcomes of Bullying and Being Bullied by Peers in Childhood and Adolescence. *JAMA Psychiatry*, 70(4), 419. doi:10.1001/jamapsychiatry.2013.504
- Craig, W.M. (1998). The relationship among bullying, victimization, depression, anxiety, and aggression in elementary school children. *Personality and Individual Differences*, 24, 123-130.
- Crick, N.R., & Dodge, K.A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115, 74-101. doi:10.1037/0033-2909.115.1.74
- DeCamp, W., & Newby, B. (2015). From bullied to deviant: the victim-offender overlap among bullying victims. *Youth Violence and Juvenile Justice*, 13(1), 3-17. doi:10.1177/1541204014521250
- DeLisi, M., Angton, A., Vaughn, M.G., Trulson, C.R., Caudill, J.W., & Beaver, K.M. (2014). Not My Fault: Blame Externalization Is the Psychopathic Feature Most Associated With Pathological Delinquency Among Confined Delinquents. *International Journal of Offender Therapy and Comparative Criminology*, 58(12), 1415-1430. doi:10.1177/0306624X13496543
- Dodge, K.A. (1991). The structure and function of reactive and proactive aggression. In D. Pepler, K. Rubin (Eds). *The Development and Treatment for Childhood Aggression* (pp. 201-218). Hillsdale: Erlbaum.
- Eisenbarth, H., Lilienfeld, S.O., & Yarkoni, T. (2015). Using a genetic algorithm to abbreviate the Psychopathic Personality Inventory-Revised (PPI-R). *Psychological Assessment*, 27(1), 194-202. doi:10.1037/pas0000032
- Espelage, D.L., & Holt, M. (2001). Bullying and victimization during early adolescence: Peer influences and psychosocial correlates. *Journal of Emotional Abuse*, 2(2), 123-142. doi:10.1300/J135v02n02_08
- Fanti, K.A., & Kimonis, E.R. (2013). Dimensions of juvenile psychopathy distinguish "bullies," "bully-victims," and "victims". *Psychology of Violence*, 3(4), 396-409. doi:10.1037/a0033951
- Frick, P.J., Cornell, A.H., Barry, C.T., Bodin, S.D., & Dane, H.E. (2003). Callous-unemotional traits and conduct problems in the prediction of conduct problem severity, aggression, and self-report of delinquency. *Journal of Abnormal Child Psychology*, 31, 457-470. doi:10.1023/A:1023899703866
- Garaigordobil, M., & Oñederra, J.A. (2010). Inteligencia emocional en las víctimas de acoso escolar y en los agresores. *European Journal of Education and Psychology*, 3(2), 243-256. doi:10.1989/ejep.v3i2.63
- Higgins, G.E., Khey, D.N., Dawson-Edwards, B.C., & Marcum, C.D. (2012). Examining the link between being a victim of bullying and delinquency trajectories among an African American sample. *International Criminal Justice Review*, 22, 110-122. doi:10.1177/1057567712443965
- Juononen, J., & Graham, S. (2014). Bullying in Schools: The Power of Bullies and the Plight of Victims. *Annual Review of Psychology*, 65(1), 159-185. doi:10.1146/annurev-psych-010213-115030

- Kiire, S. (2017). Psychopathy rather than Machiavellianism or narcissism facilitates intimate partner violence via fast life strategy. *Personality and Individual Differences, 104*, 401–406. doi:10.1016/j.paid.2016.08.043
- Kimonis, E.R., Skeem, J.L., Cauffman, E., & Dmitrieva, J. (2011). Are secondary variants of juvenile psychopathy more reactively violent and less psychosocially mature than primary variants? *Law and Human Behavior, 35*(5), 381–391. doi:10.1007/s10979-010-9243-3
- Lilienfeld, S.O., & Andrews, B.P. (1996). Development and Preliminary Validation of a Self-Report Measure of Psychopathic Personality Traits in Noncriminal Population. *Journal of Personality Assessment, 66*(3), 488–524. doi:10.1207/s15327752jpa6603_3
- Losey, B. (2011). *Bullying, suicide, and homicide: understanding, assessing, and preventing threats to self and others for victims of bullying*. New York: Routledge.
- McMains, M.J., & Mullins, W.C. (2014). *Crisis negotiations: managing critical incidents and hostage situations in law enforcement and corrections*. New York: Routledge.
- Méndez, I., & Cerezo, F. (2010). Bullying y factores de riesgo para la salud en estudiantes de secundaria. *European Journal of Education and Psychology, 3*(2), 209–218. doi:10.1989/ejep.v3i2.61
- Menesini, E., & Salmivalli, C. (2017). Bullying in schools: the state of knowledge and effective interventions. *Psychology, Health & Medicine, 22*(sup1), 240–253. doi:10.1080/13548506.2017.1279740
- Miller, J.D., Hyatt, C.S., Maples-Keller, J.L., Carter, N.T., & Lynam D.R. (2016) Psychopathy and Machiavellianism: a distinction without a difference? *Journal of Personality, n/a-n/a*. doi:10.1111/jopy.12251
- Neumann, C.S., Malterer, M.B., & Newman, J.P. (2008). Factor structure of the Psychopathic Personality Inventory (PPI): Findings from a large incarcerated sample. *Psychological Assessment, 20*(2), 169–174. doi:10.1037/1040-3590.20.2.169
- Olweus, D. (1991). Bully/victim problems among schoolchildren: basic facts and effects of a school based intervention program. In D. Pepler, & K. Rubin (Eds). *The Development and Treatment of Childhood Aggression* (pp. 411–448). Hillsdale, NJ: Erlbaum.
- Ragatz, L.L., Anderson, R.J., Fremouw, W., & Schwartz, R. (2011). Criminal thinking patterns, aggression styles, and the psychopathic traits of late high school bullies and bully-victims. *Aggressive Behavior, 37*(2), 145–160. doi:10.1002/ab.20377
- Reijntjes, A., Vermande, M., Thomaes, S., Goossens, F., Olthof, T., Aleva, L., & Van der Meulen, M. (2016). Narcissism, Bullying, and Social Dominance in Youth: A Longitudinal Analysis. *Journal of Abnormal Child Psychology, 44*(1), 63–74. doi:10.1007/s10802-015-9974-1
- Rodkin, P.C., Espelage, D.L., & Hanish, L.D. (2015). A relational framework for understanding bullying: developmental antecedents and outcomes. *The American Psychologist, 70*(4), 311–321. doi:10.1037/a0038658
- Ruchensky, J.R., Edens, J.F., Donnellan, M.B., & Witt, E.A. (2017). Examining the reliability and validity of an abbreviated Psychopathic Personality Inventory—Revised (PPI-R) in four samples. *Psychological Assessment, 29*(2), 238–244. doi:10.1037/pas0000335
- Schmidt, F.L., & Hunter, J.E. (2014). *Methods of meta-analysis: Correcting error and bias in research findings*. London: Sage publications.
- Sourander, A., Jensen, P., Ronning, J.A., Niemela, S., Helenius, H., Sillanmaki, L., & ... Almqvist, F. (2007). What Is the Early Adulthood Outcome of Boys Who Bully or Are Bullied in Childhood? The Finnish “From a Boy to a Man” Study. *Pediatrics, 120*(2), 397–404. doi:10.1542/peds.2006-2704

- Sutton, J., Smith, P.K., & Swettenham, J. (1999a). Social cognition and bullying: social inadequacy or skilled manipulation? *The British Journal of Developmental Psychology*, *17*, 435–450. doi:10.1348/026151099165384
- Sutton, J., Smith, P.K., & Swettenham, J. (1999b). Bullying and “theory of mind”: A critique of the “social skills deficit” view of anti-social behavior. *Social Development*, *8*, 117–127. doi:10.1111/1467-9507.00083
- Thompson, D.F., Ramos, C.L., & Willett, J.K. (2014). Psychopathy: clinical features, developmental basis and therapeutic challenges. *Journal of Clinical Pharmacy and Therapeutics*, *39*(5), 485–495. doi:10.1111/jcpt.12182
- van Geel, M., Toprak, F., Goemans, A., Zwaanswijk, W., & Vedder, P. (2016). Are Youth Psychopathic Traits Related to Bullying? Meta-analyses on Callous-Unemotional Traits, Narcissism, and Impulsivity. *Child Psychiatry & Human Development*. doi:10.1007/s10578-016-0701-0
- Warren, G.C. (2009). *The relationship between psychopathy and indirect aggression in a community sample*. (Doctoral dissertation, University of York). Retrieved on 12 November 2016, from <http://etheses.whiterose.ac.uk/785/1/thesisfinal.pdf>
- Zych, I., Farrington, D.P., Llorent, V.J., & Ttofi, M.M. (2017). Personal Protective Factors against Bullying: Emotional, Social, and Moral Competencies. In I. Zych, D. P. Farrington, V.J. Llorent, & M.M. Ttofi (Eds.), *Protecting Children Against Bullying and Its Consequences* (pp. 23–40). Cham: Springer International Publishing.

Received: 25 de abril de 2018

Reception modifications: 9 de mayo de 2018

Accepted: 25 de mayo de 2018