Person–Group Dissimilarity in Personality and Peer Victimization ⌂

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Abstract: The present study examined the role of person–group dissimilarity in personality in peer victimization. It was hypothesized that adolescents who show more deviation from the classroom norm in personality experience more peer victimization. Data from 1108 adolescents (48% boys; M_{age} = 13.56 years, SD = 1.13) from 54 classrooms were used to test this hypothesis. Data included measurements of self-reported and bully-disclosed victimization and Big Five and Dark Triad personality traits. Results of generalized linear mixed models including polynomial equations and subsequent response surface analyses partly supported our hypothesis. Person–group dissimilarity in the shape of personality profiles was related to more bully-disclosed victimization, but not to self-reported victimization. Dissimilarity in neuroticism and Machiavellianism was related to both more self-reported and bully-disclosed victimization. Dissimilarity in extraversion, openness to experience, and psychopathy was only related to more self-reported victimization. Unexpectedly, dissimilarity in agreeableness was related to less self-reported victimization. Moreover, our results also indicated that certain levels of congruent person–group combinations in agreeableness, neuroticism, Machiavellianism, and psychopathy were related to more peer victimization. Overall, findings of this study emphasize the importance of considering classroom norms in relation to peer victimization. Copyright © 2017 European Association of Personality Psychology

Key words: peer victimization; person–group dissimilarity; classroom norms; Big Five; Dark Triad

Peer acceptance is an important goal in adolescent development (Brown, Eicher, & Petrie, 1986). However, not all adolescents achieve this goal, and a significant amount of them is even victimized by their peers (i.e. global prevalence of 13%; Craig et al., 2009). Peer victimization, or bullying, is defined as recurrent aggression by peers, in which victims have trouble defending themselves (Olweus, 1993). This aggression can appear in direct forms, such as physical (e.g. pushing and hitting) and verbal (e.g. name-calling) aggression, and via indirect forms, such as relational aggression (e.g. spreading rumors and social exclusion) (Crick, Casas, & Nelson, 2002).

Victimization has consequences, as victimized youths often show higher levels of internalizing (e.g. depressive symptoms and anxiety) and externalizing problem behaviour (e.g. aggressive behaviour and hyperactivity) (e.g. Reijntjes, Kamphuis, Prinzie, & Telch, 2010; Ttofi, Farrington, & Lösel, 2012; Ttofi, Farrington, Losel, & Loeber, 2011). It is thus important to understand the antecedents of victimization. In addition to studying relatively visible factors, such as physical weakness and low self-concept (for reviews, see Card & Hodges, 2008; Hong & Espelage, 2012), it is worthwhile to study personality to understand risk of peer victimization because personality traits serve as important and integrative dimensions of social perception (e.g. Saucier & Srivastava, 2015).

To date, a limited number of studies have addressed the relationship between personality and peer victimization. These studies suggest that victims tend to be low on the traits of agreeableness, emotional stability, and conscientiousness (De Bolle & Tackett, 2013; Jensen-Campbell et al., 2002; Jensen-Campbell & Malcolm, 2007; Tani, Greenman, Schneider, & Fregoso, 2003). However, these studies did not take into account that peer victimization is a group process and that victims are often outsiders in the peer group (e.g. Salmivalli, Lagerspetz, Bjorkqvist, Österman, & Kaukiainen, 1996). Hence, it may be more meaningful to consider the interactive effect of the victim's personality traits and the normative levels of personality traits in that person's peer group, instead of only studying main effects of personality traits. In the present study, we therefore argue that differences in personality between the adolescent and the peer group norm affect peer victimization.

Person–group dissimilarity in personality and peer victimization

Individual differences in personality are known to affect social interaction (Back et al., 2011). One of the mechanisms is the 'similarity breeds attraction' effect, which describes

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that higher similarity is associated with higher attraction between individuals (Montoya, Horton, & Kirchner, 2008). However, this effect is mainly restricted to perceived similarity (i.e. perceived dyadic similarity by one individual) (Montoya et al., 2008; Selfhout, Denissen, Branje, & Meeus, 2009; van Zalk & Denissen, 2015). When examining similarity in Big Five traits separately, only perceived similarity in extraversion and agreeableness was found to be related to friendship intensity (van Zalk & Denissen, 2015). Conversely, several studies showed a 'dissimilarity–repulsion' effect, by demonstrating that dyadic dissimilarity in behaviour is related to dislike between individuals (Nangle, Erdley, & Gold, 1996; Nangle, Erdley, Zeff, Stanchfield, & Gold, 2004). However, because victimization often takes place in the peer group, it is important to consider the victim's personality in relation to the average personality of the peer group. Thus, in order to obtain a better understanding of personality in social contexts, we need to move beyond dyadic (dis)similarity and also study person–group (dis)similarity in personality on peer victimization.

Person–group (dis)similarity at the profile level is operationalized as normativeness, which is defined as the degree to which the shape of one's personality profile matches the shape of the personality profile of an average person within the same sample (i.e. the sample profile mean) (Furr, 2008). Previous studies have shown that a non-normative personality profile in adolescence is linked to negative developmental outcomes. For example, Klimstra, Luyckx, Hale, Goossens, and Meeus (2010) showed that deviating from the normative personality profile predicted higher levels of internalizing problems in adolescents over time, and vice versa. According to Klimstra et al. (2010), this increase in internalizing problem behaviour may occur because adolescents with a non-normative personality profile cannot fulfil the expectations of their age-graded social roles and will therefore experience disapproval by peers.

However, what is seen as normative can differ between peer groups of the same age. Especially with regard to peer victimization, studies have shown that peer group norms play an important role (e.g. Huitsing, Veenstra, Sainio, & Salmivalli, 2012; Sentse, Scholte, Salmivalli, & Voeten, 2007). Moreover, victims of bullying are often thought of as outsiders within the peer group and 'being different from what others expect could make a person a target' (Horowitz et al., 2004, p. 170). This is in-line with the person–group dissimilarity model of Wright, Giammarino, and Parad (1986), which states that the group norm defines how peers evaluate behaviour. Specifically, the model suggests that peers dislike individuals whose behaviour deviates from the peer group norm, irrespective of whether the deviation might appear desirable (e.g. being more prosocial or less aggressive than the group norm). Being disliked can, in turn, lead to a loss in social status. Studies found evidence for such person–group dissimilarity effects in social behaviour (i.e. aggression, bullying, withdrawal, and prosocial) on social status and peer acceptance (e.g. Chang, 2004; Sentse et al., 2007; Stormshak et al., 1999; Wright et al., 1986). Nonetheless, it is unclear to what extent such person–group dissimilarity effects on social status also exist for person–group dissimilarity in personality.

Thus, prior research on dyadic similarity, person–group dissimilarity, and profile normativeness together suggests that adolescents with a personality dissimilar from group norms might be at risk for peer victimization. Adolescents who deviate from the personality group norms are less likely to show similarity with other group members, because it is less likely that there are peers in the group with a similar non-normative personality profile. This may lead to poorer contact with peers. Additionally, the aforementioned previous research showed that deviating adolescents are more likely to have a low social status and to show internalizing problem behaviour. Poor peer relationships, a low social status, and internalizing problem behaviour are, in turn, risk factors of peer victimization (Card & Hodges, 2008; Hong & Espelage, 2012; Reijntjes et al., 2010). Thus, we expect that absolute dissimilarity between the individual and the group norm (i.e. individual score is either lower or higher than the norm) is related to peer victimization.

Identification of victims in the peer group

Previous studies have shown that the identification of victimized peers depends on several factors. Victimization reports are partly subjective, and therefore, disagreement between different informants often occurs (Oldenburg et al., 2015; Veenstra et al., 2007). Therefore, in the current study, we took into account both the perspective of the victim and the perpetrator. Prior research already indicated that disagreement occurs between the victim and the whole peer group (i.e. peer-reported victimization), by showing a small to moderate correlation between self-reported and peer-reported victimization (e.g. Bouman et al., 2012; Graham & Juvonen, 1998; Ladd & Kochenderfer-Ladd, 2002). Juvonen, Nishina, and Graham (2001) suggested that reports of the peer group and self-reports tap into different components of peer victimization, because they appear differently related to social status and psychological adjustment. They suggest that peer-reported victimization reflects the victim's low social standing (i.e. interpersonal component, observable by peers), whereas self-reported victimization reflects the subjective experience (i.e. intrapersonal component, less observable by peers). Hence, it is meaningful to take into account different informants when examining peer victimization.

In the current study, we used a dyadic approach. We measured the victim's perspective ('By whom are you bullied?') and the perpetrator's perspective ('Who do you bully?'). Prior research suggests that these measures also do not show perfect agreement, as there was a small correlation between seeing oneself as a victim and being nominated as a victim by perpetrators (Veenstra et al., 2007). With respect to person–group dissimilarity in personality, we expected that both the perspective of the victim and perpetrator might relate to dissimilarity in personality. Self-proclaimed perpetrators nominate victims who are vulnerable and rejected by the peer group (Veenstra et al., 2007). Because person–group dissimilarity is often related to a low social status (e.g. Wright et al., 1986), dissimilar adolescents are more likely to be victimized. Regarding victim–perpetrator disagreement, adolescents may perceive themselves as victims of peers

who do not perceive themselves to be engaged in victimization. This can indicate that the perpetrator does not label his or her behaviour as victimization or that the self-proclaimed victim perceives neutral or ambivalent peer interactions as peer victimization. Research suggests that anticipated rejection is related to a heightened sensitivity to perceive ambiguous social cues as rejection (Downey & Feldman, 1996). Person–group dissimilarity in personality might foster anticipated peer rejection and heighten subjective experiences of victimization. Thus, we hypothesize that person–group dissimilarity in personality can be related to the victimization reports of both the targets and perpetrators of victimization.

The present study

To conclude, we examine the relationship between person–group dissimilarity in personality and peer victimization in adolescence. Because adolescents spend a significant part of their time with classmates, the focus of the present study is on peer victimization in the classroom. Hence, the group norm will be operationalized as the classroom average. We operationalize personality along the traits of two prominent models: the Big Five and the Dark Triad. The Big Five model consists of five relatively independent traits: neuroticism (i.e. tendency to be distressed, anxious, and frustrated), extraversion (i.e. tendency to be energetic and sociable), agreeableness (i.e. tendency to be friendly, empathic, and cooperative), openness to experience (i.e. tendency to be reflective and curious), and conscientiousness (i.e. tendency to be precise, planned, and organized) (McCrae & Costa, 1987). The Dark Triad personality model consists of three interrelated personality traits that are negatively valenced at higher levels: Machiavellianism (i.e. tendency to behave in a cynical, immoral, and manipulative manner), narcissism (i.e. tendency to feel grandiose and superior), and psychopathy (i.e. tendency to be impulsive and a sensation seeker and to have low levels of empathy) (Furnham, Richards, & Paulhus, 2013; Paulhus & Williams, 2002). Dark Triad traits reflect dispositional tendencies in interpersonal behaviour (Furnham et al., 2013), making them important to study in relation to peer group process such as peer victimization. Dark Triad traits show some overlap with agreeableness, conscientiousness, and neuroticism, but they likely represent specific combinations of these traits (Furnham et al., 2013; Jakobwitz & Egan, 2006). Because we wanted to draw maximally specific conclusions about the association between victimization and personality normativeness, we focused on both the Big Five and the Dark Triad personality dimensions.

We examine person–group dissimilarity at the profile level and trait level. At the profile level, we examine individual deviation from the average personality profile in class. The personality profile level in this study reflects the rank order of Big Five and Dark Triad traits within a person. Thus, when a person deviates from the average profile in the classroom, it indicates that the person's personality traits show a different rank order. For example, rank orders differ when a student scores higher on conscientiousness than on other traits, whereas the average person in a class scores the highest on agreeableness. At the trait level, we examine a person's deviation from the classroom norm for each Big Five and Dark Triad trait, separately. We hypothesize that person–group dissimilarity in personality profile and traits is related to more self-reported and peer-reported victimization in adolescents.

METHOD

Participants

To test our hypothesis, we used data from the Study on Personality, Adjustment, Cognition, and Emotion (SPACE). We combined data from the pilot study in 2012 ($n = 326$) and the first wave in 2014 ($n = 1081$), which were recruited at six different high schools in the Netherlands and across various academic tracks.

Of the total sample, 312 participants (22.1%) had missing responses on the personality measurements and 265 (18.8%) had missing data on peer victimization. Compared with participants with missing data, participants with complete data scored lower on trait narcissism (3.53 vs 3.22, $p < .01$). Results of Little's missing completely at random test (Little, 1988) indicated that missing personality data were missing at random ($\chi^2/df = 1.06$, $p = .033$) according to guidelines by Bollen (1989). For participants who completed at least 60% of each personality instrument, missing data on personality were imputed via the expectation maximization technique with 25 iterations and a single imputation. Missing data on peer victimization were not imputed, and therefore, participants were excluded when they had missing values on peer victimization measurements. Participants were also excluded when no information was present on their age and sex ($n = 3$).

The final sample consisted of 1108 participants (48% boys; $M_{age} = 13.56$ years, $SD = 1.13$). The majority identified themselves as Dutch (71.6%). Other ethnicities mainly included Turkish (6.7%), Moroccan (5.1%) and Surinamese (11.7%). Moreover, participants were in the first (47.6%), second (30.4%), third (8.2%), fourth (9.3%) or fifth year (4.4%) of secondary school. Multivariate analysis of variance indicated differences between adolescents from different grades in mean-level scores on all personality traits ($ps \leq .024$), with the exception of psychopathy ($p = .558$). Overall, younger adolescents scored somewhat higher on extraversion, conscientiousness, agreeableness, and openness to experience and lower on neuroticism, Machiavellianism, and narcissism. This is in-line with previous research on personality change during early and middle adolescence (e.g. Denissen, van Aken, Penke, & Wood, 2013; Soto, John, Gosling, & Potter, 2011).

Procedure

The SPACE studies were approved by the local Institutional Review Board and conducted in-line with the APA ethical guidelines (American Psychological Association, 2010).

School principals provided permission for administering the study during school hours. Youths and their parents were informed via a detailed letter describing the content and goals of the study. Passive consent was used to obtain parental permission, and youths provided active consent. We used paper questionnaires during the pilot study and digital questionnaires during the first wave of the study. Questionnaires were filled out during school hours under the supervision of psychology (under)graduate students.

Measurements

Big Five personality

Big Five personality traits were assessed with the shortened Dutch version (Denissen, Geenen, van Aken, Gosling, & Potter, 2008b) of the Big Five Inventory (BFI; John, Donahue, & Kentle, 1991). This version of the BFI consists of 25 self-reported items, with five items per trait: extraversion (e.g. 'Is talkative'), conscientiousness (e.g. 'Does a thorough job'), openness to experience (e.g. 'Is original, comes up with new ideas'), neuroticism (e.g. 'Worries a lot'), and agreeableness (e.g. 'Is considerate and kind to almost everyone'). The items of the BFI are scored on a 5-point scale, ranging from 1 (*completely untrue*) to 5 (*completely true*). As reported in Table 1, internal consistency at the individual level was acceptable. Relatively low internal consistencies are rather common in short measures that aim to cover a broad representation of the Big Five dimensions (Denissen, Geenen, Selfhout, & van Aken, 2008a). Group mean reliability of Big Five classroom norms was relatively low for neuroticism and conscientiousness and high for extraversion, openness to experience, and agreeableness (i.e. see ICC2 estimates in Table 1).

To indicate convergent validity, we correlated trait mean scores that were based on either the standard BFI (i.e. 44 items) or the shortened version (i.e. 25 items selected from 44 items of the standard version). In the pilot study, Big Five personality was measured with the standard version instead of the shortened version. Trait mean scores of both versions correlated highly in the participants, ranging from 0.85 to 0.95 ($n = 302$).

Dark Triad personality

Dark Triad personality traits were measured with the Dutch version (Klimstra, Sijtsema, Henrichs, & Cima, 2014) of the Dirty Dozen self-report questionnaire (Jonason & Webster, 2010). The 12 items of the Dirty Dozen were scored on a 9-point scale, ranging from 1 (*strongly disagree*) to 9 (*strongly agree*). The Dirty Dozen measures three traits: Machiavellianism (four items; e.g. 'I tend to manipulate others to get my way'), narcissism (four items; e.g. 'I tend to want others to admire me'), and psychopathy (four items; e.g. 'I tend to lack remorse'). Internal consistency was adequate (Table 1). However, group mean reliability of the traits was relatively low (i.e. see ICC2 estimates in Table 1).

Peer victimization

Peer victimization was assessed using a dyadic perspective. We measured self-reports of being a target of victimization (i.e. 'By whom are you bullied?') as well as self-reports of being the perpetrator of victimization (i.e. 'Who do you bully?'). This latter type of victimization will be referred to as 'bully-disclosed victimization'. Two hundred and sixty adolescents reported being victimized ($M = 0.61$, $SD = 1.58$), and 331 adolescents received bully-disclosed victimization nomination(s) ($M = 0.39$, $SD = 0.74$). In Table 3, we reported a cross-tabulation of agreement and disagreement between self-reported and bully-disclosed victimization.

Table 1. Descriptive statistics of personality and peer victimization

Variable	Individual level				Classroom level			ICC1	ICC2
	M	*SD*	Range	*α*	*M*	*SD*	Range		
Big Five									
Conscientiousness	3.33	0.62	1.00–5.00	.58	3.33	0.22	2.73–3.72	0.05	.57
Extraversion	3.36	0.68	1.00–5.00	.66	3.34	0.33	2.55–3.74	0.20	.82
Openness	3.26	0.75	1.00–5.00	.74	3.45	0.42	2.20–3.96	0.24	.88
Agreeableness	3.43	0.67	1.40–5.00	.62	3.42	0.37	2.56–3.97	0.26	.88
Neuroticism	3.08	0.75	1.00–5.00	.69	3.11	0.28	2.68–3.90	0.06	.55
Dark Triad									
Psychopathy	3.00	1.55	1.00–9.00	.70	2.97	0.54	1.81–4.68	0.04	.53
Machiavellianism	3.42	1.67	1.00–9.00	.75	3.39	0.63	1.12–5.20	0.02	.47
Narcissism	2.68	1.55	1.00–9.00	.83	2.71	0.49	1.85–3.88	0.03	.46
Personality profile									
Profile dissimilarity	−0.72	0.19	−1.00–0.92		−0.72	0.09	−0.87 to −0.52		
Peer victimization									
Self-reported victimization[†]	0.61	1.58	0.00–24.00		0.68	0.63	0.00–2.60		
Bully-disclosed victimization[‡]	0.39	0.74	0.00–5.00		0.37	0.35	0.00–1.44		

Note: ICC1, intraclass correlation that indicated proportion of variance that was explained by grouping; ICC2, intraclass correlation that indicated group mean reliability.
N of individual scores ranged from 1026 to 1108. *N* of groups (i.e. classrooms) was 54.
[†]Skewness of 6.14.
[‡]Skewness of 2.41.

Statistical analyses

Statistical analyses were conducted in R (R Core Team, 2013). Data and analysis scripts are openly accessible (Boele, Sijtsema, Klimstra, Denissen, & Meeus, 2017). Because the data were nested (i.e. students within classrooms) and variables were measured at the individual and classroom level, we used multilevel regression models with random intercepts across classrooms. Furthermore, for person–group differences in personality to be tested, the regression models were fitted with polynomial regression equations and subsequent response surface analyses (RSA; Edwards, 2002; Schönbrodt, 2016; Shanock, Baran, Gentry, Pattison, & Heggestad, 2010). We used polynomial regression equations to overcome the limitations that are associated with difference scores when analyzing discrepancies between the person and the environment (Edwards, 2007; Laird & De Los Reyes, 2013; Shanock et al., 2010). Specifically, to examine the relation between person–group dissimilarity in personality and peer victimization, we conducted multilevel generalized linear polynomial regression models with RSA. Individual-level and classroom-level trait scores were grand-mean standardized.

As the self-reported victimization data showed an excess of zeros, the zero-inflated negative binomial regression models showed a better fit than the model without zero-inflation. However, bully-disclosed data were less zero-inflated and the model with zero inflation did not fit better than the model without zero inflation. Thus, we predicted self-reported victimization with zero-inflated negative binomial regression models and bully-disclosed victimization with negative binomial models without zero inflation.

Furthermore, to take into account the influence of group size (i.e. number of possible nominators) on variability of peer nominations between groups (Cillessen, 2009; Velásquez, Bukowski, & Saldarriaga, 2013), we included class size (i.e. class size minus one) as predictor in the regression. Moreover, age and sex (i.e. male = 0, female = 1) were included as control variables in all models.

First, the relation between personality profile dissimilarity and peer victimization was examined. To calculate the degree of profile dissimilarity, we computed q-correlations (Furr, 2008). The q-correlation reflects to which extent an individual's personality profile diverges from the average profile in class and can range from -1 to 1. Because we were interested in dissimilarity, we reversed the correlation coefficient, such that higher q-correlations indicated profile dissimilarity and lower q-correlations indicated profile similarity.

Second, we examined the relation between person–group dissimilarity in personality traits and peer victimization. We conducted (multilevel) generalized linear regression models with subsequent RSA that included grand-mean standardized trait scores on both individual and classroom level. We tested multivariate regression models that included all the personality traits in order to control for the overlap between traits.

The response surface values of the RSA resulted in a three-dimensional response surface, which shows how similarity and dissimilarity between the individual and the classroom norm relate to peer victimization in more detail. The RSA produces four coefficients, which were tested for significance by using z-tests. The surface test values a_1 and a_2 represent the line of congruence, in which a_1 tests for a linear slope and a_2 for a curvilinear slope. The surface test values a_3 and a_4 represent the line of incongruence, in which a_3 tests for a linear slope and a_4 for a curvilinear slope. To illustrate, we added an example plot (Figure 1). The blue line in this plot that goes from front to back reflects the line of congruence (i.e. a_1 and a_2). However, surface test values are not significant, indicating that congruent combinations between the individual and classroom norm in personality are not related to peer victimization. The blue u-shaped line that goes from left to right reflects the line of incongruence (i.e. a_3 and a_4). In the example figure, the line of incongruence has a positive, significant curvilinear slope, which indicates that higher levels of person–group differences in personality in either direction (i.e. higher or lower than the classroom norm) are related to higher levels of peer victimization. The colour legend at the right of the figure indicates the severity (i.e. expected log count of nominations) of peer victimization.

RESULTS

Descriptive statistics

Descriptive statistics of the study variables are given in Table 1. Correlation coefficients (Table 2) indicate that the Big Five traits were significantly correlated with each other and the Dark Triad traits were likewise correlated with each other. In addition, openness to experience, neuroticism, and profile dissimilarity were positively correlated with self-reported victimization. Agreeableness was negatively and narcissism and profile dissimilarity were positively related
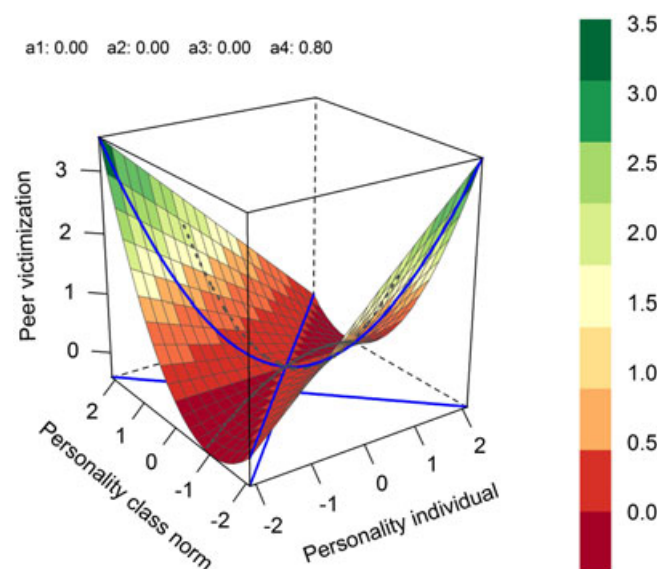

Figure 1. Example of a response surface plot. [Colour figure can be viewed at wileyonlinelibrary.com]

Table 2. Correlation coefficients between study variables

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Conscientiousness	–										
2. Extraversion	.11***	–									
3. Openness	.25***	.25***	–								
4. Agreeableness	.37***	.25***	.24***	–							
5. Neuroticism	−.13**	−.35***	−.08*	−.24***	–						
6. Psychopathy	−.19**	.05	.02	−.21***	.05	–					
7. Machiavellianism	−.18**	.07*	−.02	−.18***	.09**	.73***	–				
8. Narcissism	−.25***	−.07	−.11***	−.35***	−.00	.56***	.47***	–			
9. Profile dissimilarity	−.39***	−.10***	−.16***	−.39***	−.03	.68***	.59***	.74***	–		
10. Self-reported victimization	−.04	−.03	.07*	−.02	.07*	.04	.04	.03	.07*	–	
11. Bully-disclosed victimization	−.05	−.05	−.06	−.08**	.00	.03	.02	.07*	.13***	.17***	–

Note. N ranged from 1026 to 1108. Correlations represent Pearson correlation coefficients, except for the Spearman correlation coefficient between self-reported and bully-disclosed victimization. $*p < .05$, $**p < .01$, $***p < .001$.

Table 3. Cross-tabulation of self-reported and bully-disclosed victimization

		Self-reported		
		Victim	Non-victim	Total
Bully-disclosed	Victim	102	190	292
	Non-victim	158	557	715
	Total	260	747	1027

to bully-disclosed victimization. Victim-reported and bully-disclosed victimization showed a small positive correlation.

Person–group dissimilarity in personality profile

To test the hypothesis that person–group dissimilarity in the shape of the adolescent's personality profile is positively related to peer victimization, we examined the relation between profile dissimilarity (i.e. *q*-correlation between individual profile and average profile in class) and peer victimization. Age, gender, and class size were used as control variables. Results of the (multilevel) zero-inflated negative binomial regression indicated that personality profile dissimilarity was not related to self-reported victimization, $\beta = 0.32$, $SE = 0.24$, $p = .190$. However, a (multilevel) negative binomial regression showed that profile dissimilarity was related to more bully-disclosed victimization, $\beta = 0.37$, $SE = 0.14$, $p = .008$. This indicated that adolescents whose profile deviated from the average profile of the classroom received more bully-disclosed victimization scores.

Person–group dissimilarity in personality traits

We tested the relation between person–group dissimilarity in personality traits and peer victimization with multivariate models that included all the personality traits and covariates. We used multilevel regression models that took the nested data into account as well as the discrete count variable peer victimization. Self-reported victimization was predicted using zero-inflated negative binomial regression models

(Table 4), and bully-disclosed victimization was predicted using negative binomial regression models without zero inflation (Table 5). Additionally, subsequent RSA were performed to test whether person–group dissimilarities in specific personality traits were associated with peer victimization.

Intraclass correlations (ICCs) showed that trait norms varied across classrooms (see ICC1 in Table 1). However, the amount of variation between classrooms differed between personality traits. Especially in extraversion, openness to experience, and agreeableness, the ICC showed substantially more variation in classroom norms. Hence, with respect to the traits that showed low variability, the classroom norms might reflect a more age-related norm than a norm that characterizes a particular classroom.

Self-reported victimization

With respect to the Big Five traits and self-reported victimization, we found person–group dissimilarity effects for extraversion, openness to experience, agreeableness, and neuroticism. More specifically, we found positive curvilinear slopes of incongruence (i.e. significant a_4 slopes) for extraversion and openness to experience. This indicated more self-reported victimization when there were greater absolute differences in personality between the adolescent and the classroom norm (Figure 2(a) and (b)). For agreeableness, we found negative curvilinear slopes of both congruence and incongruence (i.e. significant a_2 and a_4 slope). This indicated that self-reported victimization was high when there was person–group congruence at moderate levels of agreeableness and that self-reported victimization was low when there were greater absolute differences between the adolescent and the classroom norm (Figure 2 (d)). Moreover, we found a positive linear slope on incongruence (i.e. significant a_3 slope) for neuroticism. This indicated that self-reported victimization was highest in adolescents who were more neurotic than the classroom norm (Figure 2(c)). Congruent and incongruent person–group combinations in conscientiousness were not related to self-reported victimization.

Regarding the Dark Triad traits and self-reported victimization, we found a negative linear slope of

Table 4. Estimated zero-inflated negative binomial regression coefficients and response surface values for self-reported victimization

	Self-reported victimization (N = 1026)							
Predictor	Null model			Covariate model			Full model	
Fixed effects	Coefficient (SE)	p-value		Coefficient (SE)	p-value		Coefficient (SE)	p-value
Intercept	0.00 (0.22)	.980		0.02 (1.26)	.990		−1.98 (1.28)	.122
Sex				−0.11 (0.15)	.460		−0.15 (0.16)	.337
Age				−0.01 (0.08)	.930		0.11 (0.02)	.164
Class size				0.01 (0.02)	.770		0.01 (0.02)	.541
Random effect	Variance (SD)			Variance (SD)			Variance (SD)	
Intercept	0.38 (0.62)			0.37 (0.61)			0.00 (0.01)	
R^2				.001			.093	

Predictor	Conscientiousness		Extraversion		Openness		Agreeableness	
Fixed effects	Coefficient (SE)	p-value	Coefficient (SE)	p-value	Coefficient (SE)	p-value	Coefficient (SE)	p-value
Adolescent score	−0.07 (0.09)	.428	−0.04 (0.09)	.654	0.15 (0.09)	.089	−0.02 (0.11)	.853
Class score	0.20 (0.12)	.102	0.23 (0.20)	.235	0.14 (0.17)	.404	−0.08 (0.19)	.683
Adolescent score^2	−0.03 (0.07)	.622	−0.02 (0.07)	.780	0.05 (0.07)	.452	−0.15 (0.09)	.082
Class score^2	0.05 (0.09)	.584	0.51 (0.13)	.000	0.24 (0.12)	.042	−0.39 (0.12)	.001
Adolescent × Class	0.01 (0.10)	.928	−0.20 (0.13)	.137	−0.12 (0.12)	.333	0.06 (0.14)	.682
Surface tests								
a_1	0.13 (0.14)	.367	0.19 (0.22)	.383	0.29 (0.19)	.130	−0.10 (0.22)	.654
a_2	0.03 (0.15)	.854	0.29 (0.21)	.151	0.17 (0.18)	.341	−0.49 (0.20)	.017
a_3	−0.27 (0.16)	.086	−0.28 (0.22)	.204	0.00 (0.19)	.983	0.06 (0.22)	.790
a_4	0.01 (0.15)	.945	0.69 (0.19)	.000	0.41 (0.18)	.024	−0.60 (0.19)	.002

Predictor	Neuroticism		Machiavellianism		Narcissism		Psychopathy	
Fixed effects	Coefficient (SE)	p-value	Coefficient (SE)	p-value	Coefficient (SE)	p-value	Coefficient (SE)	p-value
Adolescent score	0.28 (0.10)	.003	0.06 (0.12)	.601	0.02 (0.12)	.874	−0.16 (0.14)	.262
Class score	−0.29 (0.18)	.108	−0.64 (0.24)	.008	0.18 (0.15)	.224	0.99 (0.23)	.000
Adolescent score^2	−0.12 (0.07)	.075	0.15 (0.08)	.055	0.02 (0.07)	.732	0.03 (0.07)	.670
Class score^2	0.18 (0.14)	.185	0.20 (0.16)	.210	0.05 (0.11)	.612	−0.60 (0.16)	.000
Adolescent × Class	−0.14 (0.13)	.279	−0.07 (0.14)	.641	−0.19 (0.10)	.052	0.01 (0.13)	.951
Surface tests								
a_1	−0.01 (0.21)	.968	−0.58 (0.26)	.026	0.20 (0.18)	.271	0.83 (0.27)	.002
a_2	−0.07 (0.19)	.696	0.28 (0.24)	.240	−0.11 (0.16)	.485	−0.56 (0.22)	.011
a_3	0.57 (0.20)	.004	0.71 (0.28)	.012	−0.16 (0.20)	.411	−1.15 (0.26)	.000
a_4	0.20 (0.21)	.336	0.41 (0.22)	.065	0.27 (0.16)	.091	−0.58 (0.22)	.007

Note: Covariate model, a model that only included age, sex, and class size. The coefficients of the traits are derived from the full model that included the covariates and all personality traits; R^2, Nagelkerke's pseudo r-squared and based on the improvement from the null model.

congruence (i.e. significant a_1 slope) and a positive linear slope of incongruence (i.e. significant a_3 slope) for Machiavellianism. The surface response indicated that self-reported victimization was higher when adolescents were more similar to a lower classroom norm or when they were more Machiavellian than the classroom norm (Figure 2(e)). For psychopathy, all surface response values were significant (i.e. a_1–a_4 slopes). The surface response pattern suggested that self-reported victimization was highest in classrooms with a high norm (Figure 2(f)). Hence, adolescents showed higher self-reported victimization when they were similar to a high classroom norm. Moreover, adolescents who were less psychopathic than the high classroom norm also showed higher self-reported victimization. Congruent and incongruent person–group combinations in narcissism were not related to self-reported victimization.

Bully-disclosed victimization

With respect to the Big Five traits and bully-disclosed victimization, we only found a person–group dissimilarity effect for neuroticism. Specifically, we found a positive linear slope of incongruence (i.e. significant a_3 slope), which indicated that bully-disclosed victimization was

higher when adolescents were more neurotic than the classroom norm (Figure 3(a)). Moreover, we also found a negative linear slope of congruence (i.e. significant a_1 slope) for neuroticism, which indicated that bully-disclosed was higher when there was person–group congruence at lower levels of neuroticism. Additionally, we found a negative curvilinear slope of congruence for agreeableness (i.e. significant a_2 slope). This indicated that bully-disclosed victimization was higher when there was person–group congruence at moderate levels of agreeableness (Figure 3(b)). Furthermore, congruent and incongruent person–group combinations in extraversion, openness to experience, and conscientiousness were not related to bully-disclosed victimization.

Regarding the Dark Triad traits and bully-disclosed victimization, we found a positive curvilinear slope of incongruence for Machiavellianism (i.e. significant a_4 slope). This indicated that bully-disclosed victimization was higher when there were greater absolute differences between the classroom norm and the adolescent (Figure 3(c)). Moreover, we found a negative curvilinear slope of congruence for psychopathy (i.e. significant a_2 slope), which indicated that bully-disclosed victimization was higher when there was person–group congruence at moderate levels of psychopathy.

Table 5. Estimated negative binomial regression coefficients and response surface values for bully-disclosed victimization

	Bully-disclosed victimization ($N = 1108$)					
Predictor	Null model		Covariate model		Full model	
Fixed effects	Coefficient (SE)	p-value	Coefficient (SE)	p-value	Coefficient (SE)	p-value
Intercept	−1.32 (0.14)	.000	−2.36 (1.09)	.031	−2.26 (1.14)	.046
Sex			−0.43 (0.11)	.000	−0.47 (0.12)	.000
Age			−0.01 (0.07)	.870	−0.01 (0.07)	.841
Class size			0.05 (0.02)	.019	0.07 (0.02)	.002
Random effect	Variance (SD)		Variance (SD)		Variance (SD)	
Intercept	0.73 (0.85)		0.64 (0.80)		0.25 (0.50)	
R^2			.023		.090	

Predictor	Conscientiousness		Extraversion		Openness		Agreeableness	
Fixed effects	Coefficient (SE)	p-value	Coefficient (SE)	p-value	Coefficient (SE)	p-value	Coefficient (SE)	p-value
Adolescent score	0.01 (0.06)	.921	−0.04 (0.06)	.554	−0.03 (0.06)	.675	−0.06 (0.07)	.383
Class score	0.09 (0.16)	.546	−0.49 (0.26)	.058	0.29 (0.22)	.187	−0.30 (0.23)	.200
Adolescent score^2	0.01 (0.04)	.839	0.03 (0.05)	.560	0.06 (0.04)	.138	0.10 (0.05)	.034
Class score^2	−0.11 (0.12)	.387	0.18 (0.16)	.275	0.19 (0.13)	.139	−0.44 (0.15)	.002
Adolescent × Class	−0.06 (0.07)	.416	−0.09 (0.13)	.288	0.01 (0.07)	.883	−0.11 (0.09)	.219
Surface tests								
a_1	0.10 (0.19)	.590	−0.53 (0.22)	.071	0.26 (0.24)	.285	−0.36 (0.27)	.184
a_2	−0.16 (0.15)	.314	0.11 (0.20)	.572	0.26 (0.16)	.102	−0.45 (0.19)	.019
a_3	−0.09 (0.15)	.547	0.45 (0.24)	.057	−0.31 (0.21)	.128	0.24 (0.22)	.262
a_4	−0.04 (0.15)	.767	0.30 (0.19)	.125	0.24 (0.16)	.130	−0.23 (0.18)	.209

Predictor	Neuroticism		Machiavellianism		Narcissism		Psychopathy	
Fixed effects	Coefficient (SE)	p-value	Coefficient (SE)	p-value	Coefficient (SE)	p-value	Coefficient (SE)	p-value
Adolescent score	0.02 (0.06)	.768	−0.07 (0.09)	.413	0.00 (0.09)	.995	0.02 (0.10)	.863
Class score	−0.79 (0.24)	.001	0.28 (0.27)	.306	0.32 (0.19)	.093	0.04 (0.29)	.880
Adolescent score^2	−0.03 (0.05)	.486	0.07 (0.05)	.170	0.01 (0.04)	.812	−0.02 (0.05)	.718
Class score^2	0.02 (0.19)	.925	0.34 (0.19)	.068	−0.01 (0.13)	.945	−0.40 (0.19)	.035
Adolescent × Class	−0.08 (0.09)	.368	−0.06 (0.10)	.569	0.06 (0.07)	.400	−0.08 (0.09)	.382
Surface tests								
a_1	−0.77 (0.26)	.003	0.21 (0.31)	.510	0.31 (0.23)	.163	0.06 (0.33)	.853
a_2	−0.09 (0.22)	.671	0.35 (0.23)	.122	0.06 (0.16)	.709	−0.50 (0.22)	.026
a_3	0.81 (0.23)	.000	−0.35 (0.25)	.166	−0.32 (0.19)	.089	−0.03 (0.28)	.925
a_4	0.07 (0.21)	.758	0.46 (0.22)	.033	−0.06 (0.16)	.725	−0.34 (0.22)	.116

Note. Covariate model, a model that only included age, sex, and class size. The coefficients of the traits are derived from the full model that included all the covariates and all personality traits; R^2, Nagelkerke's pseudo r-squared and based on the improvement from the null model.

Congruent and incongruent person–group combinations in narcissism were not related to bully-disclosed victimization (Figure 3(d)).

DISCUSSION

The aim of the present study was to provide more insight into the relation between person–group differences in personality and peer victimization. Based on the theory of Wright et al (1986) on the social implications of person–group dissimilarity, we expected that person–group dissimilarity in personality profile would be related to peer victimization. Our findings partly supported this hypothesis, by showing that person–group dissimilarity in personality profile shape and in levels of separate traits was positively related to peer victimization. However, findings differed for self-reported and bully-disclosed victimization.

Person–group dissimilarity in personality profile

Personality profile was conceptualized as the profile's shape, which reflected a rank-ordered constellation of Big Five and Dark Triad traits within a person. The rank-order was based on the person's scores of all traits. As expected, our results indicated that adolescents whose profile was dissimilar to the normative personality profile in the classroom were higher on bully-disclosed peer victimization than adolescents who were less dissimilar from the average profile. Although the effect for self-reported victimization pointed in the same direction, profile dissimilarity was not significantly related to self-reported victimization. Thus, adolescents whose personality profile deviated from the classroom's normative personality profile had more classmates who reported to bully them, which is in-line with previous findings that youths who deviate from social norms are more likely to be rejected and to be perceived as low-status peers and hence at increased risk for being victimized by their peers (Chang, 2004; Sentse et al., 2007; Stormshak et al., 1999; Wright et al., 1986). Moreover, the correlations of the current study suggest that the Dark Triad traits drive profile dissimilarity, as these traits were most strongly correlated to profile dissimilarity. This could be due to the higher standard deviations of the Dark Triad traits than standard deviations of the Big Five traits, allowing them to contribute more to profile dissimilarity.
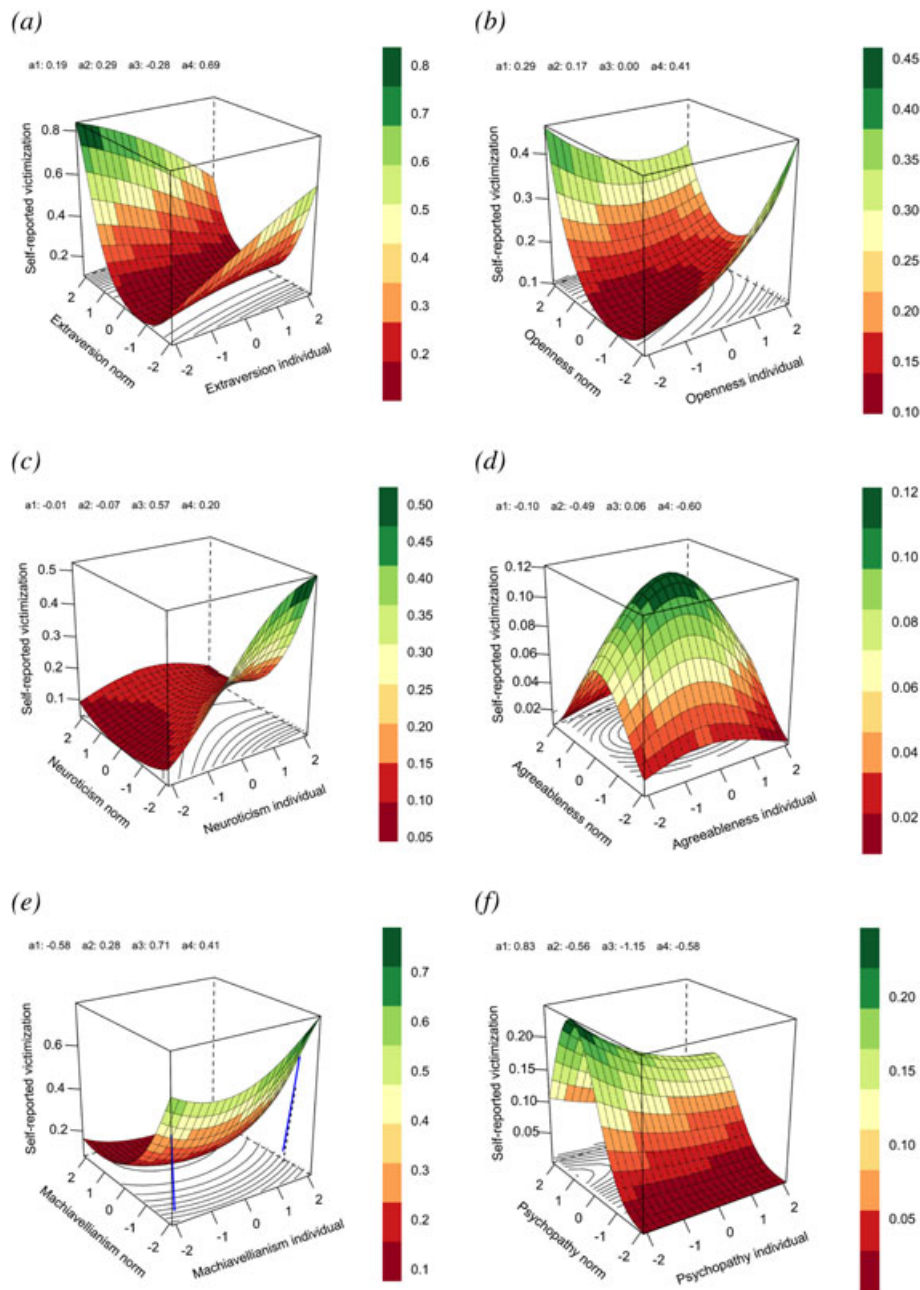
Figure 2.   Response surface plots of person–group dissimilarity in personality traits predicting self-reported peer victimization. [Colour figure can be viewed at wileyonlinelibrary.com]

The difference between self-reported and bully-disclosed victimization shows that different reporters reflect different perspectives of victimization and that these perspectives do not necessarily have to match. Indeed, we found that both measures are correlated, but a relatively small proportion of self-proclaimed victims also received nominations of perpetrators (i.e. 29.9%). This is in-line with prior research that found a small correlation between victim's and perpetrator's perspective (Veenstra et al., 2007). Hence, the current findings indicate that bully-disclosed victims are adolescents who are more likely to have a poor fit with the peer group, whereas the subjective experience of victimization is not necessarily related to person–group dissimilarity in personality profile.

Our results emphasize the role of profile normativeness in explaining peer victimization as a social process. Our findings extend prior research that linked personality trait scores to peer victimization (De Bolle & Tackett, 2013; Jensen-Campbell et al., 2002; Jensen-Campbell & Malcolm, 2007; Tani et al., 2003) and age-related normativeness in personality profile to adjustment problems (Klimstra et al., 2010). In agreement with the argument that the degree of profile normativeness reflects the degree of one's psychological adjustment or adaptation to the social environment (Bleidorn, Kandler, Riemann, Angleitner, & Spinath, 2012; Furr, 2008), our results suggest that adolescents who conform to the normative profile in class are less likely to be perceived as victims of peer victimization.
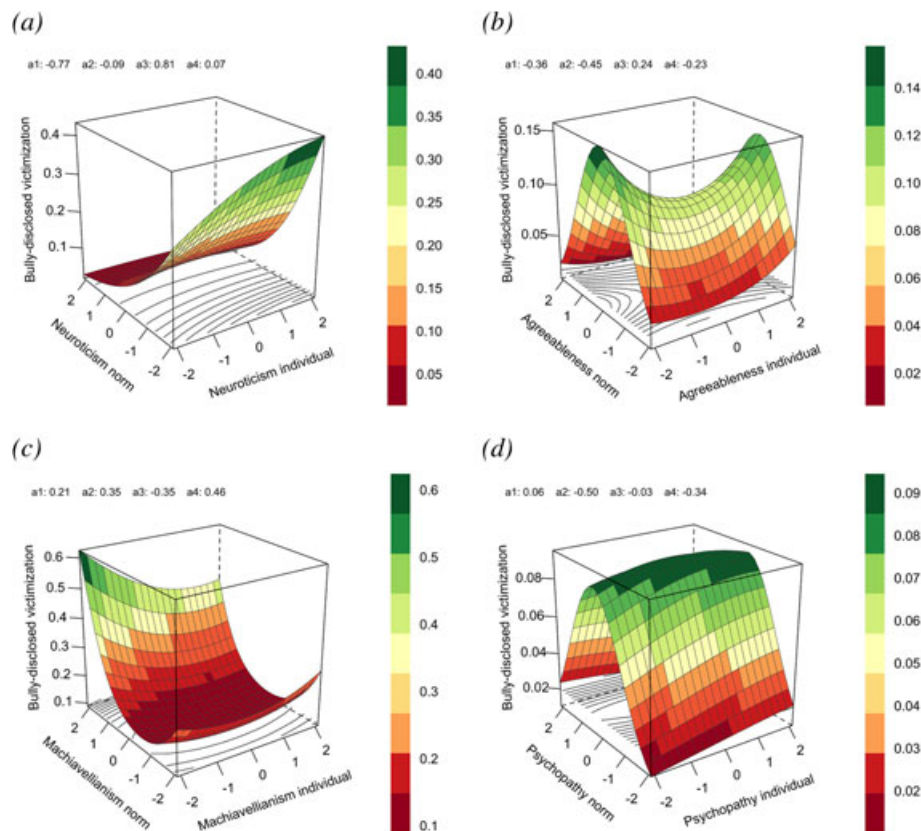
Figure 3.   Response surface plots of person–group dissimilarity in personality traits predicting bully-disclosed peer victimization. [Colour figure can be viewed at wileyonlinelibrary.com]

Person–group dissimilarity in personality traits

Next to person–group deviation in the personality profile, we examined deviation at trait level. In contrast to the results at the profile level, we found that person–group dissimilarity in personality traits was more related to self-reported victimization than to bully-disclosed victimization. We found that *absolute* dissimilarity (i.e. individual score can be either lower or higher than the classroom norm) in extraversion, openness to experience, and agreeableness, *positive linear* dissimilarity (i.e. individual score higher than the classroom norm) in neuroticism and Machiavellianism, and *negative linear* dissimilarity in psychopathy (i.e. individual score lower than the classroom norm) were related to more self-reported victimization. Unexpectedly, we found that absolute dissimilarity in agreeableness was related to less self-reported victimization. With respect to bully-disclosed victimization, we found that both absolute dissimilarity in Machiavellianism and positive linear dissimilarity in neuroticism were related to more bully-disclosed victimization. Furthermore, we found that certain levels of person–group congruence in agreeableness, neuroticism, and psychopathy were related to more peer victimization. That is, self-reported and bully-disclosed victimization was higher when there was person–group congruence at moderate levels of agreeableness and high levels of psychopathy. Self-reported victimization was higher when there was person–group congruence at lower levels of Machiavellianism. Bully-disclosed victimization

was higher when there was person–group congruence at high levels of neuroticism.

The linear dissimilarity effect of neuroticism was thus the only trait effect that was similar for both self-reported and bully-disclosed victimization. Hence, these findings suggest that adolescents who are more neurotic than the classroom norm are at risk for peer victimization. One explanation for these dissimilarity effects could be that neuroticism is related to solitude. Neuroticism reflects the tendency to be distressed, anxious, and insecure (McCrae & Costa, 1987). Prior research found that neuroticism is positively related to feelings of loneliness (Cheng & Furnham, 2002; Saklofske & Yackulic, 1989; Stokes, 1985) and affinity for being alone (Teppers et al., 2013). This can be explained by the idea that less emotional stable persons might be more insecure and anxious about negative evaluations of others and therefore prefer to be alone (Burger, 1995). This in agreement with research that found that self-confidence moderates the relationship between neuroticism and loneliness (Cheng & Furnham, 2002). Although tendencies in neuroticism are less observable for others (Vazire, 2010), person–group differences in solitude might be more easily observable, therefore making these adolescents more vulnerable to peer rejection. This is in-line with prior studies that showed that person–group dissimilarity in solitary behaviour is related to more dislike (Nangle et al., 1996, 2004) and to less peer acceptance (Chang, 2004) and peer preference (Stormshak et al., 1999).

Moreover, dissimilarity in Machiavellianism was also related to both self-reported and bully-disclosed

victimization, although the effect differed between victimization informants. Being more Machiavellian than the classroom norm was related to more self-reported victimization, whereas absolute person–group dissimilarity was related to more bully-disclosed victimization. Nonetheless, it needs to be acknowledged that the classroom norms of Machiavellianism were less reliable, as indicated by a low ICC. Hence, these dissimilarity effects must be interpreted with caution and need replication.

Furthermore, we found that absolute dissimilarity in extraversion and openness to experience and negative linear dissimilarity in psychopathy were only related to self-reported victimization, but not to bully-disclosed victimization. This indicates that adolescents who are dissimilar in extraversion or openness, or less psychopathic than the classroom norm, are at risk for perceiving themselves as a victim of peer victimization. One explanation for why these effects were only found for self-reported victimization is that victims may be less hesitant to report on their perpetrator(s) (i.e. self-reported victimization) than perpetrators reporting on their victim(s) (i.e. bully-disclosed victimization). This is supported by research that showed that the prevalence is higher for self-reported victimization than for self-reported bullying (Solberg & Olweus, 2003) and that indices regarding viewing oneself as a victim and indices regarding being nominated as a victim by a perpetrator show a small correlation (Veenstra et al., 2007). Another explanation for the results of extraversion might relate to sensitivity to perceive social cues as victimization. Extraversion reflects the tendency to be sociable and energetic (McCrae & Costa, 1987), and these tendencies are relatively easy to observe (John & Robins, 1993; Vazire, 2010). Hence, the observation that one deviates from the classroom norm in extraversion might lead to anticipated peer rejection. As previous research suggests that anticipated rejection is related to a heightened sensitivity to perceive ambiguous social cues as rejection (Downey & Feldman, 1996), deviating adolescents might perceive ambiguous peer interactions as victimization.

Unexpectedly, we also found that absolute dissimilarity in agreeableness was related to less self-reported victimization. Besides the dissimilarity effect, we also found that self-reported victimization was highest when there was person–group congruence at moderate levels of agreeableness. Together, the congruence and incongruence effect indicated that adolescents who were in a moderately agreeable classroom reported more self-reported victimization than adolescents who were in a disagreeable or highly agreeable classroom, regardless of whether they were similar or dissimilar to the classroom norm. This effect could be explained by perceived normativeness of peer victimization. Lower levels of agreeableness reflect callous, selfish, and antagonistic behaviour, whereas highly agreeable behaviour reflects sympathetic, selfless, and helpful behaviour (McCrae & Costa, 1987). Hence, the prevalence of victimization in highly agreeable classes likely is relatively low, whereas in disagreeable classes, it likely is relatively high. A high prevalence in the classroom might result in victimization being perceived as more normative and therefore less recognized and reported.

Prior studies showed that person–group dissimilarity in social behaviour can be related to social processes, such as peer acceptance, peer preference, and social status (e.g. Chang, 2004; Sentse et al., 2007; Stormshak et al., 1999; Wright et al., 1986). The present study extends previous research by showing that the person–group dissimilarity model (Wright et al., 1986) is applicable to personality traits in the explanation of peer victimization. However, the current study also revealed that the relation between person–group dissimilarity in personality and peer victimization is not straightforward. Results demonstrated different relations for self-reported and bully-disclosed victimization. Moreover, we found that both linear and absolute person–group dissimilarity effects and the relation between person–group dissimilarity in personality traits and peer victimization did not hold for each trait (i.e. no relation with conscientiousness and narcissism). Hence, our findings suggest the importance of differentiating between the perspective of the victim and perpetrator(s) and using advanced statistical models in order to examine person–group interaction in more detail. However, replication is needed in order to rule out the possibility of chance findings and to draw more robust conclusions.

Limitations, strengths, and future research

The findings of the present study have to be interpreted against the backdrop of some limitations. First, caution is warranted when interpreting the relation between person–group dissimilarity and the severity or form of peer victimization. We did not account for frequency or chronicity of victimization but only examined the amount of victimization nominations. Relatedly, we did not differentiate between the distinct forms of victimization, such as physical, verbal, or relational victimization. Future studies that include different indicators of severity and forms can provide further information about the relation between person–group dissimilarity in personality and victimization. Additionally, the base rate of peer victimization was low, which could be because we measured at class level and not grade or school wide (i.e. peer nomination across all the classrooms of the same grade or school).

Second, the degree to which the peer group perceives person–group deviation as non-normative may depend upon gender-specific expectations. For example, in adolescence, girls are more neurotic than boys (Klimstra, Hale, Raaijmakers, Branje, & Meeus, 2009). Hence, being more neurotic than the classroom norm may be more accepted for girls than for boys. In the current study, the distribution of boys and girls within classrooms varied greatly. In 23 of the 54 classrooms, the majority of boys or girls was greater than 60%, with a maximum of 91%. Although we did control for such gender differences between classrooms, it does become hard to actually examine gender differences, as the minority gender group would become small. This could lead to unreliable results. For future research, it might be interesting to examine whether there are gender differences

in the relation between person–group dissimilarity in personality and peer victimization, by using data from gender subgroups within larger peer groups.

Third, we had no information about how bullies perceived the personality of the victims. Prior research demonstrated that peer-perceived personality play a role in similarity effects (e.g. Montoya et al., 2008). Hence, peer-perceived personality may be differently related to peer victimization and may be as important as self-reported personality in group processes like peer victimization (Salmivalli, 2010). As a recommendation for future research, we suggest to consider peer-perceived personality in examining person–group dissimilarity and victimization in adolescence.

Fourth, the Big Five personality traits were measured via a shortened self-report questionnaire, which resulted in relatively low internal consistencies. Relatedly, variation in norms across groups was low for some personality traits, resulting in low group norm reliability (Bliese, 2000). Although internal consistency is not necessarily a predictor of validity of very short scales (Denissen et al., 2008a), future research should focus on replicating the present study while using measures of personality that are more reliable at both the individual and group levels.

Notwithstanding the limitations, the present study has several strengths. First, we were the first who examined the personality of the victim in relation to classroom norms. Second, we examined both the Big Five model (McCrae & Costa, 1987) and the Dark Triad model (Paulhus & Williams, 2002), allowing for more generalizable conclusions regarding the role of personality dissimilarity in peer victimization. Third, we distinguished between self-reported and bully-reported victimization and found different results for these reports. Hence, we demonstrated that it is important for future studies to take into account different sources of information about victimization, as they might stress different components of this phenomenon (e.g. victims' subjective experience or peer-perceived social standing; Bukowski & Sippola, 2001). Fourth, by applying multilevel polynomial regression analysis, we overcame the psychometric limitations of using difference scores when examining person–environment discrepancies (Edwards, 2002). Finally, by examining three-dimensional surfaces, we were able to analyze the relationships between person–group dissimilarity in personality and peer victimization in more detail. The three-dimensional surfaces provided information not only about the presence of a person–group dissimilarity effect but also about the linearity or nonlinearity of the dissimilarity effect.

CONCLUSION

In sum, the present study is the first to show that person–group dissimilarity in personality is related to peer victimization. Findings showed that adolescents who deviated from the average classroom personality profile were more likely to be perceived as victims (i.e. related to bully-disclosed victimization). Adolescents who were more

neurotic and Machiavellian than the classroom norm were more likely to be victimized by peers (i.e. related to both self-reported and bully-disclosed victimization). Adolescents who were more or less extraverted and open to experience, or less psychopathic than the classroom norm, were more likely to perceive victimization (i.e. only related to self-reported victimization). However, adolescents who more or less agreeable than the classroom norm were less likely to perceive victimization. Nonetheless, because of low variation in and reliability of classroom norms of these traits, these effects need to be interpreted with caution. Thus, the findings of the current study suggest that risk for peer victimization is contingent on personality–environment interactions (see also Back et al., 2011). Moreover, our findings can help teachers and other professionals in detecting adolescents who might be vulnerable for peer victimization. Although our findings need to be replicated, they have the potential to inspire more research on the role of personality (dis)similarity in peer group processes.

ACKNOWLEDGEMENT

SUPPORTING INFORMATION

Additional Supporting Information may be found online in the supporting information tab for this article.

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