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Big Five Personality Traits and Bullying

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### Abstract

Bullying is an issue that can have far reaching consequences. Much research has been done into the personality of the groups that are involved with bullying. These groups include victims, bullies, outsiders, and bully/victims. Outsiders are those that do not bully and are not targeted by bullies. Bully/victims are those that both bully and are bullied. The Big Five Inventory is a measure used to describe an individual's personality. It consists of five dimensions namely: Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness. In order to see if and how victims, bullies, outsiders, and bully/victims differ in these personality traits, data gathered by the 'Study of Personality, Adjustment, Cognition, and Emotions' (SPACE) was examined. The data examined was collected from adolescents ranging from twelve to fourteen years of age. The aim of this study was to support anti-bullying efforts by expanding the knowledge on who gets bullied, who bullies and who avoids bullying altogether. Thereby making it easier to direct the right kind of support to the right kind of adolescent. Recent high profile cases that have resulted in teen-suicide make this a pressing issue. Agreeableness was found to be significantly lower for bully/victims while Neuroticism was found to be significantly lower for victims. Extraversion, Conscientiousness, and Openness were not significantly different between the four groups. This study shows that certain personality traits may play a role in bullying behaviors although it does not serve as a major explanation for the phenomenon.

### Big five Personality Traits and Bullying

Bullying is a pressing matter when it comes to developmental psychology with an estimated 100 - 600 million adolescents being involved in bullying on a yearly basis worldwide (Volk, Craigh, Boyce & King 2006). In Norway for example 15% of school going children indicate that they have been involved in bullying (Olweus, 1997). In recent years bullying has gotten more attention worldwide through high profile cases such as the death of Amanda Todd aged 12 in Canada, Tim Ribberink aged 20 in the Netherlands and sadly many others as a result of bullying. These cases show how destructive excessive bullying can be. They give us ample reason to learn as much as possible about the subject in order to prevent future damage. However it is also important to note that bullying has been indicated as a positive drive. For example famous people, including the very successful Lady Gaga and Marilyn Manson, have in interviews and on stage indicated that part of what drove them to their success was the fact that they were bullied in adolescence. Therefore, to consider bullying as something purely negative would perhaps be too simplistic.

Research into bullying was first conducted 35 years ago in Norway and Sweden by Dr. Dan Olweus. He describes bullying as a student being repeatedly and over time subject to negative actions of one or more students (Olweus, 1993; 1996). By negative actions Olweus means purposefully inflicting or attempting to inflict physical or psychological harm or discomfort (Olweus, 1973). This closely resembles the general understanding of aggressive behaviour in the social sciences. On either or both the physical and the psychological level there is an imbalance in power between the bully and the victim. Without this imbalance the aggressive actions are not referred to as bullying. It is because of this imbalance that the victim is often unable to form a good defence. The imbalance can be real or perceived by the victim as being real. When there is an imbalance in the physiology of the bully and the victim, for example by

simply being smaller, or a difference in numbers when a group of bullies targets one victim we refer to this as 'direct bullying' (Olweus, 1997; Nansel et al., 2001). When we speak of a psychological imbalance there is a somewhat less clear difference between the bully and the victim. A psychological imbalance consists of exclusion from the group, creating and spreading rumours about the victim, and verbal or written abuse. This is referred to as 'indirect bullying'. Each instance of bullying can be either physiological, psychological or a combination of the two (Olweus, 1997). Male adolescents tend to make more use of 'direct bullying', while female adolescents make more use of 'indirect bullying' (Olweus, 1997).

Both the bully and its victim have been thoroughly studied. Many characteristics have been described. First of all, many studies maintain that there are three distinct groups involved in bullying namely the bully, the victim and the bully/victim (a person that is both a bully and a victim (Austin & Joseph, 1996; Boulton & Smith, 1994; Salmivalli et al., 1996; Rigby & Slee 1993; Smith, Boulton & Cowie, 1993)). Being part of these groups is reported to be consistent over time. The Participant Role Scale developed by Sutton & Smith (1999) adds three more groups namely outsiders, defenders and pro-bullies. Outsiders are those that avoid the bullying altogether. And defenders are those that try to defend victims against bullies and pro-bullies. Lastly pro-bullies are those that support the bully, for example by cheering him on and covering up the bullying for an adult. The current study will include four out of these six groups. It excludes pro-bullies and defenders as the data that is used in this study made is it is difficult to distinguish between these two and the other four groups.

Research into the different groups has led to descriptive traits related with each group. By far the most research has been on victims of bullying. Victims of bullying tend to have a higher degree of emotional instability when compared to their peers (Tani et al., 2003). As such they tend towards a higher degree of anxious feelings (Hawker & Boulton, 2000; Olweus, 2000), and

they are prone to depressive feelings (Hawker & Boulton, 2000). They often have low selfconfidence (Krog & Duel, 2003; Watson & Clark, 1984) and low self-esteem (Krog & Duel, 2003; Smith, 2004; Watson & Clark, 1984). This negative self-image is reflected by feelings of being a failure, shame, loneliness and not being attractive (Hawker & Boulton, 2000). The negative self-image has also been linked to being victimized (Rigby & Slee, 1991). There is also a tendency amongst victims to be introspective, that is to say, they have a high tendency to examine themselves (Krog & Duel, 2003; Watson & Clark, 1984). They both internalize and externalize their problems (Smith, 2004). This is perhaps reflected by the negative emotional reaction to both themselves and the environment that was reported by Krog and Duel (2003). Victims are also reported to have a low enjoyment of school (Smith, 2004), have less friends than their peers (Tani et al., 2003), and often have no friends in class (Hawker & Boulton, 2000). Having few friends is likely the result of having poor social skills as reported by Smith (2004). Victims feel as though they are rejected by their peers, this however, is not always really the case (Salmivalli et al., 1996; Smith, 2004). Victims are also reported to be less assertive and less conscientious (Tani et al., 2003). Conscientiousness is described as the desire to do well on a task and is marked by vigilance, thoroughness and being careful (Thompson, 2008). Victims are also reported to be non-assertive (Schuster, 1996).

Bullies tend to have a positive attitude towards the use of violence, have a negative self-image and are highly aggressive when compared to their peers (Olweus, 1978). They tend towards higher emotional instability when compared to their peers who do not bully (Tani et al., 2003). Bullies also tend to display more positive affect while engaging in bullying when compared to their peers (Craig & Pepler, 1997). Affect is the term used by psychologists to describe the physical representation of a person's mood. A bully showing positive affect will thus seem to be having a good time while bullying. Furthermore, bullies tend to see others as

untrustworthy and targets for manipulation in order to further their own social success. This tendency is called Machiavellianism (Christie & Geis 1970; Sutton & Keogh, 2000). Finally Rigby and Slee (1993) found that bullies score high on a trait called Psychoticism. This trait involves impulsive behaviour, sensitivity in social situations and a lack of cooperation (Eysenck & Eysenck, 1975).

Contrary to the extensive knowledge that is available on both victims and bullies, the other groups have received much less attention in research. All groups other than bullies tend to have a lesser drive for social success (Andreou, 2000; Sutton & Keogh, 2000). Bully/victims are distinct from the other groups in their low levels of social-acceptance and low problem solving skills (Andreou, 2001). Defenders of victims are shown to have high levels of friendliness and empathy (Batson et al., 1981; Bierhoff et al., 1991). They also rely more on their own morals and values, instead of outside influences (White & Gerstein, 1987). Finally outsiders have a high need to be socially appropriate (White & Gerstein, 1987) as such they imitate other bystanders, and highly value social status (Watson & Petruska, 1984). Outsiders are also reported to be introverted and independent, and they fear losing self-control and public humiliation (Tice & Baumeister, 1985).

To address the issue of bullying we need a better understanding of the subject. What characterizes the groups is of great importance. Examining the adolescent's personality concerning bullying might help us find specific factors that make adolescents more vulnerable to be bullied, to become a bully or to avoid bullying. It might help those that are working on programs to address bullying at a young age by sketching a profile of likely perpetrators and victims. This will help in getting the right kind of help to the right kind of adolescent.

The failure found in modern day anti-bullying programs by Jeong and Lee (2013) to address the issue indicates that our knowledge is insufficient. These programs concentrated

mostly on educating children on what bullying is by showing them examples of bullying. However they now seem to only increase instances of bullying on schools where they are used (Jeong & Lee, 2013).

This paper aims to add to the existing knowledge regarding bullying amongst adolescent students by characterizing the groups using the Big Five character traits. The Big Five character traits are a set of five dimensions on which an individual's personality is measured (Digman, 1990). The first dimension is Extraversion, a person that scores high on this dimension is likely to act extraverted in a situation, whereas a person with a low score would act more introverted in the same situation. The second dimension 'Agreeableness' describes a person's disposition towards altruism and caring for other people. The third dimension 'Conscientiousness' describes a person's will to achieve. The fourth dimension 'Neuroticism' describes a person's emotional stability, here a high score means a more emotionally stable individual and a low score a more neurotic individual. The fifth and final dimension 'Openness to experience' entails various aspects of intelligence and openness such as the ability to understand abstract ideas and the ability to form new ideas (Digman, 1990). The Big Five have been shown to be a stable and reliant tool in determining an individual's personality (Specht, Egloff & Schmukle, 2012).

By using the Big Five it might be possible to increase our understanding of bullying by focussing on the adolescents involved instead of on the act of bullying itself. This knowledge is meant to help the development of new anti-bullying programs directed at school going children, by determining which kinds of people bully, are bullied, and those that are not involved. Because males tend to use direct bullying, whereas females tend to use indirect bullying (Olweus, 1997), gender is added as the second factor.

This leads to the following research question: How do the groups involved with bullying relate to the big five character traits, and how do the groups differ from each other concerning

these traits? It is hypothesized that the levels of extraversion will be higher amongst bullies and bully/victims while lower in outsiders. It is also hypothesized that agreeableness will be lower in bullies than all other groups and that conscientiousness will be higher amongst victims and outsiders. Furthermore, it is hypothesized that victims will score higher on neuroticism and that openness will be higher in outsiders and victims.

### Method

### **Participants**

For the purposes of this research paper part of the Study of Personality, Adjustment, Cognition, and Emotions (SPACE) was used. The dataset consisted of 307 adolescents, aged 12 to 14 (47.9% girls;  $M_{age} = 12.79$ , SD = 0.78). The scope of the SPACE far exceeds the scope of this research paper, and thus only questionnaire responses on the Big Five Inventory, and on self-, teacher- and peer-reported information on bullying and aggression were used. Participants were put into four groups: namely bullies (N = 71), victims (N = 18), bully/victims (N = 29) and outsiders (N = 189). Assignment into the four groups was based on scores related to bullying. Bullies had been pointed out by others as bullying others but had no indication that they were themselves bullied. Victims were indicated to be bullied and had no indication of bullying others. Outsiders were those that were neither bullied or bullied themselves. And bully/victims had both an indication that they bullied others and were themselves bullied.

## **Procedure**

To attain the data used in this paper two Dutch high schools were approached and asked for permission to conduct the study. Parents were informed and given the opportunity to object via a written letter. Psychology master students of Tilburg University (TiU) went to the schools and asked the students to participate. Beforehand they were given the option to not participate, however all students filled out the questionnaires.

# **Measuring instruments**

Character traits were measured with the Dutch translation (Denissen, Geenen, van Aken, Gosling, & Potter, 2008) of the Big Five Inventory (John, Donahue, & Kentle, 1991; John & Srivastava, 1999). Questions were filled out on a 5 point Likert scale with answers ranging from 1 (strongly disagree) to 5 (strongly agree). Cronbach's alpha was sufficient for all 5 dimensions ranging from .68 to .72.

### **Results**

The first analysis was performed on Extraversion to determine if Extraversion is affected by membership of one of the groups, gender or an interaction of group and gender. A 2 (gender) x 4 (group) ANVOVA was conducted. Neither gender (F (1,301) = .024, p = .877, partial  $\eta^2$  = .000), group (F (3,301) = 1.835, p = .141, partial  $\eta^2$  = .018), nor the interaction (F (3,301) = 1,546, p = .203, partial  $\eta^2$  = .015) showed significant results. Table 1 displays the descriptive statistics of this analysis.

Table 1

Means and Standard Deviations of Extraversion as a Function of Gender and Group

	Female		Male	
Group	M	SD	M	SD
Bully	3.7408	.58861	3.6262	.56042
Victim	3.9474	.44278	3.9683	.58551
Bully/Victim	3.7407	.68329	3.5871	.66132
Outsider	3.7422	.60666	3.8218	.51719

The second analysis was performed on Agreeableness to determine if Agreeableness is affected by membership of one of the groups, gender or an interaction of group and gender. A 2 (gender) x 4 (group) ANVOVA was conducted. Gender (F (1,301) = .670, p = .414, partial  $\eta$ 2 = .002) was not significant. Group (F (3,301) = 7.688, p < .001, partial  $\eta$ 2 = .072) was significant with a

medium effect size. The interaction between group and gender (F (3,301) = 1,546, p = .203, partial  $\eta 2 = .015$ ) was not significant. A Scheffé post hoc test showed that bully/victims scored significantly lower than outsiders and bullies, however they did not score significantly lower than victims. Table 2 displays the descriptive statistics of this analysis.

Table 2

Means and Standard Deviations of Agreeableness as a Function of Gender and Group

	Female		Male	
Group	M	SD	M	SD
Bully	3.8555	.50233	3.7622	.56625
Victim	3.4659	.52683	3.5979	.44326
Bully/Victim	3.2456	.75761	3.5399	.61187
Outsider	3.8840	.47507	3.8439	.48943

The third analysis was performed on Conscientiousness to determine if Conscientiousness is affected by membership of one of the groups, gender or an interaction of group and gender. A 2 (gender) x 4 (group) ANVOVA was conducted. Neither gender (F (1,301) = .086, p = .769, partial  $\eta^2$  = .000), group (F (3,301) = 1.324, p = .267, partial  $\eta^2$  = .013), nor the interaction (F (3,301) = .381, p = .767, partial  $\eta^2$  = .004) showed significant results. Table 3 displays the descriptive statistics of this analysis.

Table 3

Means and Standard Deviations of Conscientiousness as a Function of Gender and Group

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	Female		Male	
Group	M	SD	M	SD
Bully	3.3508	.69408	3.3410	.67677
Victim	2.9792	.73397	3.1667	.59135
Bully/Victim	3.5807	.62955	3.3616	.82017
Outsider	3.4270	.68773	3.3334	.56737

The fourth analysis was performed on Neuroticism to determine if Neuroticism is affected by membership of one of the groups, gender or an interaction of group and gender. A 2 (gender) x 4 (group) ANVOVA was conducted. Both gender (F (1,301) = 10.291, p = .001, partial  $\eta^2$  = .033) and group (F (3,301) = 5.104, p = .002, partial  $\eta^2$  = .049) showed significant results. The effect size of gender was small. The effect size of group was small to medium. The interaction (F (3,301) = 1,015, p = .386, partial  $\eta^2$  = .010) was not significant. A Scheffé post hoc test showed that females score lower than males. The post hoc test also showed that victims scored significantly lower than bullies but not was not the case for outsiders and bully/victims. Table 4 displays the descriptive statistics of this analysis.

Table 4

Means and Standard Deviations of Neuroticism as a Function of Gender and Group

	Female		Male	
Group	M	SD	M	SD
Bully	3.2907	.68088	2.8125	.62489
Victim	3.0536	1.02569	2.4063	.78009
Bully/Victim	3.0975	.76190	2.9065	.57896
Outsider	2.8146	.71699	2.5961	.64799

The fifth and final analysis was performed on openness to determine if openness is affected by membership of one of the groups, gender or an interaction of group and gender. A 2 (gender) x 4 (group) ANVOVA was conducted. Neither gender (F (1,301) = 1.573, p = .211, partial  $\eta^2$  = .005), group (F (3,301) = 1.313, p = .270, partial  $\eta^2$  = .013), nor the interaction (F (3,301) = .299, p = .826, partial  $\eta^2$  = .003) showed significant results. Table 5 displays the descriptive statistics of this analyses.

Table 5

Means and Standard Deviations of Openness as a Function

of Gender and Group

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	Female		Male	
Group	M	SD	M	SD
Bully	3.4174	.61770	3.2710	.57580
Victim	3.4028	.59154	3.4731	.88171
Bully/Victim	3.4256	.39702	3.1361	.65866
Outsider	3.2929	.54927	3.1378	.58770

### Discussion

This study examined whether adolescent bullies, victims, bully/victims, or outsiders differ in terms of personality traits as measured by the Big Five Inventory. With regard to Extraversion the expectation was to find that bullies and bully/victims would have higher levels of Extraversion, and outsiders to have lower levels of Extraversion. However, the four groups were not found to be statistically different in this character trait. With regard to Agreeableness it was expected that bullies would have the lowest levels of agreeableness. However, the results showed that bully/victims had a significantly lower level of agreeableness than all other groups. With regard to Conscientiousness it was expected to be highest amongst victims and outsiders. However, the four groups were not found to be statistically different in this character trait. With regard to Neuroticism victims were expected to score highest on this dimension. However, victims scored significantly higher than bullies only. In spite of the fact that females as a group scored higher on Neuroticism than males did, there was no interaction with Neuroticism. Finally, Openness was expected to be highest amongst outsiders and victims. However, the four groups were not found to be statistically different in this character trait. The results on Extraversion go against several findings made by other researchers. Rigby & Slee (1993) for instance found victims to be more introverted. However they describe this as a tendency to self-examine. Which in the Big Five falls under Neuroticism. As such this would be supported by the results of this paper. The findings of Petruska & Wilson (1984) indicated that outsiders would be more

Extraversion has no relation to bullying. Theoretically one would expect that being more extraverted would make a person less likely to be bullied. The results of the analyses on Agreeableness showed bully/victims as the lowest scoring group. Victims also scored low but not significantly lower than the other groups. This was the largest effect found in the study. As such agreeableness could be an important factor in bullying. The low scores that bully/victims generally have on agreeableness is one that makes theoretical sense. When a person is both a victim and a bully he or she knows the negative feelings and consequences that coincide with bullying. Despite that he or she still forces this on others. A low score on agreeableness means that a person is less compassionate than his or her peers. Compassion thus seems a likely candidate for explaining the results on agreeableness.

Conscientiousness was a dimension that was expected to be closely linked with bullying. As it is generally believed that students who enjoy learning and do well in school are bullied out of resentment. Such students would score high on conscientiousness and be part of the victim group. Conscientiousness was not found to be different between the four groups though. This goes against the findings by Tani et al. (2003) that found victims to score lower on conscientiousness. The current results seem to indicate that the way a student handles school work is not discriminating between those who bully and those who do not.

The findings that show female students as more neurotic than males is not surprising. It is well known in psychology that females tend slightly more towards neuroticism than males do.

The results that show victims to be most neurotic and bullies to be least neurotic both supports previous research and contradicts it. Tani et al. (2003) came to the same conclusion on victims but also found that bullies were highly neurotic. Victims were also found to be highly neurotic by Rigby & Slee (1993) and Mynard & Joseph (1997). Adolescent victims of bullying seem to

indeed be highly neurotic. As no research shows otherwise. Finding Neuroticism only amongst victims of bullying could however indicate something else. Namely that Neuroticism is not a cause of being bullied but rather a consequence of being bullied. Being bullied could be part of the reason why a person becomes more neurotic. Bullies have a strange relation with Neuroticism. This study found them to be least neurotic although not significantly so when compared to outsiders and bully/victims. While many other studies found them to be highly neurotic. It seems that bullies have no clear relation with neuroticism. Theoretically speaking it is something that a bully and bully/victim could have issues with. Emotional instability could very well be part of the reason why they bully. The results of this paper however do not support such an assumption.

The last dimension of the Big Five that was analysed openness was not found to be significantly different between the groups. Openness, amongst other things, describes a person's tendency towards unusual ideas, art and new experiences. Given these characteristics it may not be strange that no relation with bullying was found. The relatively young age of the adolescents that were involved in the study could also explain why so few results were found. The adolescent's personality might not yet be fully developed and thus less distinct than an older person's personality. However Tani et al. (2003) did a similar study on an even younger group of eight to ten and found very distinct differences. They however looked at slightly different groups adding in a pro-bully group and a defender group. The addition of these groups offer a more likely explanation. Separating the entire group into more distinct groups seems to have led to a better distinction between them.

The results of this study have several limitations. First of all, the group of victims was very small with only 18 individuals out of 307. This might explain why there were very few significant results for the victim group. For example, the scores on Conscientiousness were lower

for victims but proved not to be statistically significant. Secondly, the data was acquired from students in a classroom. This environment might be ill suited for self-reported data as it is a highly charged environment where appearance matters to those filling out the questionnaires. This could have had an effect on the accuracy of the data if the students answered with social acceptability in mind. Thirdly, the data was not specifically acquired with bullying in mind. Thus not all groups that are believed to be involved in bullying were used in the analysis. Fourthly, the effect sizes of the results were medium at best. Therefore the generalizability of the results is weak. Finally the omission of the 'defender' and 'pro-bully' groups should be noted as a downside of this study. The behaviour of these groups is very distinct from the others, and adding them together seems to be a good explanation for finding fewer results, when compared to previous studies.

The fact that the questionnaires were not specifically set up with this papers' subject in mind does however also add to its strength. The likelihood of any of the subjects guessing the purpose of the study and letting this knowledge impact their answers is next to non-existent. The groups (besides the victim group) were of decent size and the results for these groups are thus more reliable.

Future research into bullying should try to find other factors besides personality to explain the phenomenon. Refusing to conform to the general norm in a group for example might be a cause for bullying. A member of a group seems to stray from the groups identity and goals, and is punished for doing so. Testing this however would be a difficult task. First, groups would have to be identified and then whenever a member strayed from the group it would have to be confirmed that bullying is a direct consequence of doing so. A possible way to perform this research would be to follow groups in schools for an extended period of time. Group makeup could be

determined and periodically checked. Data on bullying could be gathered and compared to the group data.

Another possible explanation could be found in evolutional psychology. Here, it could be hypothesized that bullying is a form of forced growth. Individuals that don't keep up with the general growth of a group in certain areas could be encouraged to do so or face punishment in the form of bullying. This idea might help explain why in some cases bullying leads to personal growth whereas in (most) other cases is doesn't.

Perhaps it is impossible to try to explain bullying on a group level as it is different for each bullied individual. In this case research could be done in the form of several case studies.

Making use of case studies might be a more effective way of approaching the subject. This would also allow for a better understanding of the positive side of bullying. It would also lead to a more clear understanding of why bullying can lead to suicide in individuals by studying such cases.

This study found that agreeableness is lower in bully/victims and that neuroticism is higher amongst victims. As these are the only results of the study it is concluded that the Big Five personality traits do not play a major role bullying. Generally speaking, the results of this study seem to indicate that there is little to no relation between bullying and personality. The issue seems far more complex and is perhaps impacted by a multitude of factors besides personality.

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