The Dark Triad, moral disengagement, and cognitive distortions in adolescents

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Abstract

Youth Care youngsters often have antisocial personality traits, referred to as the Dark Triad traits, including Machiavellianism, Psychopathy and Narcissism. Those traits seem paradoxal; it stands for behaving antisocial but still have a sense of grandiosity. The social cognitive theory offers an explanation via moral disengagement (MD), as one can cognitively make its detrimental conduct accepted or even righteous. The current study focused on the differences in use of MD and the presence of antisocial personality traits between Youth Care participants \((n = 35)\) and healthy controls \((n = 305)\). Additionally, in the subsample of the current study, self-serving cognitive distortions were measured. Results indicated that Youth Care participants score higher on antisocial personality traits and use more MD than healthy controls, except for the narcissism scale. It is concluded that results could have implications for treatment of Youth Care youngsters, but further research is needed.

*Keywords: Moral disengagement, Dark Triad, Dirty Dozen, delinquency, adolescence*

Probleemjongeren hebben vaak antisociale karakertrekken, ook wel gedefinieerd als Dark Triad persoonlijkheidstrekkens. Hieronder vallen Machiavellianisme, Psychopathie en Narcisme. Deze persoonlijkheidstrekkens lijken een paradox te vormen; ondanks het antisociale gedrag dat deze individuen vaak vertonen, hebben sommige een hoge eigenwaarde en zijn zij zelfverzekerd. De sociale cognitieve theorie biedt een verklaring. Via morele ontkoppeling (MO) kan iemand zijn slechte gedrag als het ware ‘goed’ praten, het wordt op die manier acceptabel of zelfs als noodzakelijk gezien. De huidige studie keek naar de verschillen in het gebruik van MO en de aanwezigheid van antisociale karakertrekken tussen jongeren uit een Jeugdzorg PLUS instelling \((n = 35)\) en een gezonde controle groep \((n = 305)\). Ook werden zelfdienende cognitieve distorties gemeten in een deel van de onderzoeksgroep.
Uit de resultaten blijkt dat jeugdzorg jongeren hoger scoren op antisoociale karaktertrekken dan de controle groep, behalve op de schaal voor narcisme. Geconcludeerd is dat de resultaten implicaties kunnen hebben voor behandeling van jongeren in de jeugdzorg, maar vervolgonderzoek is zeker nodig.

_Keywords: Morele ontkoppeling, Darkt Triad, Dirty Dozen, delinquentie, adolescenten_
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There are reasons enough to prevent juveniles from engaging in delinquent behavior. To start with, delinquency puts a youngster at risk of school drop-out, drug abuse, injury, early pregnancy, adult criminality and, eventually, a waste of their lives (Farrington, Brandon, & Welsh, 2007). Most adult criminals started their careers in their youth. In order to prevent delinquency in later life, one must start by addressing the onset in juveniles. By preventing delinquency, the burden of crime for the victims and society will be reduced. Also the costs of arresting, prosecuting, incarcerating, and treating offenders, that runs into billions of dollars a year, can be reduced (Aos, Miller, & Drake, 2006). To specify, the longitudinal study of Scott (2001) showed that the costs incurred by individuals from childhood to adulthood were ten times greater for those with serious antisocial behavior patterns than for those without. Cohen and Piquero (2009) estimated that the costs of saving a 14-year old high risk juvenile from a life of crime range from $2.6 to $5.3 million in the United States.

Frequently engaging in delinquent or antisocial behavior can be linked to antisocial personality traits, defined by socially aversive tendencies that are against the ethical and cultural norms (Hott, 1979). Hence, these traits can be defined as manipulative, deceptive, and superficially charming (Hare, 1993). To investigate individuals with certain antisocial traits, researchers particularly focused on three personality traits. First, Machiavellianism, which is defined by proneness to manipulative and deceitful behavior (Christie & Geis, 1970; Giammarco, Atkinson, Baughman, Veselka, & Vernon, 2013), and a cynical ignorance of morality with the focus on self-interest (Muris, Meesters, & Timmersmans; 2013). The second personality trait is narcissism, characterized by a grandiose self-view, a sense of entitlement and egotism, and excessive self-love (Muris et al., 2013; Raskin & Hall, 1981). Finally, research investigated psychopathy, which is defined by remorselessness, callousness, and a non-empathetic and impulsive life-style (Hare, 1985; Muris et al., 2013). These three
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unfavourable personality traits together form The Dark Triad (Paulhus & Williams, 2002). Research with adults has shown that these three personality traits are associated with antisocial behaviors and dysfunctional relationships, such as aggressive and forceful tactics at work (Jonason, Slomski, & Partyka, 2012), gambling (Crysel, Crosier, & Webster, 2013; Jonason & Tost, 2010), bullying (Baughman, Dearing, Giammarco, & Vernon, 2010), having more shorter and more superficial intimate relationships (Jonason & Kavanagh, 2010; Jonason, Li, & Buss, 2010; Jonason, Li, Webster & Schmidt, 2009), and proneness to discrimination and prejudice (Hodson, Hogg, & MacInnis, 2009).

Initially, Narcissism seems an illogic trait of the Dark Triad; individuals with antisocial personality traits, often engaging in antisocial behavior, apparently are still able to have extreme feelings of self-worth and self-love. To understand this paradox of being able to behave aggressively or violent, and still feel grandiose with excessive self-love, a closer look at the social cognitive theory (Bandura, 1986, 1991) is needed. This theory assumes that moral thought can be used by an individual in two ways. Either it can restrain the individual from behaving aggressively, in order to avoid negative self-reactions or self-sanctions, or it can make an individual engage in aggression, by making it socially acceptable through justifying the conduct as righteous. The avoidance of self-censure primarily keeps an individual from passing their own moral standards and values, which is called moral agency. The anticipation of moral emotions, such as guilt or shame, that might follow certain behavior, has a strong inhibition effect, and plays a crucial role in the accordance of thought and behavior (Bandura, Barbaranelli, Caprara, Pastorelli, & Regalia, 2001; Baumeister, Vohs, DeWall, & Zhang, 2007). In order to comprehend how individuals can engage in aggressive behavior, and still draw self-respect from their actions, the study of moral agency has focused on the cognitive component that makes this possible.
The mechanism of moral agency only operates unless activated. This makes it possible that in many psychosocial processes the cognitive self-censure can be selectively activated and therefore disengaged from detrimental conduct. This can occur through 1) reconstructing behavior; this can take place in the form of *euphemistic language* (reconstructing the behavior by relabeling the conduct), or *advantageous comparison* (comparing with more extreme or worse behavior, so that the initial conduct appears less injurious), 2) obscuring personal causal agency; via *displacement of responsibility* (people no longer view themselves for resposibility, and are therefore spared from self-censure), or *diffusion of responsibility* (often in group labor; when everyone is responsible, no one really feels responsible for themselves), 3) trivialize or disregarding the consequences of the conduct; this can occur through *disregarding or distorting the consequences* (weakening or avoiding the consequences, e.g. by rather not knowing the harm they did to another for their personal gain), and 4) vilifying the recipients of maltreatment by blaming and devaluing them; this can occur through *dehumanization* (strangers, out-group members or people that lost human qualities in the eyes of the perpetrator are more likely to be harmed because the perpetrator hardly identifies with them, and thus there is little chance of anticipatory self-sanctions), or via *attribution of blame* (people view themselves as innocent or even as victims forced to the detrimental conduct by provocation) (Bandura, Barberanelli, Caprara, & Pastorelli, 1996).

Another concept to define the cognitive process of self-justifying acts that are in conflict with moral standards of the individual is called self-serving cognitive distortions (Barriga et al., 1996). The authors distinguish between primary and secondary distortions. The primary distortions are described as *self-centered* attitudes, thoughts, and beliefs (the category *Self-Centered*). In order to assess one’s situation, someone else’s feelings, rights, thoughts, expectations and desires, etcetera are barely considered or even disregarded. To support the primary distortions, secondary distortions are pre- or post-transgression cognitions to facilitate
a neutralization of the conscience or feelings of guilt. Remarkably, secondary cognitive
distortions (the categories Blaming Others, Minimizing/Mislabeling, and Assuming the Worst)
show great overlap with the moral disengagement mechanisms. For example, the secondary
cognitive distortion blaming others, implies that the person is misattributing the blame to
another person, group, momentary aberration, etcetera. This distortion resembles Bandura’s
notions of diffusion and displacement of responsibility, and attribution of blame.

Minimizing/mislabeling is the second type of cognitive distortion. Minimizing can be defined
as seeing antisocial behavior as justified or even necessary to achieve certain goals, and
mislabeling is referring to others in a dehumanizing or belittling manner. This type of
secondary cognitive distortion shows great overlap with the moral disengagement
mechanisms of moral justification, euphemistic language, advantageous comparisons,
disregarding or distorting consequences, and dehumanization. Finally, assuming the worst
compromises the attribution of hostile intentions to others, and the individual considers the
worst-case scenario as inevitable or sees one’s own or other’s behavior impossible for
improvement. This concept partially overlaps with Bandura’s notion of attribution of blame
(Barriga & Gibbs, 1996; Ribeaud & Eisner, 2010).

When bearing the social cognitive theory of moral disengagement and self-serving
cognitive distortions in mind, it no longer appears illogic that Narcissism is an elementary
component of the Dark Triad. This pronounced egocentric bias seems to relate to the primary
self-centered cognitive distortions. Perhaps, the lower empathy, remorse, or guilt – traits that
are considered elementary components of juvenile antisocial behavior – might reflect the
neutralization processes of moral disengagement and secondary cognitive distortions
(Chabrol, van Leeuwen, Rodgers, & Gibbs, 2011). Several researchers examined this
relationship between psychopathic and antisocial personality traits and cognitive
neutralization techniques as moral disengagement and cognitive distortions. For example,
Steven, Deuling and Armenakis (2012) examined how successful adult psychopaths, being unethical decision-makers, can still be filled with grandiosity. Successful psychopaths have psychopathic personality traits but avoided contact with the justice system and might even be successful in life (Lykken, 1995). Results indicated that moral disengagement mediates in the relationship between successful psychopaths and unethical decision-making. In another study by Capuano (2007) the levels of affective and cognitive empathy on one hand, and the use of cognitive distortions on the other, in relation to physical aggression were examined.

Participants comprised 239 high school male and female students, ages ranging from 16 to 18 years. Capuano found the strong relationship that higher levels of cognitive distortions were associated with higher levels of physical aggression. Empathy was negatively related to physical aggression. The longitudinal study of Caprara and colleagues (2014) with 345 young adults (52% females) – age ranging from 17 to 25 years across 4 time periods – revealed that there is a gradual crystallization of a mindset during middle adolescence to adulthood in which proneness to irritation, revenge and moral disengagement in concert promote and sustain aggressive and violent behaviors.

In order to examine the possibility of behaving detrimental and the incurrence of feelings of self-worth, much research has focused on the relation between aggression and moral disengagement. However, given the relationship between psychopathic traits and immoral (aggressive and violent) behavior, one would expect a link between certain personality traits and the tendency to use moral disengagement. In order to further investigate the role of moral disengagement and cognitive distortions in individuals with the Dark Triad personality traits, the current research will focus on the use of those cognitive neutralization techniques in either delinquent youth (from a Youth Care facility) and healthy controls. Given the cost-effectiveness and reduce of burden for society when delinquency is addressed at the
beginning of a chronic criminal career, this study includes youngster in the age of 12 to 18 years old.

For the current study, the total sample is divided in Sample1 and Sample2. Both comprise Youth Care participants as well as healthy controls – further explained in the method section. Concerning Sample1, it is first hypothesized that there will be a difference in age and sex. It is posited that boys are more prone to antisocial behavior and moral disengagement than girls, in accordance with previous literature and findings (Bandura et al., 1996; Caprara, Paciello, Gerbino, & Cugini, 2007; Feingold, 1994; Paciello, Fide, Tramontano, Lupinetti, & Caprara, 2008). Next, an antisocial personality disorder develops from adolescence or early adulthood. As described by the DSM-V, the individual must be at least 18 years to be diagnosed with an antisocial personality disorder (American Psychiatric Association, 2013), therefore it is expected that older participants will have more Dark Triad personality traits than younger ones. Then, the second hypothesis is that healthy youth controls will use less moral disengagement mechanisms and cognitive distortions, because they probably engage in less injurious conduct that they have to cognitively neutralize than Youth Care participants. This opposed to Youth Care adolescents, who most likely engage in aggressive and detrimental conduct more frequent, and therefore they have to morally disengage from it or make use of cognitive distortions to feel better about themselves. This is supported by previous research (Caprara et al., 2014; Capuano, 2007). The third hypothesis is that Youth Care participant will have more Dark Triad personality traits than the healthy controls. This is due to the fact that they are admitted to a Youth Care facility due to problem behavior, and problem behavior is closely linked to antisocial personality traits (Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005). For the fourth hypothesis it is expected that there is a relationship between moral disengagement and Dark Triad personality traits, mainly in the Youth Care participants group, but also in the healthy control group. It is expected that
in the Youth Care adolescent group a stronger relationship between moral disengagement and Dark Triad personality traits will be found than for the healthy control group (Caprara et al., 2014). Research indicated that moral disengagement might be an underlying mechanism for the development of antisocial behavior (Caprara et al., 2014; Hyde, Shaw, Moilanen, 2010). It seems plausible that once the antisocial behavior is developed in adolescence, this fosters the use of moral disengagement. Because little research is done concerning this relation, the fifth hypothesis of the current study is that Dark Triad personality traits predict the use of moral disengagement techniques.

In Sample 2, the first four hypothesis are the same. First, differences between age and gender are expected, with boys scoring higher than girls and older participants scoring higher than the younger ones. Second, difference between the groups regarding moral disengagement is hypothesized. The Youth Care participants are expected to score higher on moral disengagement than the healthy youth control group. Third, it is hypothesized that there are differences between the groups regarding Dark Triad personality traits, with the Youth Care participants scoring higher on these traits than the healthy control group. Fourth, it is expected that there is a relationship between moral disengagement, Dark Triad personality traits, and self-serving cognitive distortions. This is mainly expected in the Youth Care participants group. Since previous research has indicated that moral disengagement and cognitive distortions are both cognitive neutralization techniques with large overlap (Ribaud & Eisner, 2010), the fifth hypothesis is that there is a strong relation for moral disengagement and self-serving cognitive distortions in both groups. Finally, because both moral disengagement as well as self-serving cognitive distortions show great overlap in content, it is expected that the results of those measurements show overlap as well. Therefore, the sixth hypothesis includes that the use of cognitive distortions will be the strongest predictor for the use of moral disengagement.
Both Youth Care participants as well as the healthy control group are chosen to examine if there are any differences between the two groups in moral disengagement, cognitive distortions and Dark Triad personality traits. If this is the case, it might offer insight for treatment of the Youth Care juveniles in order to prevent them having a chronic criminal career in later life.

Method

Participants

Participants comprised Dutch adolescent boys and girls ($N = 340$, $M_{\text{age}} = 14.6$, $SD = 1.35$ months, $n_{\text{boy}} = 182$, $n_{\text{girl}} = 146$). Twelve participants had missing demographic information. An independent t-test showed that there was no significant difference in age for boys and girls in the total sample. The sample consisted of two subgroups, one of Youth Care participants ($n = 35$, $M_{\text{age}} = 15.9$, $SD = 1.08$ months; $n_{\text{boy}} = 24$, $n_{\text{girl}} = 11$), and one of healthy controls ($n = 305$, $M_{\text{age}} = 14.5$, $SD = 1.30$ months; $n_{\text{boy}} = 158$, $n_{\text{girl}} = 135$). An independent t-test showed that the Youth Care participants were significantly older than the healthy controls [$t(317) = 6.38; p < .001$], therefore in analysis between these groups, age is controlled for. Twelve participants did not give gender or age. Due to differences in number of questionnaires that were administered, the total sample was divided in: Sample1 ($n = 340$), which included all participants ($n_{\text{Youth Care}} = 35$, $n_{\text{healthy}} = 305$); and Sample2 ($n = 118$), consisting of all the Youth Care participants, but a smaller group of healthy controls ($n_{\text{Youth Care}} = 35$, $n_{\text{healthy}} = 83$). Groups did not differ on gender [$t(107) = 1.54; p > .05$], nor regarding age [$t(107) = 1.85; p > .05$].

Youth Care participants were examined in the context of a civil judicial screening for placement in a closed Youth Care facility. Generally, these participants had conducted (repeated) minor transgressions, and many had a history of violence, abuse, neglect or poor parenting. Of the Youth Care participants, 9 were recruited by the Netherlands Institute for
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Forensic Psychiatry and Psychology (Het Nederlands Instituut voor Forensische Psychiatrie en Psychologie; NIFP), through the Praktijk voor Psychodiagnostiek, at Rijsbergen. The other 26 Youth Care participants were recruited via BjBtBrabant, at Deurne, a Youth Care facility. The healthy control group was recruited from various secondary schools in the area of Tilburg. The current research was approved by the Ethical Commission of Psychology at the University of Maastricht.

Materials

The following questionnaires were used in Sample1. The Dirty Dozen for Youth (Jonason & Webster, 2010) was used to detect psychopathic traits in youngsters in accordance with the Dark Triad personality traits; and the Moral Disengagement questionnaire (Bandura et al., 1996) was used to detect moral disengagement. Also some biographic information was requested. For Sample2 the same measurements as in Sample1 were used. In addition, the How I Think Questionnaire (Barriga et al., 2001) was administered to measure the use of self-serving cognitive distortions.

Dirty Dozen. The Dirty Dozen (Jonason & Webster, 2010) is a self-report questionnaire to assess the Dark Triad personality traits. This questionnaire consists of 3 subscales. Machiavellianism, with items like: ‘I use others for personal gain’; Narcissism with items such as: ‘I want others to admire me’; and Psychopathy with items such as: ‘I behave hateful and contemptuous to others’. It is a short 12-item instrument in which each item has to be rated on a 5-point scale with 1 = never true, and 5 = (almost) always true. For this study the Dirty Dozen for Youths (DD-Y) was used, the only difference with the Dirty Dozen for adults is that some sentences are simplified or made more understandable for youngsters. The internal consistency of the Dirty Dozen is good (Cronbach’s Aplpha = .83; Jonason & Webster, 2010). For the analysis of the scores on this measurement, the scores of the 4 items of each subscale were summed up, leading to three total scores for
Machiavellianism, Psychopathy, and Narcissism. Internal consistency in the current control sample was excellent (Cronbach’s Alpha = .91) as well as in de Youth Care sample (Cronbach’s Alpha = .84).

*Moral Disengagement.* The level of moral disengagement was measured with the Moral Disengagement (MD) self-report questionnaire developed by Bandura et al. (1996). This test includes four subsets of items, measuring the following eight mechanisms of moral disengagement: (1) Readiness to construe injurious conduct as serving righteous purposes, e.g. ‘It is OK to fight in order to protect your friends.’, (2) masquerading censurable activities by palliative language, e.g. ‘Using someone’s bike without permission is just “borrowing”.’, or (3) rendering them benign by advantageous comparison, e.g. ‘Stealing a small amount of money is not as bad as a huge amount of money.’, (4) disowning responsibility for harmful effects by displacement, e.g. ‘If no one disciplines the individual, one cannot be held responsible for his acts.’, or (5) diffusion of responsibility, e.g. ‘It is unfair to condemn someone if he has only contributed a little in the harm the group has done.’, (6) minimizing the harmful effects of one's detrimental conduct, e.g. ‘Bullying does not really hurt someone.’, (7) devaluing those who are maltreated, e.g. ‘It is OK to mistreat the fly boy.’, and (8) attributing blame to them, e.g. ‘One cannot blame a person who acted under the pressure of the environment.’.

Different forms of detrimental conduct in a variety of contextual conditions and diverse types of social relationships were encompassed in the scale items. Detrimental conduct involved physically injurious and destructive behavior, deception and stealing. The types of social relationships included educational, familial, community and peer relations. For each of the 32 items adolescents rated the strength of their approval or disapproval of moral disengagement of detrimental behavior. MD has a 5-point scale responding opportunity, ranging from 1 = strongly agree, to 5 = strongly disagree. High scores mean high levels of
moral disengagement, low scores low levels of moral disengagement. The alpha reliability coefficient of a composite measure of moral disengagement was .86 (Bandura, Barbaranelli, Caprara, Pastorelli, & Regalia, 2001). All the scores of the MD questionnaire were summed up, of which the mean formed a single Moral Disengagement total score. Internal consistency was very good for both the healthy control as well as the Youth Care sample (Cronbach’s Alpha = .94)

*How I Think Questionnaire.* The How I Think Questionnaire (HIT-Q) was developed by Barriga and colleagues (2001), an instrument to measure self-serving cognitive distortions. This self-report questionnaire includes 54 items, with responding variation on a 6-point Likert-scale, varying from totally agree to totally disagree. Of these items 39 can be clustered in the four types of cognitive distortions. Sample items for each type of cognitive distortion are, for example, ‘If I really want something, it doesn’t matter how I get it.’ for the *Self-Centered* primary cognitive distortions, ‘It is okay to tell a lie if someone is dumb enough to fall for it.’ for the categorie *Blaming Others,* ‘Everybody lies, it’s no big deal.’ for *Minimizing/Mislabeling,* and ‘It’s no use trying to stay out of fights.’ for *Assuming the Worst.* Each item refers to one of the four antisocial behavioral categories of the DSM-IV (American Psychiatric Association, 1994), namely, opposition-defiance, physical aggression, lying, and stealing. The first two categories form the overt scale, which refers to direct confrontation with the victim, opposed to the last two categories, forming the covert scale. Of the remaining 15 items, 8 are anomalous responding items (‘I have tried to get even with someone’), and 7 are positive fillers (‘I am generous with my friends’) to disguise the other 39 key questions. The overall Cronbach’s Alpha of the Dutch version HIT-Q was found to range from .90 to .94 (Nas, Brugman, & Koops, 2008). In the current sample of healthy controls, Cronbach’s Alpha was .92, and in the Youth Care sample Cronbach’s Alpha was .94. The items of each of
the four categories of the HIT-Q was summed up, and the mean of this score formed the total score for that category.

Procedure

All participants were placed in a quiet room with the experimenter. They were asked to sign informed consent to give permission to use their data for the current study, which would be anonymous. Participation was voluntary and not rewarded. The tests used for this study all consisted of self-report questionnaires, which were administered following the standard procedure of the tests.

Design

The current study will use SPSS to perform statistical analysis.

Sample 1. Independent t-tests and correlational analysis are performed to examine effects of gender and age on moral disengagement and Dark Triad personality traits for the total sample. To examine differences between the Youth Care versus healthy control group controlling for age and gender, an ANCOVA was performed with moral disengagement as dependent variable to examine if Youth Care participant use more moral disengagement mechanisms than the healthy controls. To examine differences in Dark Triad personality traits between the groups a MANCOVA was performed with the Dirty Dozen subscales as depended variables. To examine the relationship between MD and the Dark Triad personality traits correlational analysis were performed for each group. Finally, a linear regression analysis was conducted with moral disengagement as its dependent variable and the Dirty Dozen subscales as predictor to investigate if Dark Triad personality traits predict the use of moral disengagement.

Sample 2. Independent t-tests and correlational analysis are performed to examine effects of gender and age on moral disengagement and Dark Triad personality traits for the total sample. Then, an ANCOVA was performed with moral disengagement as the dependent
variable and gender as covariate to examine differences between the groups. Next, an MANCOVA was performed to examine the difference between the Youth Care participants and the healthy controls for the Dark Triad personality traits, with gender as covariate. Furthermore, a bivariate correlation was performed with moral disengagement, the three Dirty Dozen scales, and self-serving cognitive distortions for both groups separately. Finally, a linear regression analysis will be performed with moral disengagement as its dependent variable and the Dirty Dozen subscales and the self-serving cognitive distortions as predictors to see which of the two is the strongest predictor for the use of moral disengagement.

Results

Sample 1. Measures of skewness and kurtosis showed that the continuous variables – Moral disengagement (MD), Dirty Dozen Machiavellianism (DD-M), Dirty Dozen Psychopathy (DD-P), and Dirty Dozen Narcissism (DD-N) – were normally distributed. There were no outliers that needed to be removed. MD had 16 missing values and the three scales of the DD-Y had 14. Because analysis showed that the conditions of normality were satisfied, all research questions could be answered through statistical analysis. An overview of the descriptive statistics are given in Table 1.

Table 1. 
Descriptive Statistics of continuous variables.

<table>
<thead>
<tr>
<th></th>
<th>N_{Valid}</th>
<th>N_{Missing}</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral Disengagement</td>
<td>324</td>
<td>16</td>
<td>1.87</td>
<td>.51</td>
<td>.55</td>
<td>.54</td>
</tr>
<tr>
<td>DirtyDozen Machiavellian</td>
<td>326</td>
<td>14</td>
<td>11.02</td>
<td>6.60</td>
<td>.90</td>
<td>.19</td>
</tr>
<tr>
<td>DirtyDozen Psychopathy</td>
<td>326</td>
<td>14</td>
<td>11.40</td>
<td>6.55</td>
<td>.89</td>
<td>.22</td>
</tr>
<tr>
<td>DirtyDozen Narcissism</td>
<td>326</td>
<td>14</td>
<td>14.35</td>
<td>8.02</td>
<td>.40</td>
<td>-.79</td>
</tr>
</tbody>
</table>

Concerning the first research question, an independent samples t-test was performed to see if boys scored higher than girls on MD and DD-Y. Significant differences between the mean scores of the genders were found for MD as well as on DD-Y, with boys scoring higher
than girls on all instruments (all $t$’s > 3.36 and all $p$’s < .001). See table 2 for Mean and SD scores.

Table 2.

<table>
<thead>
<tr>
<th></th>
<th>Boys ($n = 180$)</th>
<th>Girls ($n = 146$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral Disengagement</td>
<td>M 1.97 SD .54</td>
<td>M 1.72 SD .42</td>
</tr>
<tr>
<td>DD-Machiavellianism</td>
<td>12.71 6.93</td>
<td>8.94 5.53</td>
</tr>
<tr>
<td>DD-Psychopathy</td>
<td>13.06 6.93</td>
<td>9.35 5.40</td>
</tr>
<tr>
<td>DD-Narcissism</td>
<td>15.68 7.91</td>
<td>12.72 7.89</td>
</tr>
</tbody>
</table>

Secondly, an ANCOVA with MD as dependent variable and age and gender as covariates, showed that there was a significant effect of group, with Youth Care participants scoring significantly higher than healthy controls. Mean MD-scores for healthy controls were $1.83 (SD = .49)$ while youth care juveniles scored $2.16 (SD = .56) [F(1,311) = 9.18; p < .05]$. Furthermore, there was a significant effect of age. A correlational analysis of MD with age was positive and significant ($r = .13; p < .05$).

Third, a MANCOVA with DD-subscases as dependent variable and age and gender as covariates, showed that for all subscales there was a significant effect of gender [$F(1,313) = 12.59; p < .001$], an effect of age for the DD-M [$F(1, 313) = 6.76; p < .05$] and DD-N [$F(1,313) = 10.20; p < .05$] subscales, and a significant effect of group for the DD-N subscale [$F(1,313) = 6.17; p < .05$]. The effect of gender can be seen in table 2 and shows that boys score significantly higher on all subscales of de DD-Y. Effect of age was examined with follow-up correlational analysis showing that there was a significant positive relation for all three variables [DD-P ($r = .11$); DD-N ($r = .13$) with $p < .05$; and DD-M ($r = .18$) with $p < .01$]. The significant group effect was due to the healthy control participants scoring significantly higher on the DD-N subscale. For the other two DD-Y subscales there were no significant differences between the groups. See table 3 for the mean and SD scores between the groups.
Table 3
Mean and standard deviations of Youth care participants versus healthy controls for Dirty Dozen (DD) subscales Machiavellianism, Psychopathy, and Narcissism.

<table>
<thead>
<tr>
<th></th>
<th>Youth Care participants (n = 35)</th>
<th>Healthy controls (n = 291)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>DD-Machiavellianism</td>
<td>12.86</td>
<td>6.80</td>
</tr>
<tr>
<td>DD-Psychopathy</td>
<td>12.46</td>
<td>5.87</td>
</tr>
<tr>
<td>DD-Narcissism</td>
<td>11.23</td>
<td>6.88</td>
</tr>
</tbody>
</table>

The fourth analysis was a correlational analysis, performed for each group separately, examining the relationship between MD and the DD-sub scales. As can be seen from table 4, for both groups MD was significantly related to DD-P and DD-N, and for the healthy control group also significantly related to DD-M. In the healthy control group the relations are stronger and of higher significance than in the Youth Care participants group, which might be due to the larger sample size.

Table 4
Correlational analysis between moral disengagement and the Dirty Dozen (DD) subscales Machiavellianism, Psychopathy, and Narcissism.

<table>
<thead>
<tr>
<th>Measure</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
</tr>
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<tbody>
<tr>
<td>Youth Care participants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 25)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1. Moral Disengagement</td>
<td>—</td>
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<td>—</td>
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</tr>
<tr>
<td>2. DD-Machiavellianism</td>
<td>.22</td>
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<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3. DD-Psychopathy</td>
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<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4. DD-Narcissism</td>
<td>.46*</td>
<td>.40*</td>
<td>.43</td>
<td>—</td>
</tr>
<tr>
<td>Healthy control group</td>
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<td>1. Moral Disengagement</td>
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<td>—</td>
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<tr>
<td>2. DD-Machiavellianism</td>
<td>.47**</td>
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<td>—</td>
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<td>.65**</td>
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<td>4. DD-Narcissism</td>
<td>.33**</td>
<td>.63**</td>
<td>.45**</td>
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</tr>
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</table>

Note: * = p < .05; ** = p < .01

Finally, the fifth analysis consisted of a linear regression analysis with MD as its dependent variable and the three DD-Y subscales as predictors, controlling for age and gender in the first step. This showed that besides gender, DD-M is a significant predictor for the use of moral disengagement. See table 5. The model was significant and explained 22% of the variance.
Table 5
Linear regression analysis with moral disengagement as dependent variable and the Dirty Dozen (DD) subscales Machiavellianism, Psychopathy, and Narcissism as predictors, controlled for age and gender.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<tr>
<td>Gender</td>
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<td>.06</td>
<td>-.24**</td>
<td>-4.40</td>
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</table>

Step 1 Model F(1,311) = 11.96, p < .001
Adjusted R² = .07

<table>
<thead>
<tr>
<th>Step 2</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<th>t</th>
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<tr>
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<td>Gender</td>
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<td>.05</td>
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<tr>
<td>DD-Machiavellianism</td>
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<td>.01</td>
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<td>DD-Psychopathy</td>
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<td>.01</td>
<td>.10</td>
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<td>DD-Narcissism</td>
<td>.01</td>
<td>.01</td>
<td>.05</td>
<td>.863</td>
</tr>
</tbody>
</table>

Step 2 Model F(1,311) = 18.64, p < .001
Adjusted R² = .22

Note: * = p < .05; ** = p < .01

Sample 2. In the second sample, again a test for skewness and kurtosis was performed, showing that the variables – MD, DD-M, DD-P, DD-N, and How I Think Self-Centered (HIT-SC), Blaming Others (HIT-BO), Minimizing/Mislabeling (HIT-MM), and Assuming the Worst (HIT-AW) – were normally distributed. There were no outliers that needed to be removed. One participant did not fill in the questionnaires, thus all variables had 1 missing. Because analysis showed that the conditions of normality were satisfied, all research question could be answered through statistical analysis. An overview of the descriptive statistics are given in Table 6.
First, an independent samples t-test was performed with all the questionnaire outcomes as test variables and gender as grouping variable. This showed that for all the variables, boys scored significantly higher than girls (see table 7 for Mean and SD scores), except for DD-N (all t’s > 1.57, p’s < .05).

To examine the effect of age, a correlational analysis with all the questionnaire outcome variables, showed only positive correlations with age. Nevertheless, only DD-M and DD-P had a significant positive correlation [DD-M (r = .22); DD-P (r = .22) with p < .05]. All other correlations were not significant. Since the two groups did not differ significantly
regarding age (see method section), it is not necessary to control for age in the analysis of this sample.

For the second research question, an ANCOVA was performed with moral disengagement as the dependent variable and gender as covariate. This showed that Youth Care participants had a higher mean MD-score \((M = 2.17; SD = .56)\) than the healthy control group \((M = 1.85; SD = .42)\) \([F(1,117) = 7.51; p < .01]\). Controlled for gender, the difference between the groups was still significant for the moral disengagement questionnaire \([F (1,117) = 15.54; p < .01]\).

After that, for the third analysis a MANCOVA was performed to examine the difference between the Youth Care participants and the healthy controls for the Dark Triad personality traits, with gender as covariate. The results indicated that there were no significant effects of gender. For group, Youth Care participants scored higher than the healthy controls on DD-M \([F(1,117) = .31; p < .01]\) and DD-P \([F (1,117) = .63; p < .01]\). For the DD-N scale, is was the opposite. Youth Care participants scored lower than the healthy controls \([F(1,117) = 17.16; p < .01]\). For Mean and SD scores, see table 8. Controlled for gender, there were significant differences between the two groups for DD-P \([F(1,117) = 10.50; p < .01]\), and DD-N \([F(1,117) = 4.59; p < .05]\), but not for DD-M.

Table 8

<table>
<thead>
<tr>
<th></th>
<th>Youth Care participants ((n = 35))</th>
<th>Healthy controls ((n = 82))</th>
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</thead>
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<tr>
<td></td>
<td>(M) (SD)</td>
<td>(M) (SD)</td>
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<tr>
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<tr>
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<td>12.46 5.87</td>
<td>10.60 5.85</td>
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<tr>
<td>DD-Narcissism</td>
<td>11.23 6.88</td>
<td>16.93 8.00</td>
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</table>

Next, a bivariate correlation, was performed with moral disengagement, the three Dirty Dozen scales, as well as self-serving cognitive distortions, for each group separately, as can be seen in table 9. This shows that moral disengagement correlates positively and
The Dark Triad, moral disengagement and cognitive distortions

significantly with all variables in both groups, except for DD-M in the Youth Care group.

Moral disengagement correlates especially strong with the four HIT-subscases.

Table 9

<table>
<thead>
<tr>
<th>Measure</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
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<th>5.</th>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td>3. DD-P</td>
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<td>.37</td>
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<td>4. DD-N</td>
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<td>.40*</td>
<td>.43*</td>
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<td></td>
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<tr>
<td>5. HIT-SC</td>
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<td>.25</td>
<td>.50**</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. HIT-BO</td>
<td>.78**</td>
<td>.20</td>
<td>.50**</td>
<td>.35</td>
<td>.84**</td>
<td></td>
<td></td>
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<tr>
<td>7. HIT-MM</td>
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<td>.03</td>
<td>.46*</td>
<td>.43*</td>
<td>.87**</td>
<td>.84**</td>
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<td>8. HIT-AW</td>
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<td>.50**</td>
<td>.33</td>
<td>.83**</td>
<td>.84**</td>
<td>.85**</td>
<td></td>
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<tr>
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<tr>
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<td>.58**</td>
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<tr>
<td>4. DD-N</td>
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<td>.13</td>
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<td>—</td>
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<td></td>
<td></td>
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<tr>
<td>5. HIT-SC</td>
<td>.82**</td>
<td>.40**</td>
<td>.48**</td>
<td>.22*</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. HIT-BO</td>
<td>.76**</td>
<td>.42**</td>
<td>.52**</td>
<td>.21</td>
<td>.75**</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>7. HIT-MM</td>
<td>.82**</td>
<td>.42**</td>
<td>.44**</td>
<td>.20</td>
<td>.80**</td>
<td>.76**</td>
<td>—</td>
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</tr>
<tr>
<td>8. HIT-AW</td>
<td>.78**</td>
<td>.45**</td>
<td>.52**</td>
<td>.15</td>
<td>.83**</td>
<td>.78**</td>
<td>.85**</td>
<td></td>
</tr>
</tbody>
</table>

Note: * = p < .05; ** = p < .01

Finally, a linear regression analysis with MD as its dependent variable and the three DD-Y subscales and the four HIT subscales as predictors was performed. This showed no significant outcomes for the DD-Y subscales. Regarding the HIT subscales, HIT-SC and HIT-MM were significant predictors, HIT-BO and HIT-AW were not. See table 10. The model was significant and explained 78% of the variance.

Table 10

<table>
<thead>
<tr>
<th>Step 1</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
<th>t</th>
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<td>14.54</td>
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Discussion

The purpose of this study was to examine the relationship between antisocial personality traits and the use of the cognitive neutralization techniques of moral disengagement and self-serving cognitive distortions in adolescents. The study focused on the difference in certain variables either in Youth Care participants as well as in healthy youth controls. Those variables were Dark Triad personality traits, moral disengagement and self-serving cognitive distortions.

Sample 1.

The first research question was if boys differed from girls in Dark Triad personality traits and the use of moral disengagement. Analysis revealed that boys scored significantly higher than girls on these variables, as it was expected. This replicates previous findings that boys are more prone to antisocial personality traits than girls (Eme, 1992; Gualtieri & Hicks, 1985; Veenstra, Oldehinkel, & De Winter, 2006; Shaw et al., 1998), and they are also more
likely to use moral disengagement than girls are (Bandura et al., 1996; Caprara, et al., 2007; Feingold, 1994; Paciello, et al., 2008).

The second research question concerned the difference between Youth Care participants on one hand, and the healthy control group on the other concerning moral disengagement. This showed that there was a significant difference between the groups for MD, and Youth Care participants scored higher than the healthy controls as it was expected.

The third hypothesis was that Youth Care participants would score higher on the Dirty Dozen questionnaire, because they engage in much more detrimental behavior than the healthy control group, as problem behavior is often the main reason for the involuntary stay in a Youth Care facility. The finding was that the groups only differed significantly from each other on the trait Narcissism, on which the Youth Care participants actually scored lower. This contradicts the hypothesis that Youth Care participants would score higher on all three scales of the Dirty Dozen questionnaire. This outcome is interesting, because it was expected that antisocial youth would score higher on Narcissism. First, because research showed it to be a main part of antisocial personality traits (Hart & Hare, 1998). Second, by cognitively disengaging from injurious conduct one would feel good about itself, regardless of his or her behavior (Bandura et al., 1996; Caprara et al., 2014). An explanation could be that the Youth Care participants were not that antisocial. Clearly, they have engaged in antisocial behavior to end up in a Youth Care facility, but it is not necessarily that all Youth Care participants are criminals in progress. After all, the level of antisocial behavior was not measured and is thus unknown. Another explanation could be that some studies have found that there is a significant relation between Machiavellianism and Psychopathy, but that both traits are un- or even negatively related to Narcissism (Muris et al., 2013; Paulhus & Williams, 2002). This finding could also be due to the small sample size of Youth Care participants (n = 35).
Next, the fourth hypothesis was that Youth Care youngsters would be more morally disengaged and have more Dark Triad personality traits than the healthy control group. This showed that the relation between the use of moral disengagement and Dark Triad personality traits was stronger in the healthy control group than in the Youth Care group. This contradicts the hypothesis, but it might be due to a much larger sample size, being 25 for the Youth Care group and 290 for the healthy control group. Therefore this finding should be replicated with even sample sizes.

Finally, the fifth analysis showed that only the Dirty Dozen personality trait that concerns Machiavellianism is a significant predictor for the use of moral disengagement. It might be that for Machiavellianism—exemplified as the tendency to deceive and manipulate others for personal gain—the use of moral disengagement is of more importance than for the other traits, in order to justify ones acts of deceiving and manipulating.

Sample 2.

The first hypothesis was that there would be a difference in age and sex. Results showed that boys scored higher than girls on MD as well as on the three DD-Y scales and the four HIT scales. However, only the difference for DD-N was not significant. Apparently, going from a large sample size \( n = 340 \) to a smaller one \( n = 118 \), can make this difference. Then, a correlation analysis was performed with all the questionnaires and age as variables. All relations were positive, but only DD-M and DD-P were significant. This contradicts the findings in Sample 1 and previous research that Dark Triad personality traits and the use of cognitive neutralization techniques increase with age. Perhaps, this could be explained because Sample 2 comprised less participants than Sample 1, which might influence the results.

The second hypothesis was that healthy youth controls would use less moral disengagement than the Youth Care participants, because their behavior is less problematic. Results showed that Youth Care participants scored significantly higher than healthy controls
on MD, as it was expected. Also when controlled for gender, the difference was significant, as this was also hypothesized.

The third research question was that Youth Care youngsters would have more Dark Triad personality traits than the healthy control group. It was demonstrated that Youth Care participants scored significantly higher on DD-M and DD-P than healthy controls, but lower on DD-N. The hypothesis is thus partially accepted. It could be that, concerning the trait Narcissism, the Youth Care participants only act as if they are confident about themselves, but deep down are not happy with their behavior and lifestyle. Or that they are not confident or filled with self-esteem at all, which could also lead to externalizing behavior (Donnellan et al., 2005). Controlled for gender, there were still significant differences for DD-P and DD-N, as expected.

Fourth, it was hypothesized that Youth Care youngsters are more morally disengaged and have more Dark Triad personality traits than the healthy controls. MD had positive relationships with all three scales of the DD-Y, but again, only the ones with DD-M and DD-P were significant. This is interesting, because moral disengagement was expected to be the reason for Youth Care participants to feel good about themselves and thus be narcissistic, even though they would behave immoral frequently. MD did have a significant and positive relation with all four scales of the HIT, with high correlation coefficients. As it was expected, the two measurements are strongly related to one another. This is an interesting finding, because this could lead to a uniform measurement of those cognitive neutralization techniques, as suggested in other literature (Ribaud & Eisner, 2010; Wikström, 2004; Wikström & Treiber, 2009). Perhaps, the difference between moral disengagement and self-serving cognitive distortions is just a matter of labeling the specific concept, although further investigation is recommended.
The last analysis was performed for the fifth and sixth hypothesis that there is a strong relation between moral disengagement and self-serving cognitive distortions in both groups. It was expected that of both Dark Triad personality traits as well as self-serving cognitive distortions, the use of cognitive distortions will be the strongest predictor for the use of moral disengagement. The analysis showed that two subscales of the HIT were of significance, and none of the DD-Y subscales was. The subscales Self-Centered and Minimalizing/Mislabeling seem to be predictors for the use of moral disengagement, which might imply that those two come closest to the concept of moral disengagement. Perhaps, these constructs overlap and measure the same type of cognitive neutralization technique.

To summarize, the results of the current study showed that boys are more prone to antisocial behavior and moral disengagement than girls. Also, Youth Care participants score higher on moral disengagement as well as on antisocial personality traits than healthy controls, except for the Narcissism scale of the DD-Y. Furthermore, moral disengagement and Dark Triad personality traits increase with age. In the second sample, once again more boys scored higher than girls on all variables, except for narcissism. Youth Care participants scored even lower than healthy controls on this scale of the DD-Y. Again, the relation of MD with DD-M and DD-P was significant, apart from Narcissism. Except for the lower score on the Narcissism scale for Youth Care youngsters, all findings are in line with previous research and the expectations. It might be that the difference for Narcissism is due to the fact that Youth Care participants are not filled with grandiosity and self-esteem as it was expected. However, there is little consensus in literature findings about violence being driven by high or low self-esteem and the role of narcissism in this. The relation between the concepts of self-esteem and aggressive behavior remains ambiguous (Walker & Bright, 2009). For a long time is has been assumed that low self-esteem provides a basis for numerous problematic behaviors, including violence. It is theorized that individuals suffering from low self-esteem
externalize blame for their problems and failures by using aggression and violence, in order to protect themselves from feelings of humiliation, inferiority and inadequacy (Ostrowsky, 2010). In contrast, high self-esteem is also found to be associated to aggressive behavior. It is more likely for someone with high self-esteem and a positive self-concept to perceive threats as unjustified and thus as a reason to use aggression, than for some with low self-esteem and a negative self-concept. In addition, the tendency to restore this damage done to the self-view is more likely for high self-esteem individuals, than for someone with low self-esteem because they probably believe there is little to restore (Kernis, Grannemann, & Barclay, 1989). A literature review on the relation of aggressive behavior with self-esteem by Ostrowsky (2010) shows that there are numerous plausible explanations for either high self-esteem and low self-esteem as basis for aggressive or violent behavior. It seems that the hardest part in understanding this psychological mechanism, lies in the conceptualization of all constructs that are involved in it. To conclude, since there is no unified theory about the relation between narcissism and problem behavior, it seems that the current finding concerning narcissism is in line with only some of the theoretical frameworks that exists around this concept. In addition, there have been studies reporting that Narcissism not always fits in with the Dark Triad as Machiavellianism and Psychopathy does. Maybe Narcissism is only a trait for a specific subgroup of people with antisocial personality traits but not all people with an antisocial personality. Indeed, no antisocial personality disorder is identical as it is a dimensional concept. Another explanation could be that the participants recruited from Youth Care facilities were to a point delinquent, otherwise they would not have been there, but it is not necessary for all of them to have committed serious crimes. These are youngsters that have been placed out of their homes because they have had fights with their parents, used or were addicted to drugs, had the wrong social network, tended to steal or commit other minor transgressions. Often these children come from broken families with parental skill
shortcomings. Therefore, it was expected that the Youth Care youngsters from this study would score higher on antisocial behavior and moral disengagement, but it is not necessarily that they already are true criminals or psychopaths.

Overall, both samples of this study show that boys score higher than girls on the use of moral disengagement as well as having Dark Triad personality traits. So gender is of significant difference. Also, there is a relation with age, the older the individual is, the more use he or she will make of moral disengagement and the more Dark Triad personality traits are probably already developed. Then, Youth Care participants use more moral disengagement than healthy youth controls, which could be a focus in treatment. On the other hand, Youth Care participants are less narcissistic than healthy youth controls, which is found in both samples. Nevertheless, the current results have to be seen in the light of some limitations. For instance, the sample size of the Youth Care participants was quite small, although a large total sample size was provided. This could have led to less accurate results than with a larger group of Youth Care participants. Also, from Youth Care participants, the degree of delinquency was not measured. Perhaps, this could have explained why narcissism formed such an exception compared to the other constructs. Then there is the use of self-report questionnaires, which have its known benefits and disadvantages. Furthermore, the results only cover participants from Noord-Brabant, a southern province of the Netherlands. This might have implications for generalizability, as it is a small part of a western country. However, differences in age and gender were properly represented and distributed across the sample.

An interesting finding of this study is the overlap of the measurements of moral disengagement and cognitive distortions. The results show that the HIT subscales Self-Centered and Minimizing/Mislabelling are the strongest predictors for the use of moral disengagement. Apparently, this overlap means that these constructs are labelled differently in
literature, but actually cover the same cognitive neutralization technique. Otherwise, it is also plausible that the difference between moral disengagement and self-serving cognitive distortions might be more of a ‘trait’ versus ‘state’. Thus, that moral disengagement concerns more of a moral stage such as Gibbs (2013) described, a form of basal reasoning or trait that is intertwined in ones thinking pattern and the individual therefore acts upon it. This opposed to more of a state of mind with self-serving cognitive distortions, that one can use to cognitively ease its consciousness. In addition, the Youth Care participants score significantly higher on the questionnaires for cognitive neutralization techniques than the individuals of the healthy control group do. This could implicate that these neutralization techniques have a mediation effect for antisocial behavior, as found in previous research (Hyde et al., 2010). Antisocial behavior might be maintained or even nourished by the use of cognitive neutralization techniques, perhaps with the consequence of an antisocial personality disorder. Future research is needed, but this offers potential in understanding the intrapsychic mechanisms that are fundamental for the development of antisocial behavior, perhaps even its treatment. On the long term, research on cognitive neutralization techniques might even be helpful for identifying subgroups of children and adolescents with antisocial behavior, for example to the degree of morally disengaging from their conduct. By identifying those groups, interventions could be focused on cognitive attitudes and behavioral symptoms.
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