



Dark Triad and schadenfreude: Mediating role of moral disengagement and relational aggression

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ABSTRACT

The current study tested mediating roles of moral disengagement and relational aggression between Dark Triad and schadenfreude. 309 adults completed online survey comprising Short Dark Triad, the Moral Disengagement, Relational Aggression in Friendships scales and author-generated measure of expressed schadenfreude. Higher levels of psychopathy, narcissism and Machiavellianism were associated with higher levels of schadenfreude, moral disengagement and relational aggression. Moral disengagement and relational aggression mediated the effects of psychopathy, narcissism and Machiavellianism on expressed schadenfreude. The findings suggest that individuals who have “dark” personalities are likely disengage morally and have tendency of relational aggression expressed more schadenfreude. Findings and implication of future research are discussed.

“Calamities are of two kinds: misfortunes to ourselves, and good fortune to others.”

Ambrose Bierce pp. 31, Bierce, A. (2001). *The Unabridged Devil's Dictionary*. University of Georgia Press

1. Introduction

Dark Triad personality traits namely narcissism, Machiavellianism and psychopathy have a shared tendency in terms of aggressiveness, emotional coldness (Paulhus & Williams, 2002). Number of studies have examined the Dark Triad traits in terms of antisocial behaviors (Kerig & Stellwagen, 2010), criminal activities (Jakobwitz & Egan, 2006), relational aggression (Abell & Brewer, 2014) and schadenfreude (Porter, Bhanwer, Woodworth, & Black, 2014). It can be considered that Dark Triad traits are not only related with the aggressive behaviors but also with the dark emotions such as schadenfreude (James, Kavanagh, Jonason, Chonody, & Scrutton, 2014). Someone's pain causes sympathy for those who are exposed to this situation (Eisenberg, Fabes, & Spinrad, 2006). However, at times the pain or sorrow of someone else may cause the individual who has witnessed it to enjoy this situation. It is indicated by the German word schadenfreude (Feather, Wenzel, & McKee, 2013).

Number of studies examined schadenfreude in terms of resentment and deservingness (Feather & Nairn, 2005), prosocial behaviors and self-esteem (Erzi, 2019; Greitemeyer, Osswald, & Brauer, 2010) and only few studies investigated the relationship between Dark Triad and

schadenfreude (James et al., 2014; Porter et al., 2014). Lack of empathy is not only related with Dark Triad traits but also related with schadenfreude (Greitemeyer et al., 2010). Also those who are high on the Dark Triad traits may give priority to their own needs to achieve their goals (Abell & Brewer, 2018) and likely to view loss of others as their personal gain (Smith, Powell, Combs, and Schurtz (2009). Form of identification with the nation is also related with schadenfreude towards immigrants, people who glorify their nation feel more schadenfreude (Berndsen, Thomas, McGarty, Bliuc, & Hendres, 2017).

Dark Triad personality traits also related with moral development (Arvan, 2013; Campbell et al., 2009), moral values (Jonason, Strosser, Kroll, Duineveld, & Baruffi, 2015). According to Bandura's (1999) social cognitive theory of moral agency individuals can protect themselves from harming conducts with the help of the internalized moral standards or values. Moreover, committing harmful conduct has also external and internal consequences. To get rid of this internal consequences, individuals try to rationalize their harmful or violating acts through psychological process which is called moral disengagement (Bandura, Barbaranelli, Caprara & Pastorelli, 1996). Few studies have showed that Dark Triad and moral disengagement is related (Egan, Hughes & Palmer, 2015; Moore, Detert, Klebe Treviño, Baker & Mayer, 2012). Justification of immoral or violent acts is also characterized by psychopathy and Machiavellianism, since they both include protecting own benefits and maximize them notwithstanding the negative consequences for others (Paulhus & Williams, 2002).

According to Bandura et al. (1996) distortion of consequences by

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disregarding or minimizing and dehumanization is a mechanism of moral disengagement, so it has been related with aggressive behaviors, bullying in middle childhood (Lansford et al., 2002) and in late adolescence (Paciello, Fida, Tramontano, Lupinetti, & Caprara, 2008). Individuals who have this tendency are less likely to be uncomfortable with feelings of guilt over harmful behaviors so it is thought that they could be more likely to feel *schadenfreude*. Although *schadenfreude* does not seem to be similar to those harmful acts, it can be regarded as the consequence in terms of Dark Triad (James et al., 2014; Porter et al., 2014) and dehumanization (Berndsen et al., 2017). So it is thought that individuals who have dark traits are likely to disengage morally and they will be more prone to feel *schadenfreude*.

Moral disengagement is related with aggressive and delinquent behaviors, bullying and violent acts (Gini, Pozzoli & Bussey, 2015; Obermann, 2011; Sijtsema, Garofalo, Jansen, & Klimstra, 2019). Besides physical and direct aggression, a few number of studies examined the relational aggression (Kokkinos, Voulgaridou, Mandrali, & Parousidou, 2016a; Kokkinos et al., 2016b). Relational aggression is defined as a kind of aggressive behavior that includes harming others by damaging their social status, spreading rumors and excluding peers (Crick & Grotpeter, 1995). For individuals who engage in relational aggression, the concept of moral disengagement can be advantageous because they have the chance to avoid feelings of guilt, remorse when their behaviors are not appropriate for their moral standards. Kokkinos et al. (2016) found that moral disengagement mediated the relationship between personality factors and relational aggression, also between individual tendencies toward aggression and violent acts (Caprara et al., 2014). Individual tendencies such as Dark Triad personality factors are also found to be related with relational aggression (Bacon & Regan, 2016; Knight, 2016; Schmeelk, Sylvers & Lilienfeld, 2008). Although relational aggression was examined generally as the consequences of dark triad personality and moral disengagement, Eliason (2017) found that relationship between neuroticism and attachment between couples mediated through relational aggression; use of relational aggression tactics was also related with competition (Abell & Brewer, 2014). So relational aggression is considered as not only the consequence of dark triad and moral disengagement but also a facilitator for the emergence of *schadenfreude* feelings.

1.1. Current study

Given the trends found in previous work, a model which examines mediating role of moral disengagement and relational aggression between the Dark Triad traits and *schadenfreude* were proposed. A lot of number of studies examined the mediating role of moral disengagement but in this study relational aggression considered as a tendency which will be related expression of *schadenfreude* were examined. Serial mediation model was used. It is expected that individuals who have Dark Triad traits will be likely to disengage themselves morally so they will get higher scores on relational aggression and this will result in increasing *schadenfreude* towards others.

Schadenfreude were measured as a state feeling by using scenarios. Majority of the studies measures *schadenfreude* with scenarios (Feather et al., 2013; James et al., 2014). two scenarios which include different settings (e. g. academic vs social context) were used because it is thought to be related with their daily-life since the majority of our sample consist of young adults. While number of studies which examined the Dark Triad use a composite score, narcissism, Machiavellianism and psychopathy were examined separately in the serial mediation model. Since previous work found relationships among *schadenfreude*, Machiavellianism and psychopathy (Abell & Brewer, 2014; Porter et al., 2014) some of them were not able to find with narcissism (James et al., 2014). It is expected that psychopathy, Machiavellianism and narcissism to be positive predictors of *schadenfreude*, and this relationship will be mediated through moral disengagement and relational aggression.

2. Method

2.1. Participants and procedure

Men ($N = 37$) and women ($N = 272$) and were recruited via a research website ($N = 60$) and convenient sampled from undergraduate students ($N = 249$). Men (Mage = 23.72, SD = 5.94) and women (Mage = 22.33, SD = 4.76) were aged 18–38 and 18–39 years respectively. Participants completed questionnaires voluntarily via online. In the beginning of the survey, informed consent were given. Student sample got course credit for their participation. All the participants answered the all questions since the online form had required questions to finish the survey, in accordingly there were no missing values. This study was approved by University Ethics Committee (decision number: 2019/05–05). The minimum number of participants required was determined by an a priori power analysis (GPower, Faul et al., 1992), with an $\alpha = 0.05$, power = 0.80 and small effect size ($f^2 = 0.043$), the projected sample size needed for “Linear Multiple Regression Fixed Model: R^2 increase” is approximately 304 for this analysis. So, total number 309 participants were included in the data analysis. Post hoc power analysis was performed with $\alpha = 0.05$, with small effect size ($f^2 = 0.05$) and sample size of 309, power was revealed as 0.87 so it can be considered as adequate power.

2.2. Measures

2.2.1. The dark triad

Dark Triad was measured by Short Dark Triad, 27 item self-report measure of the Dark Triad with 9 items for per scale (Jones & Paulhus, 2014). This scale had been validated in Turkish sample by Özsoy et al. (2017), and the Turkish version was used. Participants were asked to indicate their level of agreement (1 = strongly disagree; 5 = strongly agree). The items of each subscale showed adequate internal consistency ($\alpha_{\text{narcissism}} = 0.63$, $\alpha_{\text{Machiavellianism}} = 0.78$, $\alpha_{\text{psychopathy}} = 0.67$), total scale showed ($\alpha = 0.82$). Higher scores indicate higher narcissism, Machiavellianism and psychopathy.

2.2.2. Schadenfreude

In the present study two different scenarios were used. Since majority of the sample was consisted of young adults, these scenarios were thought to be relevant with their daily life. In similar vein, Nagel (2010) also used different scenarios in terms of context for measuring *schadenfreude*.

Schadenfreude in Social Context: *You have a meeting with your group of friends. Your classmate who doesn't know your friends to meet, wants to come with you. During the meeting, your classmate fuses with your friends very quickly, talks to them more than you do, interacts with them. After a while you feel they forgot your presence. You see that your classmate is pleased with the condition, but also drinking a lot of alcohol and you warn your classmate about it. But your classmate is making fun of you in front of your friends. After a while, your classmate's stomach starts to nauseous and it resulted in vomiting on the table before reaching the toilet.*

Schadenfreude in Academic Context: *You have a classmate who has an equal GPA in your class. The grade you will take in the last assignment of the semester can put one of you forward. The final assignment of the semester is a presentation with you. You both work equally and prepare for the presentation. The day before the presentation, your classmate says that she/he will do the presentation better than you, because he/she is a more successful student than you and also he/she makes fun of you. On the day of the presentation, your teacher evaluating your performance gives you AA while gives CC to your classmate.*

Participants were asked to rate (1 = strongly disagree; 7 = strongly agree to extent to which they amused, happy, satisfied and pleased for each scenario. Responses showed excellent internal consistency (Social: $\alpha = 0.94$, $M = 10.19$, $SD = 5.97$; Academic: $\alpha = 0.96$, $M = 17.09$, $SD = 7.75$). So higher scores indicate higher *schadenfreude*. As a

manipulation check, variables related to schadenfreude in previous work were used. It is expected that expressed schadenfreude should be significantly correlated with lower levels of sympathy and higher levels of deservingness. Sympathy towards the target was measured with 2 items by asking participants to rate the extent to how much they felt sorry and deservingness towards the target were measured with 1 item by asking participants to rate the extent which they thought the target get what he/she deserved. In previous work, those measures were used and found to be reliable in Turkish population (Erzi, 2019). Sympathy items for the scenarios showed good consistency (Social: $\alpha=0.80$, $M = 8.11$, $SD=3.01$; Academic: $\alpha=0.84$ $M = 5.97$, $SD=3.10$). Deservingness items for the scenarios showed excellent consistency (Social: $\alpha=0.85$, $M = 2.75$, $SD=1.79$; Academic: $\alpha=0.91$, $M = 3.82$, $SD=2.11$). In the study of van Dijk, Ouwerkerk, Goslinga, and Nieweg (2005) Cronbach alpha values of schadenfreude, sympathy and deservingness measures were 0.87, 0.85 and 0.94 respectively. So reliability of those measures in this study can be considered as acceptable. Moreover, in social and academic context scenarios sympathy showed significant negative correlation with schadenfreude respectively ($r = -0.40$ $p=.00$), ($r = -0.34$ $p=.00$) while deservingness showed significant positive correlation ($r = 0.68$ $p=.00$), ($r = 0.67$ $p=.00$).

2.2.3. Moral disengagement

It was measured using 7-item Moral Disengagement Scale (Moore, Detert, Trevino, Baker & ve Mayer, 2011). This scale had been validated in Turkish sample by Erbaş and Perçin-Şahine (2017). Participants were asked to indicate their level of agreement (1=strongly disagree; 5=strongly agree). The items of the scale showed adequate internal consistency ($\alpha=0.62$). Higher scores indicate higher moral disengagement.

2.2.4. Relational aggression

It was measured using 22-item Relational Aggression in Friendships developed by Kurtyilmaz, Can, & Ceyhan (2017). Participants were asked to indicate their level of agreement (1=strongly disagree; 5=strongly agree). The items of the scale showed excellent internal consistency ($\alpha = 0.92$). Higher scores indicate higher relational aggression.

3.Results

3.1. Analysis plan

Statistical analyses were made by using SPSS version 20.0, descriptive statistics were reported in Table 1. Gender differences were explored through independent sample *t* tests. Effect sizes were expressed as Cohen's *d*. Although it was not hypothesized, significant gender differences were found in terms of dark triad total, psychopathy and moral disengagement which were consistent with the previous research. Preliminary analyses revealed that no problems associated

with normality and homoscedasticity of outliers. Correlational analysis was reported in Table 2. In the main analysis, Process Macro for SPSS Release 2.15 were used for serial mediation.

3.2. Main analysis

A multiple regression analysis was performed to determine significant dark triad predictors of schadenfreude. Social context schadenfreude was predicted significantly by Machiavellianism ($\beta = 0.24$, $p > .001$) and psychopathy ($\beta = 0.22$, $p < .01$) while the adjusted $R^2 = 0.18$, $F(5, 303) = 21.99$, $p < .001$. Academic context schadenfreude was predicted significantly by Machiavellianism ($\beta = 0.26$, $p > .001$) and narcissism ($\beta = 0.22$, $p < .01$) while the adjusted $R^2 = 0.16$, $F(5, 303) = 19.95$, $p < .001$. Although psychopathy for academic and narcissism for social context did not predict schadenfreude, in serial mediation analysis, all of the dark triad measures were used because they were significantly related with schadenfreude in both scenarios (Table 2).

Serial mediation assumes “a causal chain linking the mediators, with a specified direction of causal flow” (Hayes, 2018, p. 466). For example, dark triad personality could increase moral disengagement which could increase relational aggression and thus increase schadenfreude (i.e., dark triad → moral disengagement → relational aggression → schadenfreude).

3.1.1. Serial mediation for social context

Psychopathy: Model 1 tested whether moral disengagement mediated the relationship between psychopathy and schadenfreude after controlling gender and age that indirect effect was significant ($b = 0.07$, $SE = 0.030$, 95% bootstrap confidence interval: 0.0813, 0.2037). Participants with greater psychopathy were likely to morally disengage and thus were more likely to feel schadenfreude. Model 2 tested the following causal chain: psychopathy → MD → RA → schadenfreude. That indirect effect was significant ($b = 0.032$, $SE = 0.012$, 95% bootstrap confidence interval: 0.0142, 0.0767).

Narcissism: Model 1 tested whether moral disengagement mediated the relationship between narcissism and schadenfreude; that indirect effect was significant ($b = 0.0729$, $SE = 0.0255$, 95% bootstrap confidence interval: 0.0315, 0.1346). Participants with greater narcissism were likely to morally disengage and thus were more likely to feel schadenfreude. Model 2 tested the following causal chain: narcissism → MD → RA → schadenfreude. That indirect effect was significant ($b = 0.0315$, $SE = 0.0106$, 95% bootstrap confidence interval: 0.0150, 0.0578).

Machiavellianism: Model 1 tested whether moral disengagement mediated the relationship between Machiavellianism and schadenfreude; that indirect effect was significant ($b = 0.0892$, $SE = 0.0285$, 95% bootstrap confidence interval: 0.0367, 0.1505). Participants with greater narcissism were likely to morally disengage and thus were more likely to feel schadenfreude. Model 2 tested the following causal chain:

Table 1
Descriptive Statistics.

	Total N	M	SD	N	Female M	SD	N	Male M	SD	<i>t</i> -test (gender)	<i>d</i>
Psychopathy	309	16.98	5.29	272	16.62	5.14	37	19.56	5.83	-3.21**	0.56
Narcissism	309	25.52	5.45	272	25.46	5.48	37	25.89	5.38	-0.45	0.08
Machiavellianism	309	26.08	6.81	272	25.86	6.56	37	28.05	8.07	-1.85	0.32
Dark Triad	309	68.57	13.58	272	67.94	13.28	37	73.51	14.97	-2.35*	0.41
Moral Disengagement	309	13.58	4.00	272	13.34	3.94	37	15.37	4.04	-2.93**	0.51
Relational Aggression	309	50.44	15.03	272	50.00	14.96	37	54.08	15.28	-1.55	0.27
Schadenfreude in Social Context	309	10.19	5.97	272	10.15	6.07	37	10.68	5.22	-0.51	0.09
Schadenfreude in Academic Context	309	17.09	7.75	272	17.22	7.76	37	16.16	7.84	.78	0.13

** $p < .01$,
* $p < .05$.

Table 2
Correlations and standardized regression coefficients predicting schadenfreude from the Dark Triad, Moral Disengagement and Relational Aggression.

	r (β)							
	1	2	3	4	5	6	7	8
1.Psychopathy		.34**	.41**	.80**	.48**	.41**	.34** (0.36**)	.23** (0.23**)
2.Narcissism			.47**	.75**	.28**	.27**	.25** (0.25**)	.31** (0.31)
3.Machiavellianism				.77**	.31**	.25**	.34** (0.34**)	.35** (0.35**)
4.Dark Triad					.47**	.41**	.41** (0.41**)	.39** (0.39**)
5.Moral Disengagement						.48**	.38** (0.38**)	0.33** (0.33**)
6.Relational Aggression							.38** (0.38**)	.40** (0.40**)
7.Schadenfreude in Social Context								.53**
8. Schadenfreude in Academic Context								

**p < .001.

Machiavellianism →MD→ RA→ schadenfreude. That indirect effect was significant (b = 0.0338, SE = 0.0122, 95% bootstrap confidence interval: 0.0145, 0.0621).

3.1.2. Serial mediation for academic context

Psychopathy: Model 1 tested whether moral disengagement mediated the relationship between psychopathy and schadenfreude after controlling gender and age that indirect effect was significant (b = 0.0720, SE = 0.0329, 95% bootstrap confidence interval: 0.0189, 0.1487). Participants with greater psychopathy were likely to morally disengage and thus were more likely to feel schadenfreude. Model 2 tested the following causal chain: psychopathy →MD→ RA→ schadenfreude. That indirect effect was significant (b = 0.0585, SE = 0.0182, 95% bootstrap confidence interval: 0.0295, 0.1008).

Narcissism: Model 1 tested whether moral disengagement mediated the relationship between narcissism and schadenfreude; that indirect effect was significant (b = 0.0605, SE = 0.0293, 95% bootstrap confidence interval: 0.0132, 0.1289). Participants with greater narcissism were likely to morally disengage and thus were more likely to feel schadenfreude. Model 2 tested the following causal chain: narcissism →MD→ RA→ schadenfreude. That indirect effect was significant (b = 0.0498, SE = 0.0150, 95% bootstrap confidence interval: 0.0261, 0.0874).

Machiavellianism: Model 1 tested whether moral disengagement mediated the relationship between Machiavellianism and schadenfreude; that indirect effect was significant (b = 0.0700, SE = 0.0372, 95% bootstrap confidence interval: 0.0007, 0.1487). Participants with greater narcissism were likely to morally disengage and thus were more likely to feel schadenfreude. Model 2 tested the following causal chain: Machiavellianism →MD→ RA→ schadenfreude. That indirect effect was significant (b = 0.0550, SE = 0.0158, 95% bootstrap confidence interval: 0.0304, 0.0931). In summary, an examination of the coefficients revealed that all of the dark triad measures are related separately to MD which was positively related to RA which was positively related to feelings of schadenfreude in both scenarios.

4. Discussion

As expected current study showed that Dark Triad traits (psychopathy, narcissism, Machiavellianism) positively associated with schadenfreude (James et al., 2014; Porter et al., 2014). Findings also showed positive associations between, Dark Triad traits and moral disengagement (Egan et al., 2015; Moore et al., 2012) and relational aggression (Abell, & Brewer, 2018; Knight, 2016; Schmeelk et al., 2008).

Psychopathy was positively correlated with schadenfreude as expected (James et al., 2014; Porter et al., 2014). Hypotheses that moral disengagement and relational aggression mediated the relationship between psychopathy and schadenfreude were supported. Individuals who have higher psychopathy are more likely to be morally disengage and also more prone to engage in relational aggression, as a result they

expressed more schadenfreude both in social and academic context. Kokkinos et al. (2016) showed that relationship between callous unemotional traits and relational aggression were mediated moral disengagement, individuals who have those traits are likely to justify their actions to get rid of guilt (Bandura et al., 1996). In this study relational aggression were not divided into proactive and reactive aggression categories. Proactive aggression differs from reactive form in terms of callous unemotional personality traits (Frick, Cornell, Barry, Bodin, & Dane, 2003). So, future studies may examine the different forms of relational aggression in terms of its mediating role between psychopathy and schadenfreude. Moreover, psychopathy was more related with schadenfreude in social context. This scenario includes a story about a friend who encounters with an embarrassing situation by vomiting. Psychopathy is characterized by emotional coldness (Jones & Paulhus, 2011) so in this case suffering friend from a physical discomfort may be more pleasurable for those who had higher scores on psychopathy. James et al. (2014) found a similar result that when the suffer of other became something physical, psychopathy was continue to be related with schadenfreude.

Narcissism was positively correlated with schadenfreude as expected. Self-comparison factor may emerge this relationship (James et al., 2014; Smith et al., 2009) because some studies were unable to find significant relationships between narcissism and schadenfreude (Lee, 2019). While psychopathy and Machiavellianism were found negatively related with feelings of empathy (Jonason & Krause, 2013), narcissism was found positively related in some of the studies (Jonason & Kroll, 2015). So feelings of empathy may evoke sympathy towards the target not schadenfreude (Lee & Gibbons, 2017). In terms of relational aggression, some of the studies showed that narcissism is related (Barry, Pickard, & Ansel, 2009; Washburn, McMahon, King, Reinecke & Silver, 2004). Hypotheses that moral disengagement and relational aggression mediated the relationship between narcissism and schadenfreude in the two of the scenarios were supported. Narcissism correlated more significantly with schadenfreude in academic context. Moreover, multiple regression analysis showed that Machiavellianism, psychopathy predicted schadenfreude in social whereas Machiavellianism and narcissism predicted in academic context. Since this scenario was included academic competition and also more objective criteria for downward comparison. While the target got “CC”, observer got “AA”, so individuals who are high in narcissism may have found easier to make down-ward comparison and felt good about themselves.

Machiavellianism was positively correlated with schadenfreude as expected. In serial mediation analysis, hypotheses that moral disengagement and relational aggression mediated the relationship between Machiavellianism and schadenfreude in the two of the scenarios were supported. Previous research found that Machiavellianism was related with schadenfreude which evoked by scenarios with different settings (Abell & Brewer, 2018; James et al., 2014). While psychopathy which is characterized by low anxiety and callousness, Machiavellianism is characterized by manipulation and exploitation for long term goals

(Jones & Paulhus, 2011). In this study although all of the dark triad measures were found positively correlated with schadenfreude, the strength of the relationship was higher for Machiavellianism. Veselka, Giammarco, and Vernon (2014) also found similar result. Moreover, Abell and Brewer (2018) found that women who got high score on Machiavellianism, were likely to show schadenfreude when there was a social competitive situation; sexual competition with members of the same sex was also related with Machiavellianism (Brewer & Abell, 2015).

Moral disengagement also strengthens association for narcissism, Machiavellianism and psychopathy. Besides demonstrating significant mediation role of moral disengagement between Dark Triad traits and schadenfreude, relational aggression also found to be mediated this relationship through moral disengagement. Individuals who have dark traits are likely to be morally disengage, so they can easily justify their actions which are against their moral standards so they can express schadenfreude more easily. Also their tendency of relational aggression contributed their expression of schadenfreude in both scenarios. Schadenfreude is considered as “discordant emotion” (Heider, 1958, p. 278), individuals could try to hide their expression and also Ben-Ze'ev (2014) suggested that when others' suffering is intense, schadenfreude cannot be expressed. However, individuals who are able to disengage morally can easily justify their feelings of schadenfreude. Some studies have already showed that in spite of the intensity of the suffering by dehumanizing or stereotyping others, schadenfreude can be more easily expressed in group dynamics (Berndsen et al., 2017). But the unique contribution of this study is showing that moral disengagement could give the chance to justify those expressions individually. In similar vein, callous emotional traits make the individual not only ignore the suffering of other but also give pleasure (Lee & Gibbons, 2017). Individuals who had high score on psychopathy and Machiavellianism which include callousness and manipulation and exploitation, considered to be morally disengage more.

Relational aggression which is characterized by looking after one's own benefit, manipulation and social exclusion was also found associated with schadenfreude. Similarly stereotypes about the out-groups are showed to be related schadenfreude towards them in the absence of competition (Cikara & Fiske, 2012). So it is thought that maybe relational aggression tendency makes visible the expression of schadenfreude easily for individuals who justify their immoral actions through moral disengagement process. In similar vein, Eliason (2017) found that relationship between personality factors and couple attachment, mediated by relational aggression, partners higher in neuroticism and anxious attachment were more likely to use relational aggression tactics. Previous research also demonstrated that relational aggression tactics were used by individuals especially when there was a competition (Abell & Brewer, 2014). It is thought that moral disengagement creates a room for those who had dark triad personalities in using of relational aggression tactics (Abell, Brewer, Qualter, & Austin, 2016). So these tactics became a part of personality characteristic, so for those who had them it seemed easy to feel schadenfreude towards other although the other was suffering.

In the current study two of the schadenfreude scenarios which contains different context were both found associated with Dark Triad, moral disengagement and relational aggression. Scenarios analyzed separately because both student and community sample were used. Similar studies with undergraduate participants generally used academic competition scenarios (Erzi, 2019; Feather & Sherman, 2002), so it was thought that different social context would be more familiar for all of the participants. In similar vein, Nagel (2010) and Abell and Brewer (2018) used similar scenarios.

The current study was limited by using convenient sample and relatively small number of male participants. Use of self-report measures were another limitation, therefore, future research should consider the social desirability. Also use of author constructed scenarios for schadenfreude require further replication. Another limitation is the

Cronbach alpha values of the moral disengagement and narcissism, although they are adequate, the more reliable measure could emerge more replicable results. Besides dark triad, dark tetrad which includes everyday sadism also associated with schadenfreude in some studies (Buckels, Jones & Paulhus, 2013; Gonzalez & Greitemeyer, 2018; Lee, 2019). Another limitation can be considered as excluding sadism factor while measuring dark side of the personality.

4.1. Implications

Cross sectional design hinders inferences about causal relationships, so longitudinal designs especially for development of moral disengagement and relational aggression can be considered in the future research. To our knowledge, this is study is the first to investigate to mediation role of moral disengagement and relational aggression between Dark Triad and schadenfreude, and it is also remembered that although significant relations were found, coefficients effects were small, so results were needed further replication. Moreover, it is thought that further examination is needed with participants from different socio-demographic backgrounds and with other personality factors such as dark tetrad.

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Supplementary materials

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