Are Dark Triad Traits related with Intimate Partner Violence and Stalking Behavior? A survey on an Italian sample

Fabio Delicato[1]

[1]Associazione Criminiseriali - Centro studi & Ricerche in Psicologia Clinica e Criminologia

January 08, 2021

Abstract

The Dark Triad of Personality represents a collection of three socially different traits: Machiavellism, Narcissism and Psychopathy. Throughout our study, we carried out a survey on an Italian sample (N. = 541 - Age = 18-75 – Male = 241 / Female = 300), by administering an anonymous questionnaire, named Short Dark Triad, and by verifing the association between the Dark Triad Traits and the subject's admission of having hit own's partner (I.P.V. – Intimate Partner Violence), or subject's admission of Stalking behavior (as ex partner). By using a linear regression method, results shows positive association between Psychopathy and Machiavellianism with Intimate Partner Violence. Also, in male subjects, results revealed Psichopathy trait and admission of I.P.V. as good predictors of stalking behaviour, conversely in female subjects only psichopathy is a predictor of stalking behavior. There is no association beetwen Narcisism trait and subject's admission of I.P.V. neither subject's admission of Stalking behaviour.

Are the Dark Triad Traits related with Intimate Partner Violence and Stalking Behavior? A survey on an Italian sample.

Abstract

The Dark Triad of Personality represents a collection of three socially different traits: Machiavellism, Narcissism and Psychopathy. Throughout our study, we carried out a survey on an Italian sample (N. = 541 - Age = 18-75 – Male = 241 / Female = 300), by administering an anonymous questionnaire, named Short Dark Triad, and by verifing the association between the Dark Triad Traits and the subject's admission of having hit own's partner (I.P.V. – Intimate Partner Violence), or subject's admission of Stalking behavior (as ex partner). By using a linear regression method, results shows positive association between Psychopathy and Machiavellianism with Intimate Partner Violence. Also, in male subjects, results revealed Psichopathy trait and admission of I.P.V. as good predictors of stalking behaviour, conversely in female subjects only psichopathy is a predictor of stalking behavior. There is no association beetwen Narcisism trait and subject's admission of I.P.V. neither subject's admission of Stalking behaviour.

The Dark Triad of Personality

The Dark Triad of Personality represents a collection of three socially different traits, that is : Machiavellism, Narcissism and Psychopathy (Paulhus e Williams 2002); These traits are positively correlated (Fehr et al. 1992; Gustafson e Ritzer 1995; Jonason e Webster 2010; McHoskey 1995; Paulhus e Williams 2002) though they represent three different personality characteristics (Jones e Paulhus 2010; Lee e Ashton 2005; McHoskey et al. 1995; Paulhus and Williams 2002). Psychopathy is characterized by high thrill-seeking, callousness, interpersonal antagonism, manipulation, and anti-social behavioral pattern (Hare and Neumann 2008). Machiavellianism is a construct based on the writing of Niccolo Machiavelli and has been studied

most commonly in the personality literature (McHoskey, Worzel, & Szyarto, 1998); it is defined by high self-interest and tendencies toward deception, exploitation and manipulation of others, and by a cynical perspective both on life and interpersonal relationships (Christie and Geis 1970); Machiavellian individuals tend to be viewed as ambitious, strategic, capable, and amoral. Finally, individuals with high level on Narcissistic trait tend to extensively focus on themselves; they are characterized by sense of self-absorpion, dominance, grandness and devaluation of others (Emmons 1987). Over the past several years there has been an increase of researches that study the usefulness of these traits (for a review, see Furnham et al. 2013). Recent surveys have found that the Dark Triad traits are differently informative in predicting workplace, interpersonal, mating, antisocial behaviour, as aggressiveness and financial misbehaviours (e.g., Jones and Paulhus 2010; Lee and Ashton 2005; Malesza and Ostaszewski 2016a, b). But the role of the Dark Triad Traits in the I.P.V. Behavior or in the Stalking Behavior is poorly researched. Carton and Egan found in their study that psychopathy had the strongest associations and most predictive relationships with both psychological abuse and physical/sexual abuse (Carton and Egan, 2017), also Satoru found that only psychopathy uniquely predicted IPV perpetration and The Dark Triad personality is considered a proximal risk factor in the I.P.V. behavior (Satoru 2017, 2019). A broad range of risk factors have been implicated in IPV and Stalking, and are typically identified through comparing the characteristics of individuals who engage in the behaviour of interest to those who do not. In contrast to the empirical evidence base relating to I.P.V., the stalking literature (about Dark Triad traits) is less comprehensive (for a review see Dixon and Bowen 2012). In this study, we will address the theme of the relationship between the Dark Triad traits and the Intimate Partner Violence Behavior (I.P.V.) or with Stalking Behavior in an Italian Sample.

Aims of the Study

Having therefore found studies demonstrating the role of the Dark Triad of Personality in adverse and aggressive behavior, we wondered if these traits could have a correlation with Intimate Partner Violence behavior and with Stalking behavior. The Dark Triad Traits, at a sub-clinical level, have been widely studied in the International Literature (James et al. 2014; Jonason et al. 2013b; Petrides et al. 2011) with consistent research results, reporting mutual positive correlations, in particular in the introductory study of the Short Dark Triad questionnaire (SD3), and respectively (Pearson correlation coefficients): Machiavellism/Narcisism = .23 , Machiavellism/Psychopathy = .37 , Narcisism/Psychopathy = .20 (Jones and Paulhus 2014; Paulhus and Jones 2011). In the present study the SD3 questionnaire was anonymously administered to an Italian sample, in order to investigate any correlations between the Dark Triad Traits and subject's admission of having hit one's partner (Intimate Partner Violence -I.P.V.) or with Stalking Behaviour (as ex partner).

Also the sample was analyzed by dividing it into age groups and social-professional role, by verifying any correlations between the Dark Personality traits and the selected age group or with subject's social-professional role.

Finally, through true/false items, we investigated any correlation between the Dark Traits subject's admission of having suffered criminal conviction, having been involved in a brawls (twice or more) or having had financial troubles.

Materials and Methods

3.1 The Short Dark Triad Questionnaire – SD3

The SD3 (Jones and Paulhus 2014) is a self-report questionnaire developed to assess three dimensions of the Dark Triad personality model; is a 27 items measuring scale with nine items in each subscale, scored on a 5-point Likert scale (ranging from strongly disagree = 1 to strongly agree = 5), with statements that reflect the aforementioned dimensions of the Dark Triad. The psychometric properties of the original SD3 revealed acceptable internal consistency for every dimension and convergent validity with the external variables, consistent with Cronbach's alpha of the scale is in a range between .78 to .74 . (Furnham et al. 2013; Jones & Paulhus 2014; Lee & Ashton 2005; Paulhus & Williams 2002). An Italian version of the SD3 questionnaire already validated was chosen for the administration to our sample (Somma, Paulhus, Borroni, & Fossati, 2020).

3.2 Partecipants and Proceeding

By using the Italian version of the SD3 (Somma, Paulhus, Borroni, & Fossati, 2020), the sample was anonymously administered and randomly distributed throughout the Italian territory. The sample is composed as follows :

Total Subjects = 541 (Female = 300 ; Male = 241) aged between 18 to 75 years, divided in age-groups for the purpose of the study: Age range 1 = 18-25 years - Age range 2 = 26-35 years - Age range 3 = 36-45 years - Age range 4 = over 46 years.

Moreover, participants were asked to answer questions related to:

- Social-professional role, the following categories have been identified : 1) Unemployed, 2) Student, 3) Employee, 4) Self-Employed, 5) Executive, 6) Retired
- (through true/false item) Admission of having hit one's partner on several occasions (I.P.V.)
- (through true/false item) Admission of stalking behavior (as ex partner)
- (through true/false item) Admission of having suffered criminal conviction
- (through true/false item) Admission of having been involved in a brawl twice or more
- (through true/false item) Admission of having had financial troubles

The collected data have been processed by using an SPSS v25 software (IBM SPSS 2017); Pearson's correlation was used to analyze the association among the different variables, while a Regression analysis (Backward elimination method) was further performed to examine whether the Dark Triad Traits were able to predict I.P.V. and Stalking Behavior.

Results

Descriptive statistics of the Sample and mutual intercorrelation among the D.T.T. resulting from the administration of the SD3 to our sample are presented in Table 1 and Table 2.

These results (Tab.2) agree with the aforementioned literature concerning the mutual correlations between the dark traits of personality.

Table 1 – Descriptive statistic of the Sample

	N	Mean	St.Dev.
Machiavellism	541	3,0600	,62156
Narcisism	541	2,7575	,53653
Psychopathy	541	2,1999	,57308

Table 2 – D.T. Intercorrelations: bivariate Pearson correlation coefficients

	Machiavellism	Narcisism	Psychopathy
Machiavellism	–	,280**	,489**
Narcisism		–	,341**
Psychopathy			–

** p < .01 level (two tail)

Table 3 illustrates Pearson's correlation coefficients between the Dark Triad Taits and the detected age-groups.

Table 3 – D.T. and age range groups - bivariate Pearson correlation coefficients

	Age 18-25	Age 26-35	Age 36-46	Age 46+
Machiavellism	,038	,016	,012	-,065
Narcisism	,036	-,002	,028	-,054
Psychopathy	,039	,036	,050	**-,123****

** p < .01 level (two tail)

No positive correlation was noted between the Dark Traits and the examined age-groups; on the contrary we noted a two tailed negative correlation (p< .01 level) between the Psycopathy and the 46+ age-group.

Then we proceeded to verify any probable correlation among the Dark Triad Traits and the subject's social-professional role. Results are shown in Table 4.

Table 4 – Dark Triad traits and social professional role - bivariate Pearson correlation coefficients

	Unemployed	Student	Employee	Self-Employed	Executive	Retired
Machiavellism	,004	-,060	,073	-,031	,026	-,063
Narcisism	**-,103***	,029	-,021	,039	,031	-,016
Psychopathy	-,041	-,001	,034	-,003	,010	-,035

*p < .05 level (two tail)

No positive correlation between social-professional roles and Dark Triad traits has been observed. Anyway the negative correlation between Narcissism and the Unemployment is worth nothing, andand will be discussed in the conclusions paragraph .

Table 5 – D.T. and admission of : criminal conviction/brawl/financial troubles – bivariate Pearson correlation coefficients

	Criminal conviction	Involved in brawl	Financial troubles
Machiavellism	,017	**,132****	-,015
Narcisism	**,088***	,108	,010
Psychopathy	**,115****	**,307****	,071
Criminal conv.	–	**,126****	**,238****
Brawl		–	,065
Financial troubles			–

* p < .05 level (two tail) / ** p < .01 level (two tail)

Table 5 illustrates Pearson's correlation coefficients between Dark Triad traits and subject's admission of : criminal conviction / brawl / financial troubles. Results show positive correlations between both Narcissism (p < .05 level two tail) and Psychopathy (p < .01 level two tail) dimensions and the following variables : Admission of having suffered criminal conviction and Admission of having been involved in brawls. No significant correlation has been noted between the Personality Dark Triad traits and the admission of having suffered financial troubles. It is also relevant the significant correlation between Machiavellism and the admission of having been involved in browls (p < .01 level two tail).

However, to perform in-depth analysis of data, steps were taken to make a statistic partial correlation for

each Dark Personality dimension with the selected variables, by partializing the effects of the remaining two dimensions. Results are shown in Tabs 6, 7 and 8.

Table 6 – Partial correlation cofficient – Machiavellism and : criminal conviction/brawl/financial troubles

Control Variables		Criminal conviction	Involved in brawl	Financial troubles
Narcisism & Psichopathy	Machiavellism	-,052	-,023	-,056
	d.o.f.	537	537	537

By partializing the effects of the other Dark Personality Traits (Tab. 6 and Tab.7), no significant correlation is found neither between Machiavellism nor Narcisism and the selected variables. Such data lead us to note that the intercorrelations among the Dark Personality Traits have a strong influence on the interpretation of the data itselves, considered that, by partializing the effects for each dimension compared to the remaining two, only the Psychopathy Trait has a positive correlation with the selected variables (Tab. 8).

Table 7 – (Partial correlation cofficient - Narcisism and : criminal conviction/brawl/financial troubles

Control Variables		Criminal conviction	Involved in brawl	Financial troubles
Psichopathy & Machiavellism	Narcisism	,059	,007	,008
	d.o.f.	537	537	537

Table 8 – Partial correlation cofficient – Psichopathy and : criminal conviction/brawl/financial troubles

Control Variables		Criminal conviction	Involved in brawl	Financial troubles
Narcisism & Machiavellism	Psichopathy	**,104***	**,271****	,089
	d.o.f.	537	537	537

* p < .05 level (two tail) / ** p < .01 level (two tail)

More specifically, it was noticed that the Psychopathy trait has a positive correlation ($p < .05$ level, two tail) with the admission of having suffered criminal conviction, and a stronger correlation ($p < .01$ level, two tail) with the admission of having been involved in brawls. No significant correlation was found between Psychopathy and the admission of having had financial troubles.

Than we arrived at very aim of the study and procedeed to verify any probable correletion between the Dark Triad Traits and the subject's admission of having hit one's partner on several occasions (I.P.V.) or stalking behavior (as ex partner). The first step is the Pearson correlation, Table 9 Show the results of bivariate Pearson correlation among the Dark Traits and I.P.V./Stalking Behavior.

Results in Table 9 show us the relation between both Machiavellism and Narcisism traits and both I.P.V.

and Stalking behavior. No significant correlation has been noted between Narcisism traits and both I.P.V. or Stalking behavior.

Table 9 – D.T. and admission of : IPV/Stalking behavior - bivariate Pearson correlation coefficients

	I.P.V	Stalking
Machiavellism	**,131****	**,103***
Narcisism	,071	,034
Psychopathy	**,132****	**,183****
I.P.V.	–	**,165****
Stalking		–

*p < .05 level (two tail) / ** p < .01 level (two tail)*

But, keeping in mind the mutual intercorrelations between the Dark Triad traits, and to perform in-depth analysis of data in order to verify the hypothesis that these traits are predictors of Intimate Partner Violence behavior, Linear Regression (Backward elimination method) was performed between Dark Traits as Indipendent Variables. and I.P.V. as Dipendent Variable. Resulst of Linear Regression are shown in Table 10 – 11 – 12. They show Machiavellism and Psychopathy traits are related with the I.P.V. behavior *(Model 2)* , while the Narcisism trait was removed from the model as not predictor of I.P.V. *(Model 1)*.

Table 10 – Linear Regression D.T. and IPV – model summary*

Model	Variabiles	Removed variabiles	Removed variabiles	Method	Method	Method
1	Psychopathy Narcisism Machiavellism	.	.	Ins.	Ins.	Ins.
2	.	Narcisism	Narcisism	Backward (crit.: Prob. F - to remove > = ,100).	Backward (crit.: Prob. F - to remove > = ,100).	Backward (crit.: Prob. F - to remove > = ,100).
Model Summary Model	**Model Summary R**	**Model Summary R-square**	**Model Summary R-square adapt.**	**Model Summary R-square adapt.**	**Model Summary St. error ets.**	**Model Summary Durbin-Watson**
1	,154	,024	,018	,018	,29973	
2	,153	,023	,020	,020	,29950	1,937

Dipendent Var.: I.P.V. Model 1 : Predctor: (const.), Psychopathy Narcisism Machiavellism Model 2 : Predctor: (const.), Psychopathy Machiavellism

Table 11 – Linear Regression D.T. and IPV – ANOVA*

Model		Square sum	d.o.f.	Quadr. Mean	F	Sign.
1	Reg.	1,164	3	,388	4,320	,005
	Res.	48,244	537	,090		
	Tot.	49,409	540			
2	Reg.	1,150	2	,575	**6,412****	**,002****

Model		Square sum	d.o.f.	Quadr. Mean	F	Sign.
	Res.	48,258	538	,090		
	Tot.	49,409	540			

* Dipendent Var.: I.P.V. Model 1 : Predctor: (const.), Psychopathy Narcisism Machiavellism Model 2 : Predctor: (const.), Psychopathy Machiavellism ** In bold Sig. value

Table 12 – Linear Regression D.T. and IPV – coefficients*

		not St. coeff.	not St. coeff.	St. Coeff.	t	Sign.	Corelations	Corelations	Corelati
Model		**B**	**St. Err.**	**Beta**			**Zero-order**	**Partial**	**Part**
1	(Const.)	-,151	,083		-1,827	,068			
	Machiavellism	,041	,024	,085	1,723	,086	,131	,074	,073
	Narcisism	,010	,026	,018	,397	,691	,071	,017	,017
	Psychopathy	,044	,027	,084	1,671	,095	,132	,072	,071
2	(Const.)	-,132	,068		-1,945	,052			
	Machiavellism	,043	,024	,088	1,796	,073	,131	,077	,077
	Psychopathy	,047	,026	,089	1,824	,069	,132	,078	,078

* Dipendent Var.: I.P.V. Model 1 : Predctor: (const.), Psychopathy Narcisism Machiavellism Model 2 : Predctor: (const.), Psychopathy Machiavellism

By using same metodology, Linear Regression - Backward elimination method - was performed between Machiavellism, Narcisism, Psychopathy and I.P.V. as Indipendent Variables, and Stalking behavior as Dipendent Variable. Resulst are shown in Table 13 – 14 – 15.

Table 13 – Linear Regression D.T. , IPV and Stalking behavior – model summary*

Model	Variabiles	Removed variabiles	Method	Method	Method
1	IPV, Psychopathy Narcisism Machiavellism	.	Ins.	Ins.	Ins.
2	.	Machiavellism	Backward (crit.: Prob. F - to remove > = ,100).	Backward (crit.: Prob. F - to remove > = ,100).	Backward (crit.: Prob. F - to remove > = ,100).
3	.	Narcisism	Backward (crit.: Prob. F - to remove > = ,100).	Backward (crit.: Prob. F - to remove > = ,100).	Backward (crit.: Prob. F - to remove > = ,100).
Model summary Model	**Model summary R**	**Model summary R-square**	**Model summary R-square adapt.**	**Model summary St. error ets.**	**Model summary Durbin-Watson**
1	,234	,055	,048	,20110	
2	,234	,055	,050	,20092	
3	,232	,054	,050	,20086	2,030

* Dipendent Var.: Stalking Model 1 : Predctor: (const.), Machiavellism Narcisism Psychopathy I.P.V. Model 2 : Predctor: (const.), Narcisism Psychopathy I.P.V. Model 3 : Predctor: (const.), Psychopathy I.P.V.

Table 14 – Linear Regression D.T. I.P.V. and Stalking behavior – ANOVA*

Model		Square sum	d.o.f.	Quadr. Mean	F	Sign.
1	Reg.	1,259	4	,315	7,780	,000
	Res.	21,677	536	,040		
	Tot.	22,935	540			
2	Reg.	1,257	3	,419	10,376	,000
	Res.	21,679	537	,040		
	Tot.	22,935	540			
3	Reg.	1,230	2	,615	**15,244****	**,000****
	Res.	21,705	538	,040		
	Tot.	22,935	540			

* Dipendent Var.: Stalking Model 1 : Predctor: (const.), Machiavellism Narcisism Psychopathy I.P.V. Model 2 : Predctor: (const.), Narcisism Psychopathy I.P.V. Model 3 : Predctor: (const.), Psychopathy I.P.V. ** In bold Sig. value

Table 15 – Linear Regression D.T. I.P.V. and Stalking behavior – coefficients*

		not St. coeff.	not St. coeff.	St. Coeff.	t	Sign.	Corelations	Corelations	Corelati
Model		**B**	**St. Err.**	**Beta**			**Zero-order**	**Partial**	**Part**
1	(Const.)	-,072	,056		-1,299	,195			
	Machiavellism	,004	,016	,011	,222	,824	,103	,010	,009
	Narcisism	-,014	,017	-,038	-,833	,405	,034	-,036	-,035
	Psychopathy	,062	,018	,171	3,441	,001	,183	,147	,144
	IPV	,098	,029	,144	3,384	,001	,165	,145	,142
2	(Const.)	-,067	,049		-1,351	,177			
	Narcisism	-,014	,017	-,036	-,811	,418	,034	-,035	-,034
	Psychopathy	,063	,016	,176	3,917	,000	,183	,167	,164
	IPV	,098	,029	,144	3,413	,001	,165	,146	,143
3	(Const.)	-,095	,034		-2,772	,006			
	Psychopathy	,059	,015	,164	3,870	,000	,183	,165	,162
	IPV	,098	,029	,144	3,393	,001	,165	,145	,142

* Dipendent Var.: Stalking Model 1 : Predctor: (const.), Machiavellism Narcisism Psychopathy I.P.V. Model 2 : Predctor: (const.), Narcisism Psychopathy I.P.V. Model 3 : Predctor: (const.), Psychopathy I.P.V.

These results (Tab. 13 - 14 - 15) show that, in our sample, the Psychopathy Trait and the presence of Intimate Partner Violence (I.P.V.) are good predictors of Stalking behavior *(Model 3)* , while Machiavellism and Narcissism traits were excluded from the model as not predictors of Stalking behavior *(Models 1,2)* .

Finally a Linear Regression was performed by dividing the sample in Male/Female gruops to verify any gender differences (Indipendet Variables : Machiavellism, Narcisism, Psichopathy, I.P.V., Dipendent Variable : Stalking behavior. Table 16 – 17 – 18 show results of linear regression in Male group.

Table 16 – Linear Regression D.T. , IPV and Stalking behavior (Male) – model summary*

Model	Variabiles	Removed variabiles	Method	Method	Method
1	IPV, Psychopathy Narcisism Machiavellism	.	Ins.	Ins.	Ins.
2	.	Machiavellism	Backward (crit.: Prob. F - to remove > = ,100).	Backward (crit.: Prob. F - to remove > = ,100).	Backward (crit.: Prob. F - to remove > = ,100).
3	.	Narcisism	Backward (crit.: Prob. F - to remove > = ,100).	Backward (crit.: Prob. F - to remove > = ,100).	Backward (crit.: Prob. F - to remove > = ,100).
Model summary Model	**Model summary R**	**Model summary R-square**	**Model summary R-square adapt.**	**Model summary St. error ets.**	**Model summary Durbin-Watson**
1	,342	,117	,102	,22212	
2	,342	,117	,106	,22169	
3	,340	,115	,108	,22138	2,047

* Dipendent Var.: Stalking (Male Group) Model 1 : Predctor: (const.), Machiavellism Narcisism Psychopathy I.P.V. Model 2 : Predctor: (const.), Narcisism Psychopathy I.P.V. Model 3 : Predctor: (const.), Psychopathy I.P.V.

Table 17 – Linear Regression D.T. , IPV and Stalking behavior (Male) – ANOVA*

Model		Square sum	d.o.f.	Quadr. Mean	F	Sign.
1	Reg.	1,543	4	,386	7,818	,000
	Res.	11,644	236	,049		
	Tot.	13,187	240			
2	Reg.	1,539	3	,513	10,438	,000
	Res.	11,648	237	,049		
	Tot.	13,187	240			
3	Reg.	1,523	2	,762	**15,539****	**,000****
	Res.	11,664	238	,049		
	Tot.	13,187	240	,386		

* Dipendent Var.: Stalking (Male Group) Model 1 : Predctor: (const.), Machiavellism Narcisism Psychopathy I.P.V. Model 2 : Predctor: (const.), Narcisism Psychopathy I.P.V. Model 3 : Predctor: (const.), Psychopathy I.P.V. ** In bold Sig. value

Table 18 – Linear Regression D.T. , IPV and Stalking behavior (Male) – coefficients*

Model		not St. coeff. B	not St. coeff. St. Err.	St. Coeff. Beta	T	Sign.	Corelations Zero-order	Corelations Partial	Corelati... Part
1	(Const.)	-,053	,100		-,531	,596	-,053	,100	
	Machiavellism	-,008	,027	-,019	-,283	,777	-,008	,027	-,019

9

		not St. coeff.	not St. coeff.	St. Coeff.	T	Sign.	Corelations	Corelations	Corelati
	Narcisism	-,015	,029	-,032	-,505	,614	-,015	,029	-,032
	Psychopathy	,067	,027	,169	2,495	,013	,067	,027	,169
	IPV	,281	,060	,290	4,723	,000	,281	,060	,290
2	(Const.)	-,066	,089		-,747	,456	-,066	,089	
	Narcisism	-,016	,029	-,036	-,568	,571	-,016	,029	-,036
	Psychopathy	,064	,025	,162	2,580	,010	,064	,025	,162
	IPV	,280	,059	,290	4,724	,000	,280	,059	,290
3	(Const.)	-,104	,059		-1,764	,079	-,104	,059	
	Psychopathy	,061	,024	,154	2,520	,012	,061	,024	,154
	IPV	,280	,059	,289	4,726	,000	,280	,059	,289

* Dipendent Var.: Stalking (Male Group) Model 1 : Predctor: (const.), Machiavellism Narcisism Psychopathy I.P.V. Model 2 : Predctor: (const.), Narcisism Psychopathy I.P.V. Model 3 : Predctor: (const.), Psychopathy I.P.V.

Results of linear regression in the male group (tab. 16 – 17 – 18) agree with the previous ones drawn from the entire sample, confirming that, in male subjects, psychopathy trait and presence of I.P.V. are good predictors of stalking behavior *(Model 3)*.

The same procedure was sperformed for the Female group; results shown in tables 19 – 20 – 21.

Table 19 – Linear Regression D.T. , IPV and Stalking behavior (Female) – model summary*

Model	Variabiles	Removed variabiles	Method	Method	Method
1	IPV, Psychopathy Narcisism Machiavellism	.	Ins.	Ins.	Ins.
2	.	Machiavellism	Backward (crit.: Prob. F – to remove > = ,100).	Backward (crit.: Prob. F – to remove > = ,100).	Backward (crit.: Prob. F – to remove > = ,100).
3	.	Narcisism	Backward (crit.: Prob. F – to remove > = ,100).	Backward (crit.: Prob. F – to remove > = ,100).	Backward (crit.: Prob. F – to remove > = ,100).
4		I.P.V.	Backward (crit.: Prob. F – to remove > = ,100).	Backward (crit.: Prob. F – to remove > = ,100).	Backward (crit.: Prob. F – to remove > = ,100).
Model summary Model	Model summary R	Model summary R-square	Model summary R-square adapt.	Model summary St. error ets.	Model summary Durbin-Watson
1	,181	,033	,020	,17802	
2	,179	,032	,022	,17778	
3	,175	,031	,024	,17763	
4	,166	,028	,024	,17760	2,117

10

* Dipendent Var.: Stalking (Female Group) Model 1 : Predctor: (const.), Psychopathy I.P.V. Narcisism Machiavellism Model 2 : Predctor: (const.), Psychopathy I.P.V. Narcisism Model 3 : Predctor: (const.), Psychopathy I.P.V. Model 4 : Predctor: (const.), Psychopathy

Table 20 – Linear Regression D.T. , IPV and Stalking behavior (Female) – ANOVA*

Model		Square sum	d.o.f.	Quadr. Mean	F	Sign.
1	Reg.	,318	4	,079	2,505	,042
	Res.	9,349	295	,032		
	Tot.	9,667	299			
2	Reg.	,311	3	,104	3,283	,021
	Res.	9,355	296	,032		
	Tot.	9,667	299			
3	Reg.	,295	2	,148	4,679	,010
	Res.	9,371	297	,032		
	Tot.	9,667	299			
4	Reg.	,267	1	,267	**8,455****	**,004****
	Res.	9,400	298	,032		
	Tot.	9,667	299			

* Dipendent Var.: Stalking (Female Group) Model 1 : Predctor: (const.), Psychopathy I.P.V. Narcisism Machiavellism Model 2 : Predctor: (const.), Psychopathy I.P.V. Narcisism Model 3 : Predctor: (const.), Psychopathy I.P.V. Model 4 : Predctor: (const.), Psychopathy ** In bold Sig. value

Table 21 – Linear Regression D.T. , IPV and Stalking behavior (Female) – coefficients*

		not St. coeff.	not St. coeff.	St. Coeff.	T	Sign.	Corelations	Corelations	Corelati
Model		**B**	**St. Err.**	**Beta**			**Zero-order**	**Partial**	**Part**
1	(Const.)	-,089	,064		-1,389	,166			
	Machiavellism	,014	,019	,050	,745	,457	,125	,043	,043
	Narcisism	-,009	,021	-,028	-,441	,659	,054	-,026	-,025
	Psychopathy	,049	,025	,141	1,942	,053	,166	,112	,111
	IPV	,027	,031	,052	,876	,382	,091	,051	,050
2	(Const.)	-,104	,054		-1,926	,055			
	Narcisism	,014	,019	,048	,713	,477	,125	,041	,041
	Psychopathy	,045	,023	,129	1,912	,057	,166	,110	,109
	IPV	,027	,031	,052	,880	,380	,091	,051	,050
3	(Const.)	-,080	,042		-1,887	,060			
	Psychopathy	,053	,020	,153	2,611	,009	,166	,150	,149
	IPV	,029	,031	,056	,952	,342	,091	,055	,054
4	(Const.)	-,085	,042		-2,028	,043			
	Psychopathy	,057	,020	,166	2,908	,004	,166	,166	,166

* Dipendent Var.: Stalking (Female Group) Model 1 : Predctor: (const.), Psychopathy I.P.V. Narcisism Machiavellism Model 2 : Predctor: (const.), Psychopathy I.P.V. Narcisism Model 3 : Predctor: (const.), Psychopathy I.P.V. Model 4 : Predctor: (const.), Psychopathy

Unlike Male subjects, results in Female group (Tab. 19 – 20 – 21) show that only Psychopathy is related to Stalking behavior *(model 4);*Machiavellism, Narcissism and I.P.V. were excluded from the model as not predictors of Stalking behavior *(models 1,2,3).*

Discussion

In this study we explored the personality dark traits on an Italian sample through the anonymous administration of the Short Dark Triad questionnaire - Italian version (Somma, Paulhus, Borroni, & Fossati, 2020) to investigate the association between the Dark Triad Traits and the subject's admission of having hit own's partner (I.P.V. – Intimate Partner Violence) or subject's admission of Stalking behavior (as ex partner). Moreover, by dividing the sample into 4 age groups and social-professional role, we investigated any correlations between Dark Personality traits and the age grup or social-professional role. Finally, through true/false items, we investigated any correlation between the Dark Traits and subject's admission of : having suffered criminal conviction, having been involved in a brawls (twice or more) or having had financial troubles.

Our results about the mutual correlations among Dark Personality Traits (see Tab. 2) agree with the international literature (Fehr et al. 1992; Gustafson e Ritzer 1995; Jonason e Webster 2010; McHoskey 1995; Paulhus e Williams 2002, Jones and Paulhus 2014; Paulhus and Jones 2011) and in italian sample (Schimmenti et al. 2017) which show an evident mutual correlation between Machiavellism, Narcisism and Psychopathy traits.

Then we investigated any correlations between the Dark Triad traits of Personality and age, by dividing the sample into an age gruops; results show no positive correlation with any age groups (see Tab. 3), but the negative correlation (p <.01 two-tailed) between Psychopathy and the 46+ age group leads us to think about a probable decrease of such a trait with increasing age.

By getting ahead our study of the sample and by listing subjects according to their social-professional role (5 roles were identified : Unemployed, Student, Employee, Self-Employed, Executive, Retired) we proceeded to verify any probable correlation with the Dark Triad Traits . Results don't show any positive correlation between Dark traits and individual social-professional role. They furthermore reveals only a negative correlation (p < .05 two-tailed) between Narcissism and the unempoyed status (see Tab. 6). Such results inspire a question: is the high Narcissism trait that couse the subject to a well defined social-professional role, acceptable for the "self" and for the society, or is the difficulty in finding a Job, and therefore being unemployed, that affects the decline in levels of such a dark traits? A first reasoning about, prompts us to think that this hypothesis may have a foundation. High levels of Narcissistic trait, because of its peculiarity, can cause the subject to engage himself in this sense, since he tends to a grandious idea of himself and of social role that he percieves as high. All this can makes the high level of Narcissistic trait hardly consistent with the unemployed status. More studies are desirable for a better understanding.

Moreover, we investigated any probable correlation among Dark Traits and the subject's admission of : 1) having suffered criminal convictions, 2) having been involved in brawls (two times or more), 3) having had financial troubles (see Tab. 8-9-10). After partialising the effect for every dark trait (to the remaining two), results show that only Psychopathy trait has positive correlation with subject's admission of having suffered criminal convictions (p < .05 two-tailed) and with subject's admission of having been involved in brawls (two times or more) (p < .01 two-tailed).

Lastly, keeping in mind the international literature demostrating the role of Dark Personality traits in aggressive behavior (e.g., Jones and Paulhus 2010; Lee and Ashton 2005; Malesza and Ostaszewski 2016a, b), I.P.V. (Satoru 2017, 2019), and psychological abuse (Carton and Egan, 2017), and knowing that the stalking literature (about Dark Triad traits) is less comprehensive (for a review see Dixon and Bowen 2012), we wondered if these Drak traits of personality are in rrelation with Intimate Partner Violence behavior or with Stalking behavior.

Results of Pearson's correlation (see Tab. 9) show Machiavellism and Psychopathy both related with the admission of Intimate Partner Violence, and with the admission of Stalking behavior (p <.01 two-tailed for Psychopathy and p <.05 two-tailed for Machiavellism); otherwise, Narcissism is not related with I.P.V. or Stalking behavior. Also we note a relation between I.P.V. and Stalking behavior (p <.01 two-tailed). Keeping in mind the mutual intercorrelations between the Dark Triad traits, and to perform in-depth analysis of data in order to verify the hypothesis that these traits are predictors of Intimate Partner Violence behavior, Linear

Regression (Backward elimination method) was performed between Dark Traits as Indipendent Variables and I.P.V. as Dipendent Variable. Results show Machiavellism and Psychopathy traits are related with Intimate Partner Violence, while Narcissism trait was removed from the model (as not predictor), and it is confirmed to have no relation with I.P.V. behavior (see Tab. 10 - 11 - 12).

Than, with a similar methodology, we proceeded to verify if the Dark Triad traits of Personality and the presence of I.P.V. are good predictors of stalking behavior. Linear Regression results show Machiavellism and Narcissism traits are not related with Stalking behavior and they were excluded from the model as not predictive; on the contrary Psychopathy trait and the presence of I.P.V. are a good predictors of Stalking behavior (see Tab. 13 - 14 - 15) .

Seen the Linear Regression analysis results in our sample, about the role of Dark Triad Traits and presence of I.P.V. in the prediction of Stalking behavior, we proceeded to verify if there were gender differences, and for this reason the same Linear Regression methodology was repeated, in the first step analyzing only Male subjects, and in the second step only Female subjects.

In Male group Linear Regression results shown a convergence with the results of entire sample, confirming Psychopathy and the presence of I.P.V. as good predictors of Stalking behavior, excluding both Machiavellianism and Narcissism as not predictive (see Tab. 16-17-18). On the other hand, in Female group the results differ from the previous ones (see Tab. 19 - 20 - 21) and confirming only Psychopathy as a good predictor of Stalking behavior.

Limitation

The first limitation of this study is the size of the sample which, although quite representative, is still limited, especially in the male group. A further limitation concerns the use of a self-report questionnaire that, although anonymously administred, still suffers the influence of social desirability and self-perception, and might not reflect accurately the subject's behavior.

Compliance with Ethical Standards

Ethical Approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent

Informed consent was obtained from all individual participants included in the study.

Conflict of Interest

The corresponding author states that there is no conflict of interest.

References

Carton, H., and Egan, V., (2017) The dark triad and intimate partner violence, Personality and Individual Differences, Volume 105, ISSN 0191-8869, doi: 10.1016/j.paid.2016.09.040.

Christie, R., & Geis, F. (1970). Studies in Machiavellianism. New York: Academic. doi: 10.1016/B978-0-12-174450-2.50006-3

Dixon, L., & Bowen, E. (2012). Intimate partner violence and stalking. In G. Davies and A.R. Beech (Eds.), Forensic Psychology: BPS Textbooks in Psychology series (2nd ed), p189-205.

Emmons, R. A. (1987). Narcissism: Theory and measurement. Journal of Personality and Social Psychology, 52, 11–17. doi: 10.1037/0022-3514.52.1.11.

Fehr, B., Samson, D., & Paulhus, D. L. (1992). The construct of Machiavellianism: Twenty years later. In C. D. Spielberger & J. N. Butcher (Eds.), Advances in personality assessment (Vol. 9, pp. 77– 116). Hillsdale: Erlbaum.

Furnham, A., Richards, S. C., & Paulhus, D. L. (2013). The dark triad of personality: A 10-year review. Social and Personality Compass, 7, 199–216. doi: 10.1111/spc3.12018.

Gustafson, S. B., & Ritzer, D. R. (1995). The dark side of normal: A psychopathy-linked pattern called aberrant self-promotion. European Journal of Personality, 9(3), 147–183. doi: 10.1002/per.2410090302

Hambleton, R. K. (2001). The next generation of the ITC test translation and adaptation guidelines. European Journal of Psychological Assessment, 17(3), 164–172. doi: 10.1027//1015-5759.17.3.164.

Hare, R. D., & Neumann, C. S. (2008). Psychopathy as a clinical and empirical construct. Annual Review of Clinical Psychology, 4, 217–241. doi: 10.1146/annurev.clinpsy.3.022806.091452

Jonason, P. K., & Webster, G. D. (2010). The dirty dozen: A concise measure of the dark triad. Psychological Assessment, 22(2), 420–432. doi: 10.1037/a0019265

Jones, D. N., & Paulhus, D. L. (2010). Different provocations trigger aggression in narcissists and psychopaths. Social Psychological and Personality Science, 1(1), 12–18. doi: 10.1177/1948550609347591

Jones, D.. N., & Paulhus, D. L. (2014). Introducing the Short Dark Triad (SD3): A Brief Measure of Dark Personality Traits. Assessment 21(1):28–41. doi: 10.1177/1073191113514105

Lee, K., & Ashton, M. C. (2005). Psychopathy, Machiavellianism, and narcissism in the five-factor model and the HEXACO model of personality structure. Personality and Individual Differences, 38(7), 1571–1582. doi: 10.1016/j.paid.2004.09.016

Malesza, M., & Ostaszewski, P. (2016a). Dark side of impulsivity – Associations between the dark triad, self-report and behavioral measures of impulsivity. Personality and Individual Differences, 88, 197–201. doi: 10.1016/j.paid.2015.09.016

Malesza, M., & Ostaszewski, P. (2016b). The utility of the dark triad model in the prediction of the self-reported and behavioral risktaking behaviors among adolescents. Personality and Individual Differences, 90, 7–11. doi: 10.1016/j.paid.2015.10.026

McHoskey, J. W. (1995). Narcissism and Machiavellianism. Psychological Reports, 77(3), 755–759. doi: 10.2466/pr0.1995.77.3.755

McHoskey, J. W., Worzel, W., & Syzarto, C. (1995). Machiavellianism and psychopathy. Journal of Personality and Social Psychology, 74(1), 192–210. doi: 10.1037/0022-3514.74.1.192

Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. Journal of Research in Personality, 36(6), 556–563. doi: 10.1016/S0092-6566(02)00505-6

Paulhus, D. L., & Jones, D. N. (2011). Introducing a short measure of the Dark Triad. Poster presented at the meeting of the Society for Personality and Social Psychology, San Antonio. doi: 10.1037/e527772014-279

Satoru K., (2017). Psychopathy rather than Machiavellianism or narcissism facilitates intimate partner violence via fast life strategy, Personality and Individual Differences, Volume 104, ISSN 0191-8869, doi: 10.1016/j.paid.2016.08.043.

Satoru K., (2019). A "fast" life history strategy affects intimate partner violence through the Dark Triad and mate retention behavior, Personality and Individual Differences, Volume 140, ISSN 0191-8869, doi:10.1016/j.paid.2018.07.016

Somma, A., Paulhus, D. L., Borroni, S., & Fossati, A. (2020). *Evaluating the psychometric properties of the Short Dark Triad (SD3) in Italian adults and adolescents. European Journal of Psychological Assessment, 36, 185–195. doi: 10.1027/1015-5759/a000499*

Schimmenti A., Jonason P. K., Passanisi A., La Marca L., Di Dio N., Gervasi A. M. (2017) *Exploring the Dark Side of Personality: Emotional Awareness, Empathy, and the Dark Triad Traits in an Italian Sample. Current Psychology March 2017. doi: 10.1007/s12144-017-9588-6*