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# The affective and cognitive empathic nature of the dark triad of personality

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ABSTRACT

The dark triad represents the most prominent, socially aversive personalities (viz., Psychopathy, Narcissism, and Machiavellianism) characterised by a common underlying deficit in empathy. Although, evidence shows that empathy can be further divided into cognitive and affective systems, this two-dimensional conceptualisation had not been considered when examining the empathic impairments of the complete dark triad. The present study aimed to determine whether the dark triad is associated with deficits in cognitive or affective empathy as measured through self-reports and facial expressions tasks. The sample comprised 139 university students. All dark triad personalities were associated with deficits in affective empathy, but showed little evidence of impairment in cognitive empathy. The facial expression tasks provided further support for the affective nature of the dark triad's empathic deficits. Finally, the results emphasised the importance of primary psychopathy, as the main predictor of empathic deficits within the dark triad.



## 1. Introduction

Socially aversive personalities are associated with empathic deficits. Recent research has increasingly focused on the *dark triad* of personality, comprising *Machiavellianism*, *narcissism*, and *psychopathy* (originally proposed by Paulhus and Williams (2002)), and its association with empathic impairments. Although the individual empathic nature of these personalities has been independently and extensively studied, research on their combined empathic attributes has been absent. The aim of this enquiry was to address this gap in the literature.

### 1.1. Empathy

Empathy is a social awareness, through which a person shares an emotional experience with others either or both on an affective and cognitive level (Davis, 1994). *Affective empathy* refers to the generation of an appropriate emotional reaction in response to others' emotions (Feshbach, 1978, 1987). It is comparable to the construct of *emotional contagion* – the tendency to "catch" emotions from observed emotional states of others. Affective empathy is important in priming altruistic behaviours (Eisenberg & Miller, 1987; Penner, Dovidio, Piliavin, & Schroeder, 2005). *Cognitive empathy* is the ability to discern emotional states of others without undergoing emotional contagion. In its functional utility it can be a valuable tool for insight in such settings as counselling or law enforcement. Since, however, it provides an individual with sensitive emotional information, it may also underlie manipulative personalities (McIllwain, 2003). Differential relationships of the two empathic systems have been identified in individuals with Asperger syndrome (impairment in cognitive empathy; Dziobek et al., 2008) or higher aggression (impairment in affective empathy; Schechtman, 2002). However, to date no evidence exists about the relationship of these systems with the dark triad of personality.

### 1.2. Dark triad

#### 1.2.1. Machiavellianism

Machiavellianism is a personality trait characterised by duplicity, externalisation of blame, emotional coldness, and use of interpersonal strategies for manipulating others for personal gain (Christie & Geis, 1970; Fehr, Samsom, & Paulhus, 1992). High Machiavellians can identify and exploit weaknesses in others, whilst hiding their own. They remain unmoved by emotional involvement with others and are indifferent towards their own beliefs or behaviours. They possess a cynical world-view and believe it is better to manipulate than be manipulated. This exploitative tendency may derive from a lack of emotional attachment during social interactions (Harrell, 1980). High Machiavellians are consistently found to possess low empathy (e.g. Ali & Chamorro-Premuzic, 2010; Barlow, Qualter, & Stylianou, 2010).

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#### 1.2.2. Narcissism

Narcissists possess exaggerated views of self-worth and grandiosity; they are self-centred, arrogant, and exploitative in interpersonal relationships, viewing others as a means through which their needs for admiration and reinforcement of self-views can be attained (Campbell, Reeder, Sedikides, & Elliot, 2000; Campbell, Rudich, & Sedikides, 2002; Rhodewalt & Peterson, 2009). Like Machiavellianism, narcissism is associated with reduced empathy (Watson, Grisham, Trotter, & Biderman, 1984; Watson & Morris, 1991).

#### 1.2.3. Psychopathy

Psychopathic individuals employ destructive patterns of dysfunctional interpersonal behaviours, augmented by aberrant cognitions, and utilise charm and manipulative techniques for personal gain, regardless of cost to others, while contrary to the other dark triad traits, they are characterised by high impulsivity and a disposition towards reckless, inappropriate, immoral, or even violent conduct (Hare, 1999). A fundamental trait of subclinical psychopathy, as in Machiavellians and narcissists, is empathic deficiency (Del Gaizo & Falkenbach, 2008; Mahmut, Homewood, & Stevenson, 2008). Their inability to empathise is further complemented by lack of remorse, guilt, and regret (Williams & Paulhus, 2004).

Psychopathy is divided into *primary* and *secondary* (Del Gaizo & Falkenbach, 2008). Primary psychopaths maintain their "cool" and carefully execute planned behaviours, fuelled by relative lack of morality. Secondary psychopathy is an emotionally conditioned adaptation to environmental factors that leads to an impulsive and emotionally unstable character, which may cause harm to others in response to negative emotion.

### 1.3. Dark triad and empathy

Although research has demonstrated robust negative relationships between the dark personalities and empathy, findings are inherently limited for at least the following reasons. First, the empathy assessments utilised so far tapped into either cognitive or affective empathy (e.g. *Emotional Empathy Scale*; Mehrabian & Epstein, 1972), did not differentiate between the two (e.g. *Empathy Scale*; Hogan, 1969), or possessed questionable levels of content validity (e.g. *Interpersonal Reactivity Index*; Davis, 1983). Consequently, the identified empathic deficits associated with the dark triad cannot be reliably disseminated as either being cognitive or affective. This information is crucially needed, given the distinct behavioural and motivational attributes of the two empathy systems. Thus, a research-focus on the relationship between the dark triad and both cognitive and affective empathy is vital in advancing the understanding of how individual differences in such personality expressions impact upon social interactions.

Second, no study, thus far, has assessed the combined empathic nature of the three dark triad traits. Since these personalities are significantly related to each other, by co-assessing their behaviour, it would be possible to examine their concurrent, unique, and interactive effects.

### 1.4. The current study

This is the first reported study to examine bi-dimensional empathic deficits on all the facets of the dark triad. Since exploitation and manipulation are the dark triad's key characteristics, empathic deficits may be more affective than cognitive. Hence, we hypothesised that the dark triad personalities are associated with lower global and affective empathy, but would demonstrate no deficits in cognitive empathy. Consequently, we expected individuals high on the dark triad to demonstrate higher levels of inappropriate empathic responding to emotional stimuli (i.e. low affective empathy) and show no impairment in accurately identifying others' emotions (cognitive empathy). Finally, in an explorative approach, gender effects were considered.

## 2. Method

### 2.1. Measures

#### 2.1.1. Mach-IV (Christie & Geis, 1970)

A widely used measurement of Machiavellianism comprises 20 items that assess on a 5-point Likert scale the use of manipulative interpersonal strategies for personal gain, a lack of concern with conventional morality, and a generally cynical attitude towards human nature. Higher scores reflect higher Machiavellian tendencies.

#### 2.1.2. Narcissistic personality inventory (NPI; Raskin & Hall, 1979)

A 40-item, two alternative forced-choice assessment of narcissistic personalities in non-clinical populations. Two statements are presented, one of which is characteristic of a narcissistic mindset. A point is given for each narcissistic statement chosen, thus higher scores reflect higher narcissistic tendencies.

#### 2.1.3. Levenson self-report psychopathy scale (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995)

A 26-item measurement designed to assess attributes and behaviours commonly associated with psychopathy within non-clinical populations (4-point unbalanced, no neutral point, Likert-type scale). Sixteen items measure primary psychopathy and the remaining items assess secondary psychopathy. Higher scores reflect higher psychopathic tendencies.

#### 2.1.4. Empathy quotient (EQ; Baron-Cohen & Wheelwright, 2004)

An instrument designed to assess cognitive and affective empathy – 11 items per empathy construct; 4-point unbalanced, no neutral point, Likert-type scale; higher scores reflect higher empathic tendencies.

#### 2.1.5. Self-assessment manikin (SAM; Bradley & Lang, 1994)

Since affective empathy is defined as an appropriate emotional response to the perceived emotions of others, it may be more accurately and correctly measured by assessing an individual's response to emotional stimuli, as opposed through self-report questionnaires. Research shows that the presentation of simple facial expressions, depicting various emotions, can induce emotional contagion (Hess & Blairy, 2001; Wild, Erb, & Bartels, 2001). Since an individual's emotional response must be appropriate to the situation to be counted as affective empathy, how positively or negatively one feels toward another's emotions is arguably an empathic criterion.

We used *SAM* as an affective empathy facial responding task, by replicating the procedure from a study by Ali, Amorim, and Chamorro-Premuzic (2009), extending the task by adding angry and fearful expressions, as both are considered basic universal emotions (Ekman & Friesen, 1971). The task involves the sequential presentation of images (black and white mag-shots of single individuals) depicting specific emotional facial expressions. The task requires participants to examine each picture and indicate how they feel towards it on a *valence scale* [1 (more negative) – 9 (more positive)]. Our image-set comprised neutral, happy, sad, angry, and fearful faces – 10 images/emotions, equally balanced across gender and race (Beaupré, Cheung, & Hess, 2000). Valence scores for each emotion were obtained by averaging responses across its 10 images.

Finally, in order to receive a non-psychometric assessment of cognitive empathy, a *facial identification task* was devised; participants were asked to select which emotion they believed each of the