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The Machiavellians' "Cool Syndrome": They Experience Intensive Feelings but Have Difficulties in Expressing Their Emotions

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Abstract Previous studies clearly show that Machiavellian thinking and behavior are characterized by some kind of cold attitude; a tendency to be detached from the emotional features of a particular situation. However, very little is known what this cold-minded attitude means, and the presence or absence of which characteristics can lead to emotional detachment. Machiavellianism was found to have significant relationships with Agreeableness, Conscientiousness, and Neuroticism. Surprisingly, our study indicated that Machiavellians - contrary to the widespread conception - show more emotional instability: they may experience strong emotions and easily lose their coolness in various situations. However, we also found that they cannot express their emotions as subtly and precisely as others. We argue that this is exactly the deficit that can create the best condition for deceiving others. If Machiavellian persons have a difficulty in expressing their own emotions, they can easily disguise their true intentions from their partners.

Keywords Machiavellianism · Emotional intelligence · Emotional expression · Neuroticism · Big five · Personality

Introduction

In their *Studies of Machiavellianism*, Christie and Geis (1970) describe Machiavellianism as a fairly complex phenomenon. The authors characterize High Mach people – who obtain high scores on Mach tests - as distrustful individuals with a negative attitude towards others, who are predisposed to be amoral, in order to achieve their goals, violate norms, and exploit and manipulate their environment. Geis (1978) suggests that it is an organic part of the Machiavellian worldview for these individuals to be cool in an emotional sense. Christie and Geis called this feature the 'cool-syndrome'. Not only do high Machs remain relatively unmoved by emotional involvement with others, they also appear unaffected by their own beliefs and even their own behavior.

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Other authors confirm that Machiavellian individuals are characterized by the lack of interpersonal warmth; they lack emotional attachment during social interactions and they try to avoid intimate relationships (Ali, Amorim, and Chamorro-Premuzic 2009; Bereczkei, Birkas, and Kerekes 2010; McIllwain 2003; Wai and Tiliopulous 2012; Wastell and Booth 2003; Wilson et al. 1996). The emotional detachment makes Machiavellian people able to remain cool, make the rational decisions, and act in their interest (that is in a manipulative way), even in emotionally stressful situations. It is easy to see that this can only be done if they can distract themselves from the social interactions and emotions and intentions of the individuals participating in these interactions. Accordingly, they experience personal relationships in a utilitarian way, and see others as a tool that is necessary for attaining personal gain (Christie and Geis 1970; Fehr et al. 1992; McHoskey 1995; Wastell and Booth 2003; Pilch 2008).

The concept of emotional coolness is strongly related to the results of studies on the Machiavellians' personality traits and emotional intelligence. Machiavellianism has been associated with a lower level of empathy and emotional intelligence: high Mach people were found to be poor at managing their stress levels and demonstrate reduced skills in expressing their emotions (Ali et al. 2009; Austin, Farrelly, Black, and Moore 2007; Paal and Bereczkei 2007; Pilch 2008). Other studies have revealed that Machiavellianism was negatively associated with Agreeableness and Conscientiousness, and positively with Neuroticism on the Big Five scales (Jacobwitz and Egan 2006; Paulhus and Williams 2002).

Emotional coolness has become a central feature of Machiavellianism in the past few decades (Christie and Geis 1970; Jones and Paulhus 2009). One of the main reasons for this is that this feature is an essential condition for the success of the Machiavellian strategy, since people who listen to their own emotions, and can be influenced by the emotions of others, would not be able to implement this strategy successfully. Without emotional detachment they would not be able to accomplish their goals by riding roughshod, if necessary, over their friends, exploiting and manipulating them all along.

Although there are several references to the Machiavellians' emotional coolness, very little is still known as to what it exactly means, what components it constitutes, and which emotional abilities, or the lack of which emotional abilities, can contribute to the cool attitude of Machiavellians.

We set up three hypotheses for attempting to explain the "cool syndrome". Machiavellians are characterized by an information-processing deficit in terms of mindreading ability and emotional intelligence (Ali and Chamorro-Premuzic 2010; Austin et al. 2007; Lyons, Caldwell, and Schultz 2010; Paal and Bereczkei 2007). When processing emotions, Machiavellian persons run into difficulties and, as a result they fail to perceive the emotional temperature of the situation. Therefore, they are not influenced by the partner's intentions and emotions. They are unmoved by the system of social relations, and do not experience intense emotions in situations in which others become angry, disappointed or happy (Hypothesis 1). The emotional coolness deriving from such a "primary" deficit in emotional control creates favorable conditions for Machiavellianism to develop. If Machiavellians do not get involved in the situation emotionally and can make a rational decision, they have more opportunity for influencing their exchange partner, and for controlling the situation more effectively.

The other hypotheses are based on the assumptions that Machiavellians do experience emotions; in fact, certain situations might evoke even stronger emotions in them

than in others (McIllwain 2003). However, they conceal these emotions in essentially two ways (Hypothesis 2). They may conceal them from others: in this case their emotions do not appear in their verbal communication and on their face or in their gestures (Hypothesis 2a). The inability to express and share emotions with others may help Machiavellian persons conceal their emotions, along with their intentions, and so manipulate others effectively.

Yet Machiavellians may conceal their emotions from themselves too (Hypothesis 2b). This goes back to the possible deficit of not being able to identify and interpret their own emotions precisely and appropriately (Austin et al. 2007). In addition, they may perform worse at perceiving transitions between emotions. This may again be adaptive for Machiavellians, inasmuch as the evaluation of their own emotions becomes more difficult for Machiavellians, so any obstacle to the manipulation of others simply disappears. This is because the decision to manipulate others may entail a serious emotional challenge that would distract them from successfully cheating the partner. If, however, it is more difficult for the Machiavellian person to identify and interpret their own feelings, they can be committed more easily to the manipulation of their partners, and enforce their own interests more efficiently, to the detriment of others.

If the first hypothesis is supported (Hypothesis 1), we expect Machiavellians to experience a low degree of Neuroticism, indicating that they may experience less emotions and remain relatively unmoved by emotional involvement with others. If the second hypothesis turns out to be right (Hypothesis 2), we expect just the opposite; that is, high neuroticism. In this case, Machiavellians will show an increased emotional responsiveness to the events and feelings of others and they may easily lose their coolness in various situations. Hypothesis 2a, within the second hypothesis, will be supported if Machiavellians turn out to be worse than others at expressing their emotions, while Hypothesis 2b will be confirmed if they have lower scores for identifying and interpreting their own emotions.

Method

Participants

157 university students (74 males and 83 females), between 18 and 29 years of age, participated in our study (mean: 21.6, standard deviation: 2.51), all of them studying at the faculty of humanities of the University of Pécs. The subjects volunteered to participate in the experiment and did not receive any financial remuneration, nor extra credits for participation.

Measures

Mach-IV

We used the Mach-IV questionnaire developed by Christie and Geis 1970, to measure Machiavellianism. The test contains 20 items, and agreement or disagreement with each of them is indicated by the subjects on a seven-point Likert scale. The total score is calculated by summing up the values marked for each item. 10 statements are added to

the total score without any change in the test, while 10 statements are calculated inversely. The minimum score is 40, and the maximum score is 160, the average is about 100. In the current study we treated Machiavellianism as a continuous variable in the statistical analysis.

Schutte Self-Report Emotional Intelligence Scale (SSREI)

Emotional intelligence was measured by the questionnaire developed by Schutte et al. 1998 (Schutte et al. 1998). The authors originally made a 62-item, one-dimensional scale, which was later changed to 33 items, on the basis of Salowey and Mayer's (1990) model. 13 statements in the test refer to the appraisal and expression of emotions, 10 statements to the regulation of emotions, and another 10 statements to the utilization of emotions in solving problems (De Raad 2005). SSREI measures the following six factors (Gignac, Palmer, Manocha and Stough, 2005):

1. Appraisal of Emotions in the Self (AES), involves the ability to analyze information conveyed by our own emotions, that is label and understand the meaning of the emotions in the Self.
2. Appraisal of Emotions in Others (AEO), measures the ability to interpret and understand the emotions expressed by others, either verbally or nonverbally.
3. Emotional Expression (EE), measures whether our emotions appear in verbal communication, and if they do, whether they appear at the right time.
4. Emotional Regulation of the Self (ERS), means the knowledge-based, cognitive regulation of our own emotions. Closely related to this ability is openness to perceiving our own emotions, and the ability to use strategies that improve and maintain mood.
5. Emotional Regulation of Others (ERO), involves the cognitive control of the emotions of others. Part of this factor is monitoring and controlling the emotions of others, as well as the knowledge of strategies that can maintain the mood of others.
6. Utilization of Emotions in Problem Solving (UEPS), examines whether we have the ability to call upon our emotions to help us solve problems, and overcome difficulties successfully.

Table 1 shows the means, ranges, and standard deviation of the subscales of SSREI.

Big Five Inventory (BFI)

The Big Five Inventory was developed by John et al. 1991. It contains 44 items. Each statement is a personality description. The testees can mark their agreement or disagreement with the statements on a 5-point Likert scale. Following McCrae and Costa (2008), the test measures the five main Big Five factors: Extraversion, Conscientiousness, Agreeableness, Neuroticism, and Openness. The Neuroticism factor helps us measure emotional stability in the following way: the higher a person scores on Neuroticism, the lower the degree of emotional stability; hence the higher the degree of emotional instability that characterizes this person. The individual high on Neuroticism can be described as an emotionally restless, mood-directed, anxious

Table 1 Means, standard deviations for machiavellianism, SSREI, SSREI subscales

	N	Minimum	Maximum	Mean	Standard Deviation
AES	157	2	10	7.5625	1.8246
AEO	157	15	30	22.0446	3.1344
EE	155	3	10	6.9871	1.4637
ERS	159	16	36	26.8994	3.6564
ERO	158	12	25	18.8734	2.5730
EUPS	160	9	20	14.1875	2.4345

personality. Agreeableness is related to prosocial behavior and includes attributes such as trust, altruism, kindness, and affection. Extraversion tends to be manifested in outgoing, talkative, sociable, and energetic behavior that enable one to obtain gratification from what is outside the self. Conscientiousness is a trait, that influences whether people set and keep long-range goals, deliberate over choices or behave impulsively, and take seriously obligations to others. Finally, Openness reflects to the appreciation for art, emotion, adventure, and unusual ideas.

The means, ranges, standard deviations, and internal consistencies of all the inventories are summarized on Table 2.

Results

First, we have made correlational analyses in order to learn how Machiavellianism is related to Neuroticism and Emotional intelligence. Then, we run regression analyses to measure the influence of Machiavellianism and personality traits on the relevant factors of Emotional intelligence. The aim of the regression analyses was to evaluate the relative weight of personality characteristics in the mediation of the relationship between Machiavellianism and expression and appraisal of emotions.

Table 2 Reliability, means, standard deviations for machiavellianism, SSREI, SSREI subscales and BFI subscales

	Cronbach α	N	Minimum	Maximum	Mean	Standard deviation
Machiavellianism	0.771	160	60	149	97.475	12.465
SSREI Total scores	0.829	150	70	126	96.767	9.941
BFI Extraversion	0.837	154	2.00	7.50	3.569	0.677
BFI Agreeableness	0.701	154	1.44	8.78	3.480	0.700
BFI Conscientiousness	0.831	154	2.11	4.89	3.587	0.687
BFI Neuroticism	0.770	154	1.38	4.75	2.913	0.729
BFI Openness	0.799	154	1.70	4.90	3.691	0.582

Machiavellianism and Neuroticism

Correlation analysis showed a positive and significant correlation between the level of Machiavellianism and Neuroticism ($r=0.28$; $p<0.05$; Fig. 1).

Considering the other factors of Big Five Inventory, Machiavellianism was significantly correlated with Agreeableness ($r=-0.20$; $p<0.05$), with Extraversion ($r=-0.17$, $p<0.05$, and Conscientiousness ($r=-0.23$; $p<0.01$). There was not significant relationship between Machiavellianism and Openness ($r=-0.01$; $p>0.05$).

Machiavellianism and Emotional intelligence

We found a negative and marginally significant correlation between the degree of Machiavellianism and the total score for trait emotional intelligence ($r=-0.16$, $p=0.054$).

In support of hypothesis 2a, there was a significant negative correlation between the Machiavellianism and the Emotional Expression (EE) subscale of SSREI ($r=-0.29$; $p=0.001$) (see Fig. 2).

In accordance with our hypothesis 2b, a weak but significant relationship was found between the scores for the factor Appraisal of Emotions in the Self (AES), and the degree of Machiavellianism ($r=-0.18$; $p>0.05$).

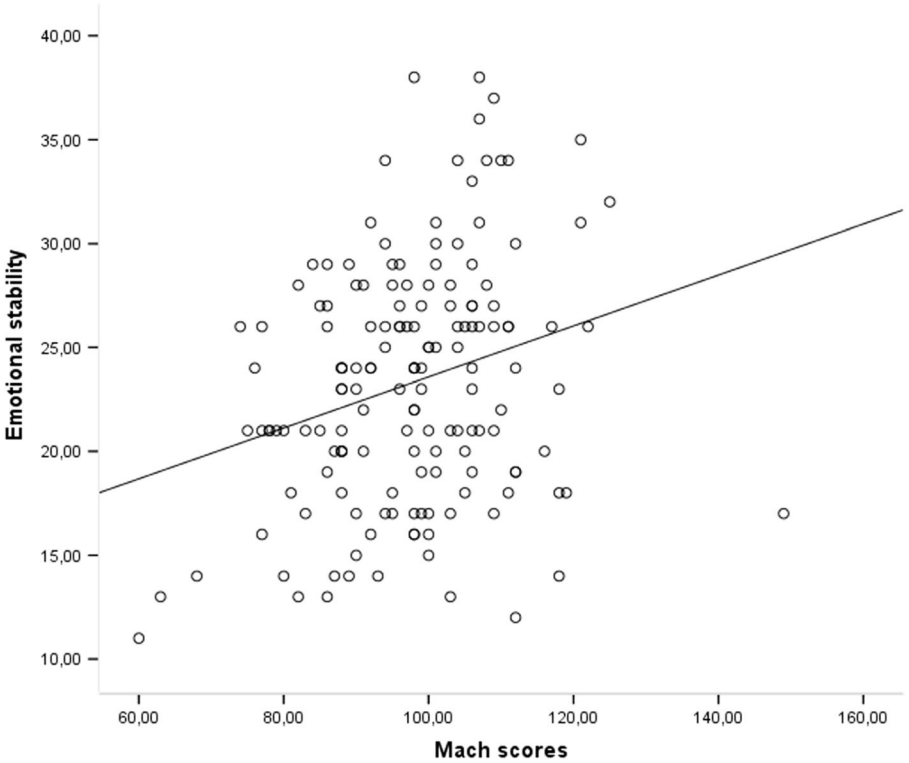

Fig. 1 Machiavellianism and emotional stability. The Mach scores were measured on Mach-IV test, the emotional stability was measured on the Neuroticism scale of Big Five Inventory (BFI)

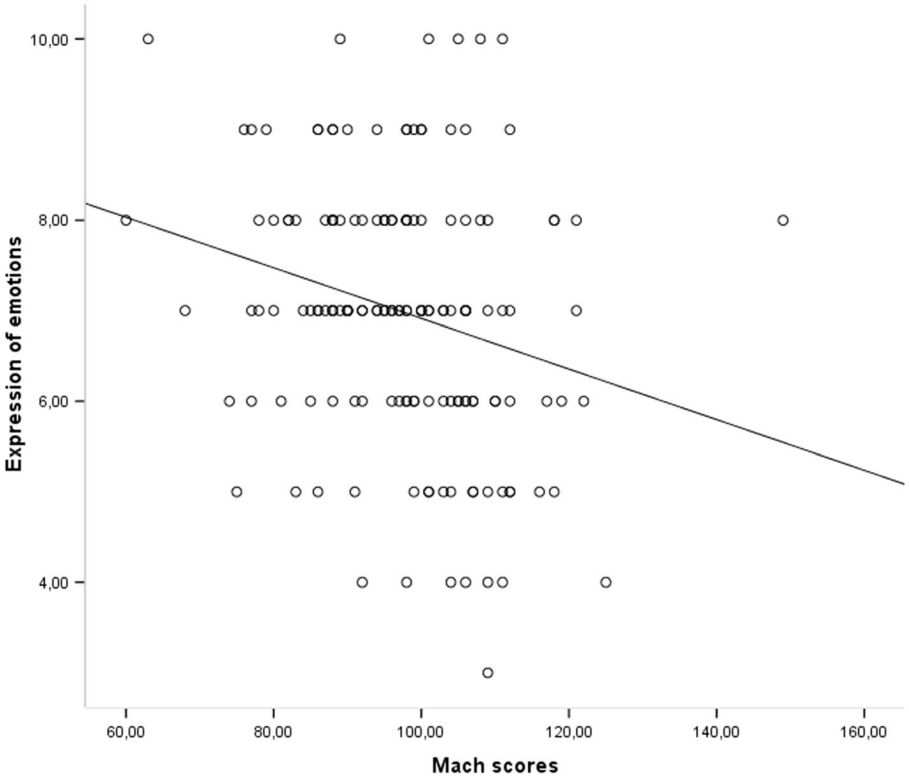

Fig. 2 Machiavellianism and the expressions of emotions. The Mach scores were measured ont he Mach-IV test, the verbal expression of emotion was measured on the EE scale of the Schutte Self-Report Emotional Intelligence Scale (SSREI)

Male subjects have significantly higher scores on the Mach scale than females (100.3±10.7 vs. 95.7±11.9, $t=2.72$, $p<0.01$). Neither personality factors in BFI nor emotional variables in SSREI showed significant sex differences.

We did not find any significant correlation between Machiavellianism and the values of the following variables: 1. Appraisal of Emotions in Others ($r=0.03$, $p>0.05$); 2. Emotional Regulation of the Self ($r=-0.07$; $p>0.05$); 3. Emotional Regulation of Others ($r=-0.13$; $p>0.05$); and 4. Utilization of Emotions in Problem Solving ($r=0.02$; $p>0.05$).

Regression Analyses

We used multiple regression analyses to examine the influence of the Machiavellianism, personality factors, and sex on Emotional Expression and Appraisal of Emotions in the Self. As Table 3 shows, we entered Machiavellianism first, then added Sex, and finally entered the five personality factors.

Only Machiavellianism and Extraversion had a significant effect on Emotional Expression. Even though Extraversion was a strong predictor of EE, the relationship between Machiavellianism and EE remained significant after Extraversion was entered into the equation. The Appraisal of Emotions in the Self was influenced by Machiavellianism, Conscientiousness, and Neuroticism. However, after entering these

Table 3 Results of multiple regression analysis for expression of emotion and appraisal of emotions in the self

	Expression of emotion						Appraisal of emotions in the self					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
Variables	t	Beta	t	Beta	t	Beta	t	Beta	t	Beta	t	Beta
Machiavellianism	−3.73***	−0.29	−3.45***	−0.28	−2.46*	−0.19	−2.22*	−0.18	−2.39*	−0.20	−0.58	−0.05
Sex			0.32	0.03	−0.05	−0.01			−0.93	−0.08	−0.56	−0.05
Personality factors												
Extraversion					6.01***	0.46					0.33	0.03
Agreeableness					0.98	0.07					1.89	0.15
Conscientiousness					0.07	0.01					2.45*	0.21
Emotional Stability					−0.51	−0.04					−3.32*	−0.22
Openness					0.23	0.02					1.00	0.08
R2	0.09		0.11		0.233		0.03		0.01		0.186	

personality variables, they eliminated the effect of Machiavellianism on AES (Table 3). In spite of the sex differences on the Mach scale, Machiavellianism preserved a significant relationship with both EE and AES after Sex was entered in the regression analyis (Table 3).

Discussion

The literature unanimously holds Machiavellians to be cold-minded people who can distance themselves from the emotional atmosphere of the situation. However, this widespread view has not yet been supported properly by empirical evidence. We do not know precisely what the Machiavellians' emotional detachment, rational behavior and "cold" worldview really mean. Our study made an attempt to provide analyses on the components of the Machiavellians' "cool syndrome".

Neuroticism

First of all, the question arises whether there are any emotions evoked in Machiavellian persons, who are regarded by the outside observer as cool, and if there are, what kind of emotions they experience during their social interactions. Do they lack emotions and intensive feelings even in the stressful situations (Hypothesis 1)? Or on the contrary, do Machiavellians have negative emotions that do not, for one reason or another, appear to outsiders (Hypotheses 2)? How do Machiavellian persons experience emotionally stressful situations?

In order to get an answer to this question, we found it important to examine the relationship between Machiavellianism and neuroticism, which was done using the BFI test. We found a significant positive relationship between Machiavellianism and the variables of Neuroticism. This means that Machiavellian persons are characterized by high emotional instability that may be linked to the experience of more negative emotions and a large difficulty to bear distress. It is possible, then, that emotionally stressful situations wear them out more than others that may contradict to the widespread notion about their cold-minded thinking. However, our results, in themselves, do not describe the underlying mechanisms of their emotional instability. We do not know if they tolerate difficult situations worse, or lose their composure sooner, or lose their temper more easily than their peers with lower scores on the Mach-scale. More studies should be done in order to clarify these details.

Regarding the other personality factors in BFI, we found that Machiavellianism was negatively correlated with Agreeableness, Extraversion, and Conscientiousness. These findings are not surprising and coincide with the results of other studies (Austin et al. 2007; Jacobwitz and Egan 2006; Paulhus and Williams 2002). Those low on Agreeableness are mistrustful of others, have a broadly negative view of other people, and are less likely to be concerned about other people beyond their own self-interest. The negative relationship between Machiavellianism and Conscientiousness may reflect the Machiavellians' cynicism and egocentrism: they have a less intention to trust in others and show a little concern for conventional morality, especially in situations that offer various rewards for them. Finally, low scores on Extraversion may link to the Machiavellians' solitary character in that they easily separate themselves from the

others' needs and intentions, and handle the others in the service of their own intrinsic motivations (Fehr et al. 1992).

Expression and Understanding of Emotions

Our results then support the second one of our two hypotheses: Machiavellian people experience worries and intense emotions in stressful situations. If they are characterized by "emotional detachment" and "cold-mindedness", as former studies described (Christie and Geis 1970; Wai and Tiliopulous 2012; Wastell and Booth 2003; Wilson et al. 1996), our results lead us to assume that Machiavellians somehow conceal their emotional instability, hiding it under the guise of composure. We hypothesized that this can occur in two ways: either they poorly express their emotions (Hypothesis 2a); or their own emotions stay concealed even from themselves (Hypothesis 2b).

Our results partly supported these expectations. We found negative correlation between Machiavellianism and Emotional Expression (EE), in the Schutte Self-Report Emotional Intelligence Scale (SSREI). When sex and personality factors were entered in the regression model, Machiavellianism preserved its significant effect on this emotional variable. Beside Machiavellianism, Extraversion was the only variable that significantly related to the Emotional Expression. This is not surprising: previous studies found a significant positive correlation between emotional intelligence and Extraversion (Austin et al. 2007; Mayer et al. 2008).

Persons with higher Mach scores admittedly cannot express their emotions in a subtle and precise way in verbal communication, compared to those with lower scores. Although the poor ability to express emotions may be a kind of deficit, it can be advantageous for deceiving and manipulating others, since the inability to express and share emotions with others may help Machiavellian persons conceal their emotions, along with their intentions, and so manipulate others effectively, which can make it easier for them to utilize others. When the expression of their emotions is inhibited, they may become able to present themselves as cool, whatever emotions are evoked in them in an emotionally stressful situation. In this way, the concealment of their true emotions, that does not require any special effort or pretense, does not disclose the tensions they are experiencing. Paradoxically, this deficit may become a tool for the Machiavellian persons to influence and manipulate others effectively. The unintentional concealment of emotions can practically be seen as a "built-in error" that may have an adaptive function for the Machiavellians in social relationships.

However, our data do not make possible for us to provide details about the underlying psychological mechanisms of the concealment of emotion (Thomson et al. 2008). It is possible that Machiavellians simply suppress or repress their emotions thereby preventing them to be expressed. But the concealment of emotion may involve a broader term suggesting that Machiavellians are less aware of their own emotions that does not imply any specific psychodynamic process. Next studies could clarify what psychological mechanisms are involved in the concealment of emotions in the Machiavellian persons.

We found a negative correlation between Machiavellianism and the Appraisal of Emotions in the Self. However, entering personality variables, this association disappeared, and only Consciousness and Neuroticism proved to be predictive of AES. This result suggests that Machiavellianism does not have a direct effect on the evaluation

and interpretation of the emotions. It may have rather an indirect influence through the mediation of the previously mentioned personality factors. As a possible support of this assumption, previous studies found that emotional intelligence is significantly correlated with Consciousness and negatively correlated with Neuroticism (Austin et al. 2007; Mayer et al. 2008).

Machiavellianism was not significantly related to the other factors of the Emotional Intelligence Scale. The interpretation of the lack of significant relationship between Machiavellianism and Emotional Regulation of the Self may be influenced by our other finding concerning positive correlation between Machiavellianism and Neuroticism, including emotional stability. Although the present study is the first one that examined the relationships among these variables simultaneously, the former studies found similar results: Machiavellianism positively correlated with Neuroticism (Jacobwitz and Egan 2006), but did not correlate with the awareness of one's own feelings (Austin et al. 2007). It is highly probable that emotional stability and emotional regulation represent, at least partly, different dimensions of the emotional information processing in the Machiavellian decision making. Obviously, more studies are needed to understand the underlying cognitive and physiological mechanisms.

Summary

Our results may shed new light on the notion of Machiavellian "cool syndrome", or "emotional detachment". We think that Machiavellians are by no means as cold-minded as they were thought to be in the former studies. They have a general disposition to stress and negative emotionality in critical situations. However, they have difficulties to express and share emotions that may result in a concealment of their true emotions from the others.

We speculate that this is exactly the deficit that can create the best condition for deceiving others. If Machiavellian persons have a difficulty in expressing their own emotions, they can easily disguise their true intentions from their partners. Although they easily lose their emotional stability in various social situations, it is just their poor capacity for expressing emotions that enables them to implement the strategy to enforce their self-interest successfully. Obviously, more studies are needed concerning these findings in future research.

Limitations of the Study

There are several limitations of our study. First, we used self-report inventories that can provide a limited scope on investigating the relationship between Machiavellianism and personality characters. In future research other instruments have to be used for measuring emotional information processing in Machiavellians. Experimental games and Neuroimaging techniques, for example, would be useful procedures to learn more about the psychological mechanisms underlying the decision making processes in Machiavellian people (see Czibor and Bereczkei 2012).

Another limitation of the current study is that a measure of rational thinking was not included in the connection with cold-minded attitude. Obviously, a profound examination of the relationships among rational thinking, emotional regulation, and manipulative tactics are crucial for understanding the Machiavellian intelligence. Therefore,

studies on the possible association between cognitive mechanisms and Machiavellian thinking are unavoidable in future research (see Bereczkei et al. 2013).

In our paper we did not explain how Machiavellianism differ from antisocial disorder, although this distinction must be helpful in the understanding of the Machiavellian's personality. Antisocial Personality Disorder is defined in the Diagnostic and Statistical Manual (DSM). According to DSM-V., four criteria is required for the diagnosis of Antisocial Personality Disorder (APD): 1, a pervasive pattern of disregard for and violation of the rights of others (since the client is older than 15) 2, The individual is at least age 18 years old, 3, There is evidence of conduct disorder with onset before age 15 4, The occurrence of antisocial behavior is not exclusively during the course of schizophrenia or bipolar disorder.

In contrast, Machiavellianism is a behavioral strategy and a world view based upon manipulation, cynicism and deceitfulness. According to Paulhus and Williams (2002), Machiavellianism is one of the three main components of the so called'Dark Triad' personality involving, besides Machiavellianism, subclinical psychopathy and subclinical narcissism. These three personalities have diverse origins but they share some characters: emotional coolness, self-promotion, duplicity, aggressiveness. Although several authors associate Machiavellianism with subclinical psychopathy, they also regard these personalities as distinct constructs (Paulhus and Williams 2002).

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