



CHAPTER 7



Machiavellianism

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Early in the 16th century, Niccolo Machiavelli acted as chief political advisor to the ruling Medici family in Florence, Italy. The details of his counsel are well known because Machiavelli laid them out for posterity in his 1513 book, *The Prince*. The gist of his advice for maintaining political control is captured in the phrase “the end justifies the means.” According to Machiavelli, a ruler with a clear agenda should be open to any and all effective tactics, including manipulative interpersonal strategies such as flattery and lying.

Four centuries later, these ideas struck a chord with the personality psychologist Richard Christie, who noticed that Machiavelli’s political strategies had parallels in people’s everyday social behavior. Christie and his colleagues at Columbia University identified a corresponding personality syndrome, which they dubbed *Machiavellianism*. The label was chosen to capture a duplicitous interpersonal style assumed to emerge from a broader network of cynical beliefs and pragmatic morality. Christie applied his psychometric expertise to develop a series of questionnaires designed to tap individual differences in Machiavellianism. Those questionnaires, along with the research supporting their construct validity, were presented in Christie and Geis’s (1970) book, *Studies in Machiavellianism*. Of these measures, by far the most popular

has been the Mach IV.¹ Used in more than 2,000 cited studies, the scale has proved valuable in studying manipulative tendencies among student, community, and worker samples. The follow-up version, Mach V, was designed as an improvement but, in the end, raised more problems than it solved (Wrightsman, 1991).

The only comprehensive review of the research literature on Machiavellianism was published 20 years later by Fehr, Samsom, and Paulhus (1992). Rather than recapitulate that review, our strategy here is to summarize its conclusions and springboard into the subsequent research. Our emphasis is on the Christie tradition primarily focused on research using his scales. We conclude by discussing new directions in theory and research on Machiavellianism.

The Character of Machiavellians

Their Motivation

The 1992 review by Fehr and colleagues described Machiavellian motivation as being of cold selfishness or pure instrumentality. Rather than having a unique set of goals, individuals high in Machiavellianism (referred to casually as “Machs”) were assumed to have typical intrinsic motives (e.g., sex, achievement, and sociality). But they are willing to pursue them in duplicitous ways.

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Machs

This view has required some adjustment based on recent work wherein Machs were asked about their motivations. Compared to low Machs, high Machs gave high priority to money, power, and competition (Stewart & Stewart, 2006) and relatively low priority to community building, self-love, and family concerns (McHoskey, 1999). Machs admitted to a focus on unmitigated achievement and winning at any cost (Ryckman, Thornton, & Butler, 1994). Note that this distinctive motivational profile does not necessarily conflict with the original view of Machs as purely instrumental: After all, money seeking and power seeking tend to maximize instrumental benefits in the long run.

Their Abilities

Because of their success at interpersonal manipulation, it is often assumed that Machiavellians have superior intelligence, especially with regard to understanding people in social situations (Davies & Stone, 2003). However, the lack of relation between Machiavellianism and IQ has been clearly established (e.g., Paulhus & Williams, 2002; Wilson, Near, & Miller, 1996). As a result, researchers have turned to possible links with more specific cognitive abilities, in particular, mind reading and emotional intelligence.

The assumption that Machiavellians have a more advanced “theory of mind” has stirred a new commotion of developmental research. An advanced theory of mind is said to facilitate “mind reading” in the sense of anticipating what others are thinking in interpersonal interactions (Davies & Stone, 2003; McIlwain, 2003; Repacholi, Slaughter, Pritchard, & Gibbs, 2003). To date, however, research has failed to support the putative link with Machiavellianism (Loftus & Glenwick, 2001; Paal & Bereczkei, 2007).

Even more disappointing, associations of Machiavellianism with emotional intelligence (EQ) have actually turned out to be *negative*. This pattern applies to overall scores on both performance and questionnaire measures of EQ (Austin, Farrelly, Black, & Moore, 2007). Most relevant are two key facets of EQ—the ability to empathize with other people and the ability to recognize others’ emotions. Both empathy (Carnahan & McFarland, 2007; Loftus &

Glenwick, 2001; Paal & Bereczkei, 2007; Wastell & Booth, 2003) and emotion recognition (Simon, Francis, & Lombardo, 1990) have shown consistent negative correlations with Machiavellianism.

In sum, the assumption that Machs have superior mental abilities—whether it be IQ, EQ, or mind reading—is not supported by the data. Indeed, one should be cautious about concluding from Machs’ willingness to manipulate others that they are naturally skilled at the task. Instead, we argue here that any manipulative abilities that Machiavellians possess derive from superior impulse regulation rather than any special cognitive ability.

How Machs Are Perceived by Others

The 1992 review reported mixed results with respect to how Machs are perceived by others, and more recent research has attempted to clarify that ambiguity. On the one hand, the developmental literature suggests that young Machiavellians may be well adjusted and even well liked (Hawley, 2003; Newcomb, Bukowski, & Pattee, 1993). Even as adults, they are sometimes preferred as leaders (Coie, Dodge, & Kupersmidt, 1990) and debate partners (Wilson, Near, & Miller, 1998). Notwithstanding those exceptions, Machiavellian behaviors among adults generally draw strong disapproval (Falbo, 1977).

One moderating variable may be the social role for which the Machiavellian is being rated. Wilson and colleagues (1998) showed that high Machs were seen as less desirable for most forms of social interaction (e.g., confidant, good friend, business partner) but may be more desirable as debate partners. Consistent with that finding are two studies of presidential personalities. Ratings of archival data indicated that presidents seen as more Machiavellian were also seen as having higher levels of drive and poise (Simonton, 1986). A follow-up to that research indicated that presidents who were viewed as more Machiavellian were also seen as more desirable leaders, with high ratings on charisma and effectiveness (Deluga, 2001).

A recent review by Wilson and colleagues (1996) offered a second possible moderating variable—time delay. They argued that Machiavellians pursue short-term manipulative

social strategies and thus fool some people some of the time, but repeat offenses lead to resentment and social exclusion over time. To date, no empirical evidence supports these claims. Furthermore, as explained subsequently, we dispute the idea that Machiavellians prefer short-term over long-term strategies.

Their Personalities and Psychological Adjustment

Self-Monitoring

A personality construct sharing many features of Machiavellianism is self-monitoring (Snyder, 1974). Although both constructs involve social manipulation, Machiavellianism also harbors the darker features of cynical worldviews and amorality. In the original publication of the self-monitoring scale, Snyder (1974) emphasized their distinctiveness, and subsequent research confirmed that the two traits correlate only in the .20–.33 range (Bolino & Turnley, 2003; Fehr et al., 1992; Leone & Corte, 1994).

Locus of Control

The 1992 review indicated (counterintuitively) that Machiavellians have an external locus of control; that is, they feel that external forces control people's behavior and outcomes. More recent studies have reported the same pattern (Gable & Dangelo, 1994; O'Connor & Morrison, 2001; Yong, 1994). Along with Paulhus (1983), we consider that conclusion to be misleading. None of these studies partitioned perceived control into its three spheres of engagement—personal, interpersonal, and sociopolitical. Paulhus showed that these three aspects of perceived control have quite different relations with Machiavellianism. Machs' apparent external locus of control derives entirely from the sociopolitical factor: Machs are simply endorsing their cynical view of others' competence (see also McHoskey et al., 1999). That is, they perceive other people as weak and as having little control over their situations.

In contrast, Machiavellians score quite high on measures of interpersonal control. In this sphere, Machs believe that they can manipulate others to get what they want. We encourage other researchers to include

the three subscales instead of a global measure of locus of control. Further clarification would be provided by a measure that distinguished perceptions of control by oneself ("I can control . . .") from perceptions of control among others ("People can control . . .").

Worldviews

One might expect a positive association between Machiavellianism and authoritarianism because a condescending attitude toward outgroups is central to both constructs. The 1992 review, however, concluded that overall associations are weak. The exception was a positive correlation between authoritarianism and the Mach IV Moral Views subscale, which taps tough-mindedness. That link is understandable because a condescending attitude toward outgroups is central to both authoritarianism and Machiavellianism.

Since then, the only direct study failed to find an overall association between Machiavellianism and authoritarianism, although both measures predicted the willingness to volunteer for a study on "prison life," as well as endorsement of pragmatic sociopolitical views (Carnahan & McFarland, 2007). Indirect research also indicates links with specific aspects of conservatism and authoritarianism (Christie, 1991). For example, Machiavellianism has been linked to traditional attitudes toward women in the workplace (Valentine & Fleischman, 2003). As noted later, Machs also score relatively low on communal values (Trapnell & Paulhus, in press; Watson & Morris, 1994). In sum, the worldview of Machs is one of pragmatic tough-mindedness.

Mental Health

An analysis of the links between psychopathology and Machiavellianism must first acknowledge the distinction between Axis I and Axis II disorders. We defer our discussion of Axis II (personality disorders) to a subsequent section and deal here with Axis I disorders, primarily mood and anxiety disorders.

The 1992 review indicated a consistent positive association between Machiavellianism and anxiety. Even Christie and Geis (1970) were suspicious that this counterintuitive association was artifactual, resulting

intolerance of personal weakness is an element of the authoritarian personality (Christie, 1991)

from the willingness of Machs to disclose negative feelings. Wrightsman (1991) agreed that high anxiety was at odds with the concept of Machiavellianism, especially their detachment in situations of interpersonal conflict. More recent research has failed to resolve this paradox, with some studies finding no correlation (Allsopp, Eysenck, & Eysenck, 1991; McNamara, Durso, & Harris, 2007; Paulhus & Williams, 2002) and others finding a positive correlation (Jakobowitz & Egan, 2006; Ramanaiah, Byravan, & Detwiler, 1994).

The findings on guilt are also inconsistent: Some research indicates that Machs are more guilt prone (Drake, 1995), whereas others report that Machs are less guilt prone (Wastell & Booth, 2003). Scattered research indicates some positive correlations with other forms of psychopathology, for example, depression (Bakir, Yilmaz, & Yavas, 1996), paranoia (Christoffersen & Stamp, 1995), alexithymia (Wastell & Booth, 2003), socially prescribed perfectionism (Sherry, Hewitt, Besser, Flett, & Klein, 2006), and low self-esteem (Valentine & Fleischman, 2003; Yong, 1994). Overall links between Mach scales and psychopathology measures appear to be weak and sample specific.

Interpersonal adjustment (Axis IV) concerns whether individuals have harmonious relations with other people. Although clearly relevant to the psychological adjustment of Machiavellians, the Axis IV diagnosis is, once again, mixed. On the one hand, Machs sometimes harm those around them, as we describe later. On the other hand, as noted, Machs can earn liking and respect under select circumstances and time frames (presumably when they deem it to be in their interest) (Hawley, 2006) ©

Career Issues

Career Choice

The 1992 review concluded that Machs select occupations that are more business oriented and less helping oriented. However, research shows that Machiavellianism is unrelated to specialty choice in medical students (Moore, Katz, & Holder, 1995) and nursing students (Moore & Katz, 1995). Other research on medical students finds that Machs are less likely to opt for general practice as a spe-

cialty (Diehl, Kumar, Gateley, Appleby, & O'Keefe, 2006). The latter finding is consistent with the view that, even in helping professions, career choices of high Machs are motivated by financial goals. Some commentators have raised the possibility of a reverse causal direction: Certain careers may reward manipulative behavior, thereby inducing workers to become more Machiavellian. For example, success in some professions is determined by reporting the misbehavior of coworkers (e.g., Girodo, 1998; Macrosson & Hemphill, 2001).

Career Success

We define career success as effective performance by a worker in the role assigned by the employer. The 1992 review found no overall evidence that Machiavellianism facilitates such career success. However, more recent research using behavioral outcomes indicates a clear pattern. Machs appear to have an advantage in unstructured organizations (Gable, Hollon, & Dangelo, 1992; Shultz, 1993). They thrive when they have more decision power, fewer rules, and less managerial supervision. In highly structured organizations, high Machs actually perform worse than low Machs (O'Connor & Morrison, 2001; Shultz, 1993; Sparks, 1994). Our confidence in these conclusions is encouraged by the fact that concrete measures of job success were used in several of these studies. In general, the research on career success is consistent with the original notion of *latitude for improvisation*. As Christie and Geis (1970) determined in laboratory research, Machs remain cool, exploit interpersonal relationships, bend the rules, and improvise. When this flexibility is constrained, Machs are likely to incur problems.

A self-report study by Ricks and Fraedrich (1999) exemplified the tradeoff in the job success of Machiavellians: High Machs reported higher sales volume but also reported significantly lower approval rates from their supervisors. By one criterion, Machs are a success; by another criterion, they are not. Other research with self-report measures of job success has extended to a wider variety of occupations. Aziz and colleagues related success to a new measure they called the Machiavellian Behavior Scale (Mach-B). The Mach-B correlated positively with

self-reports of success among stockbrokers (Aziz, May, & Crotts, 2002), car salespeople (Aziz, 2004), and real estate salespersons (Aziz, 2005). However, one wonders how much to trust self-reports of success by Machiavellians, who may be inclined to exaggerate their accomplishments.

One study investigated the question of how compatible the Machiavellian personality is with various job profiles (Macrosson & Hemphill, 2001). Fittingly, the job profile for Machs suggested that they would be ideal as spies on other employees. For such roles, organizations may find it in their interest to hire otherwise unsavory characters.

Career Satisfaction

The 1992 review concluded that Machs are generally less satisfied with their jobs. More recent research has supported this finding in retail executives (Gable & Topol, 1988), marketers (Sparks, 1994), and bank managers (Corzine, Buntzman, & Busch, 1999). Machs are more likely to feel unappreciated, to believe that they have plateaued in their careers (Corzine et al., 1999), and to leave their positions (Becker & O'Hair, 2007). Machs also report more negative feelings from coworkers (Vecchio, 2000, 2005). Indeed, hostile Machs are more likely to justify committing sabotage against a company they are upset with (Giacalone & Knouse, 1990).

Interestingly, some studies indicate that high Mach women report higher levels of promotion satisfaction (Gable & Topol, 1989; Siu & Tam, 1995). It is possible that female Machs were also satisfied in the studies reported in the previous paragraph, but the results provided no breakdown by gender. Overall, the bulk of recent research seems to confirm a general career dissatisfaction among high Machs.

Machiavellian Malevolence

Because the Mach IV scale is ^{its} the most widely accepted operationalization, the construct validity of Machiavellianism rests largely on the match between high Mach IV scores and actual pragmatic manipulation. Its structural validity is clarified by evidence for the meaningfulness of the three themes measured by the Mach IV Scale: (1) belief

in manipulative tactics, (2) a cynical worldview, and (3) a pragmatic morality. Accordingly, we review the evidence for these three themes, as well as overall antisocial behavior ^{among} high Machs.

Manipulation Tactics

Rather than asking respondents directly whether they manipulate others, the Mach IV poses questions about the utility of various tactics. Among other advantages, this indirect approach to measurement was designed to reduce socially desirable responding—otherwise a serious concern. Apparently successful, high Mach IV scores do predict who will and who will not engage in interpersonal manipulation.

Fehr and colleagues (1992) highlighted persuasion, self-disclosure, and ingratiation as the influence tactics most preferred by Machs. More recent research has continued to elaborate on these and other tactics. For example, Falbo's (1977) notion that Machs use more indirect persuasion strategies was supported by Kumar and Beyerlein's (1991) finding that Machs are especially inclined to use thought manipulation, deceit, and ingratiation. Machs are also more likely to use friendliness and emotional tactics, possibly because of their ability to stay emotionally detached from a situation (Grams & Rogers, 1990). High Machs are also ~~more likely~~ ^{known} to use guilt induction to manipulate others (Vangelisti, Daly, & Rudnick, 1991).

Impression Management

The literature since 1992 has elaborated on the nature and degree of impression management among high Machs. Among their reported forms of self-presentation are perfectionistic self-promotion, nondisclosure of imperfection, and nondisplay of imperfection (Sherry et al., 2006). Importantly, the impression-management tactics of Machiavellians have been verified by self-reports, peer reports, and supervisor reports (Becker & O'Hair, 2007). Compared with low Machs, high Machs view impression management as a more appropriate strategy in job interview situations (Lopes & Fletcher, 2004).

As noted, the 1992 review indicated that high Machs and high self-monitors employ

different impression-management strategies. Recent work has supported that conclusion (Bolino & Turnley, 2003; Corral & Calvete, 2000). Machs are more likely to use ~~aggressive~~ ^{negative} impression-management tactics such as supplication and intimidation (trying to be perceived as helpless or threatening, respectively), whereas high self-monitors are more likely to use more positive tactics such as exemplification (emphasizing one's moral integrity and responsibility), self-promotion (emphasizing one's competence), and ingratiation (emphasizing one's likeability).

Self-Disclosure Machs'

Recently added to ~~the~~ list of social influence tactics is the notion of using selective self-disclosure for manipulation (Liu, 2008). In one study, the tendency was found only among females high in Mach, suggesting that certain manipulation strategies may be sex-specific (Buss & Schmitt, 1993; Haselton, Buss, Oubaid, & Angleitner, 2005; O'Connor & Simms, 1990).

Sandbagging

One paradoxical finding concerns the willingness to "sandbag," or feign incompetence, in order to gain a competitive edge. Contrary to expectations, research indicates that low Machs are more likely to sandbag than high Machs (Shepperd & Socherman, 1997). Perhaps high Machs are too dominant and aggressive to feign ~~weakness~~ ^{incompetence}. Another possible explanation is that strategies such as sandbagging are ineffective and that high Machs recognize this ineffectiveness and eschew them.

Cynical Worldview

Research confirms that Machs have a broadly negative view of other people. For example, they assume that other people are cheaters (Mudrack, 1993). They are more likely to believe that others would engage in such unethical behavior as feigning dissatisfaction with service received in order to obtain a refund (Wirtz & Kum, 2004). At the same time, high Machs report being more tolerant of unethical behavior in others (Mudrack, 1993). This finding is reminiscent of the

"projective" logic behind covert integrity tests: Workers who say they believe that others steal are the very ones who go on to steal from the company (Cunningham, Wong, & Barbee, 1994).

The original notion of Machiavellian cynicism went hand in hand with Machs' reported use of manipulative tactics, although the causal direction was ambiguous. Cynical beliefs could lead to manipulative tactics as a form of preemptive strike. Alternatively, the tendency to manipulate may require a rationalization in the form of a cynical worldview. This ambiguity has yet to be addressed empirically, presumably because it requires a complex longitudinal research design with at least two waves of data.

Morality

Understanding the moral perspective of Machiavellians continues to be a challenge. Although immorality was considered by Christie to be among the three key elements of Machiavellianism, the Morality subscale on the Mach IV comprised only two items, one favoring euthanasia and the other concerning callous bereavement. Together, they may indicate a detached pragmatism regarding emotion-laden decisions.

The 1992 review concluded that Machs behave in a less ethical manner—but only in specific circumstances. More recent research suggests a broader set of circumstances. Compared to low Machs, high Machs report having lower ethical standards (Singhapakdi & Vitell, 1991), fewer qualms about unethical behavior (Mudrack, 1995), and greater intentions to behave unethically in the future (Bass, Barnett, & Brown, 1999; Jones & Kavanagh, 1996). Specific examples include a greater acceptance of unethical consumer practices such as purchasing clothing for one night's use and returning it the following day (Shen & Dickenson, 2001). Machs are willing to accept unjustified positive benefits from an employer (Mudrack, Mason, & Stepanski, 1999). Machs also advocate the violation of privacy and intellectual property laws (Winter, Stylianou, & Giacalone, 2004). Of course, the moral perspective of Machs may be seen as either immorality or simple pragmatism (Leary, Knight, & Barnes, 1986).

A radical reinterpretation may be mandated by research indicating that low and high Machs hold qualitatively different kinds of ethical beliefs. High Machs place relatively more emphasis on competence values (i.e., valuing competence and ability to succeed), whereas low Machs report relatively more emphasis on moral values (Musser & Orke, 1992; Trapnell & Paulhus, in press). Such results can be seen as a reframing of Machiavellian morality in terms of its priorities. This reframing is consistent with Haidt's (2001) notion that people differ little in their overall moral reactions but rank the priority of moral facets (e.g., justice, integrity) rather differently.

Antisocial Behavior

Lying and Cheating
 Given their ^{manipulative} ~~pragmatic~~ tendencies, it may be surprising that Machs ~~report~~ ^{admit to} antisocial behaviors in many self-report studies. Machs report telling more lies in daily diary studies (Kashy & DePaulo, 1996), lower intentions to honor deals that they have made (Forgas, 1998), and being more likely to withhold information that would harm them economically (e.g., not revealing a flaw in a car they are selling) (Sakalaki, Richardson, & Thepaut, 2007). In a business school simulation, Machs were also more likely to lie on tax returns (Ghosh & Crain, 1995). We contend that Machs would not report any of these antisocial inclinations if they expected that authorities might use the information against them.

The 1992 review indicated that this interaction of Machiavellianism with accountability was evident in behavioral studies of cheating. That is, high Machs cheat when the risk of detection or retaliation is low, whereas low Machs cheat when ~~prompted~~ ^{persuaded} by others. Recent research indicates a similar pattern for academic cheating. High Machs were more likely to cheat on term papers (Williams, Nathanson, & Paulhus, in press) but not more likely to cheat on multiple-choice tests (Nathanson, Paulhus, & Williams, 2006). The authors explained that Machiavellians' impulse control channeled them into strategic forms of cheating (e.g., essay plagiarism) rather than opportunistic forms such as multiple-choice copying.

Revenge and Betrayal

No research on revenge or betrayal was reported in the 1992 review. Recently, Nathanson and colleagues reported a series of studies of anonymous revenge anecdotes (Nathanson & Paulhus, 2006). Although it predicts revenge reports, the Mach IV overlaps considerably with measures of subclinical psychopathy (McHoskey, Worzel, & Szyarto, 1998; Paulhus & Williams, 2002). Indeed, the association of Mach with revenge was entirely accounted for by the overlap of Machiavellianism with subclinical psychopathy (Nathanson & Paulhus, 2006).

Betrayal behavior has been studied in simulation games among college students. In a simulated sales game, Machs engaged in a variety of unethical behaviors such as kickbacks (Hegarty, 1995). In bargaining games, Meyer (1992) found that high Machs are more likely to betray another participant in a one-shot opportunistic manner. More recent research has suggested that Machs are especially likely to betray others when there is no chance for the other person to get retribution (Gunnthorsdottir, McCabe, & Smith, 2002). We suspect that Machiavellianism predicted betrayal in the simulation studies because that behavior led to success. In contrast, Machiavellianism failed to predict revenge in the Nathanson studies, where such behavior was largely maladaptive.

Aggression and Hostility

The 1992 review noted a small positive correlation between Mach and hostility but cautioned that few studies were available. As with guilt and anxiety, however, the notion that Machs are especially hostile is inconsistent with the original construct. Christie and Geis (1970) emphasized the cool detachment of Machs in conflict situations. Instead, it may be that Machs—at least in anonymous reports—are more forthright in admitting hostile feelings and behaviors (Locke & Christensen, 2007; Marusic, Bratko, & Zarevski, 1995; Wrightsman, 1991).

With regard to aggression per se, self-report data again suggest a small positive correlation with Machiavellianism (Suman, Singh, & Ashok, 2000; Watson & Morris, 1994), including verbal aggression (Martin, Anderson, & Thweatt, 1998). Machiavellian

managers also report a greater willingness to use coercive power (Corzine & Hozier, 2005).

Similarly, children who report bullying (either as perpetrators or victims) score higher on Machiavellianism (Andreou, 2000, 2004). Machs may be responding strategically to being bullied by bullying others. Or they may report being bullied to garner benefits from authorities. Alternatively, Machs may be more willing to admit to the negative experiences of both bullying and being bullied.

In the one study where both self-report and behavioral measures were collected on the same children, a paradox emerged. Machiavellianism was positively correlated with misbehavior on children's self-reports but not on adult ratings (Loftus & Glenwick, 2001). It is unclear whether Machiavellian children are exaggerating their misbehavior or whether they are successful in inhibiting it when adults are present.

Summary

Machiavellian misbehavior is well documented in nonaggressive varieties, namely, cheating, lying, and betrayal. By contrast, there is no evidence for overt aggression in behavioral studies of Machiavellian adults.

New Directions

Situating Machiavellianism in Personality Space

The growing consensus on two structural models—the Big Five and the interpersonal circumplex—has helped clarify the location of Machiavellianism in broader personality space. Those two models help interpret Machiavellianism with respect to fundamental personality axes, as well as elucidating its overlap with other personality variables.

Interpersonal Circumplex

The interpersonal circumplex is framed in terms of two independent axes—agency and communion (Wiggins, 1991). Agency refers to the motivation to succeed and individuate oneself; communion refers to the motivation to merge with others and support the group. Several studies have established that Machi-

avellianism lies in quadrant 2 of the circumplex, indicating that high Machs are high on agency and low on communion (Gurtman, 1991, 1992; Wiggins & Broughton, 1991). Work by Locke and colleagues utilizes a composite variable called *self-construal* that indexes a relative preference for communion over agency. As expected, self-construal fell diagonally opposite Machiavellianism in circumplex space (Locke & Christensen, 2007), confirming a key suspicion regarding Machs: They are not simply out to achieve but rather are out to achieve at the expense of (or at least without regard for) others.

The Big Five

Because it is currently the predominant personality taxonomy, relations of Machiavellianism with the Big Five “supertraits” are of interest (Costa & McCrae, 1992). The clearest correlates are low Conscientiousness and low Agreeableness (Jakobwitz & Egan, 2006; Paulhus & Williams, 2002). Interestingly, research indicates that Mach correlates more highly (and negatively) with a sixth factor of personality (Honesty-Humility) than with any of the Big Five (Lee & Ashton, 2005).

The Dark Triad

Three overlapping personality variables—Machiavellianism, narcissism, subclinical psychopathy—have come to be known as the “Dark Triad” of personality: They were so named because individuals with these traits share a tendency to be callous, selfish, and malevolent in their interpersonal dealings (Paulhus & Williams, 2002). Also overlapping is the P-scale from Eysenck's P-E-N inventory (Allsop et al., 1991), which appears to be conceptually equivalent to subclinical psychopathy (Williams & Paulhus, 2004).

The distinctiveness of the Dark Triad was disputed by McHoskey and colleagues (McHoskey, 1995, 2001a; McHoskey et al., 1998): They argued that, in nonclinical samples such as students, the three variables are equivalent. Their arguments posed a significant threat to the discriminant validity of the Mach construct. Subsequently, Paulhus and colleagues published a series of articles confirming their overlap but establishing sufficient discriminant validity to recom-

mend measuring all three variables in Mach research (e.g., Paulhus & Williams, 2002). The authors argued that a failure to include the other two Dark Triad members renders ambiguous any research on a single member.

Evolutionary Origins

The growing influence of evolutionary psychology has provoked discussion of the ancestral origins of Machiavellianism. Although it includes arguments for the advantages of prosocial traits (such as altruism, compassion, and cooperation), the hallmark of evolutionary theory is the notion of the “selfish gene” (Dawkins, 1989). Contrary to many observers’ intuition, it is not paradoxical to include both prosocial and antisocial tendencies within the behavioral repertoire of our species (Krueger, Hicks, & McGue, 2001).

The natural selection of selfishness would naturally foster Machiavellian personalities. In ancestral times, those who exploited opportunities to cheat, steal, and manipulate others to achieve their goals would have outreproduced those who did not. Indeed, this adaptive advantage been referred to in the literature as *Machiavellian intelligence* (Whiten & Byrne, 1988): The term is often used interchangeably with terms such as *social intelligence*, *everyday politics*, *social astuteness*, *political intelligence*, *practical intelligence*, *emotional intelligence*, and *interpersonal intelligence*, all of which allude to cognitive abilities involving skill at adapting to social complexities. Such skills, including the ability to manipulate others, would enhance the control of resources such as food, shelter, and sex (Hawley, 2006). In sum, the term *Machiavellian intelligence* (more than the related terms) implies that the skillful manipulation of others conferred a significant evolutionary advantage.

If Machiavellianism is adaptive, it seems that all members of our species should exhibit that inclination. Instead, we see substantial variation. The explanation may be found in arguments put forth by Mealey (1995). She agreed that antisocial traits such as Machiavellianism and psychopathy may reflect an adaptive reproductive strategy but argued further that antisocial traits are frequency dependent. In other words,

not everyone in an ecology can be cooperative because the advantage of being a high Mach is too great. However, there are two reasons why not everyone in an ecology can be a high Mach. The first is that low Machs would have the advantage of building strong social relationships and cooperative alliances, and the second is that high Machs would simply be cheating each other and little would be gained. Thus there are at least two good reasons that preclude the full spread of Machiavellianism. One is that Machs have a serious disadvantage in forming cooperative alliances that depend on trust. The second reason is that Machiavellian tendencies will show marginal returns: At some point, high Machs would be trying (unsuccessfully) to cheat each other, and no advantage ensues (Mealey, 1995).

Differential Reproductive Strategies

The advantages of high and low Machiavellianism should correspond to different reproductive strategies. The opportunism ascribed to Machiavellians implies that they focus on the short term (Wilson et al., 1996). Such an opportunistic strategy is especially beneficial in unstable environments (Figueredo et al., 2005), in which repeated interactions with the same individuals are rare. In the words of Wilson and colleagues (1996), “advantages of cooperation are usually long term, whereas the advantages of exploitation are usually only short term” (p. 287).

Instead, we agree with Hawley (2006) that the behavioral repertoire of Machiavellians is “bistrategic,” that is, it includes both cooperation and coercion. We would differ with Hawley in arguing that neither long-term nor short-term cooperative tactics in Machiavellians reflect true cooperation, but are behaviors that are in the service of selfish goals.

Of special concern to evolutionary psychology are sexual strategies. The data are clear that high Machiavellians tend to be more promiscuous than low Machs (Linton & Wiener, 2001; McHoskey, 2001b; Schmitt, 2004; Paulhus & Williams, 2002). Recently, more detailed analyses have partitioned promiscuous behaviors and attitudes (Webster & Bryan, 2007). Exploiting that distinction, Jones and Paulhus (2008) found that Machiavellianism correlated only with

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the attitude component. The lack of correlation with promiscuous behavior suggests that high Machs are no less discerning than low Machs in their actual sexual activities. Such findings are another indication that high Machs are not solely short term in orientation.

Sex Differences

Evolutionary psychologists emphasize the different reproductive challenges faced by men and women. Because women bear the greater parental burden, they have evolved to be more long-term-oriented in their reproductive strategies than men (Buss & Schmitt, 1993). The short-term reproductive strategies characteristic of men should predict dismissive attachment styles and high levels of mating effort.

The research on Machiavellianism supports the gender difference in short-term reproductive strategies (Figueredo et al., 2005). Most samples show higher Mach scores in men than in women (Christie & Geis, 1970) and in young than in older adults (e.g., Rawwas & Singhapakdi, 1998). These trends suggest that Machiavellianism promotes sexual activity. Individuals who seek multiple short-term sexual opportunities (e.g., those unrestricted in sociosexuality) would benefit from manipulative tendencies and a lack of empathy.

Other research suggests that Machiavellianism confers a special reproductive advantage on men. Linton and Wiener (2001) showed that high Mach men reported higher rates of possible conceptions than low Mach men. One possible explanation is that Machiavellians are likely to deceive, coerce, and manipulate partners into sex (Jones, Harms, & Paulhus, 2008). Mach is positively associated with a variety of deceptive and self-serving tactics in romantic relationships that include feigning love, intoxicating partners, divulging intimate secrets, infidelity, and coercion (McHoskey, 2001b). The fact that these associations were more pronounced for men than for women led McHoskey (2001b) to conclude that biological sex moderates the effect of Machiavellianism on sexual behavior. Insofar as men are more likely to benefit from short-term opportunistic reproductive strategies, this interaction is predictable from evolutionary psychology (Buss & Schmitt, 1993).

These arguments rest on the assumption that manipulation is more effective for the gender that prefers promiscuity than the one that prefers investment and commitment. We dispute that assumption and suggest that female Machiavellianism manifests itself in a manner consistent with the female reproductive agenda.

Developmental Origins

Researchers have addressed how Machiavellianism develops in individual children. Christie and Geis (1970) speculated on the issue but conducted little developmental research. To encourage such research, they developed the "Kiddie Mach" Scale, which has been widely used. That version assesses Machiavellianism in children by tailoring the language to their level. For example, it includes the item "The best way to get along with people is to tell them things that make them happy" instead of the Mach IV wording, "The best way to handle people is to tell them what they want to hear."

That scale has been used in the rekindling of research on the topic of Machiavellianism in children (Repacholi & Slaughter, 2003). In McIlwain's (2003) review of that research, she concluded that the young Machiavellian is characterized by mistrust, cynicism, and affective blunting. Lack of empathy, in particular, plays a causal role in determining a young Machiavellian's behavior.

A factor analysis by Sutton and Keogh (2001) revealed three factors in the Kiddie Mach Scale: lack of faith in human nature, dishonesty, and distrust. Only lack of faith in human nature correlated with age, suggesting that cynicism increases over time. The authors also suggested that, initially, children may not differentiate manipulative from prosocial behavior. In other words, they see doing and saying things to make other people "happy" as commendable rather than dishonest or unethical.

As noted earlier, some writers had anticipated that Machiavellians would have an advanced theory of mind. Instead, the research showed no relation with theory of mind but a growing negativity among those scoring high on the Kiddie-Mach. As a result, Kiddie-Machs receive ambivalent reactions from others, even in preschool years (Repacholi et. al., 2003).

A radically different conclusion has been drawn by Hawley (2006). In her view, Machiavellian children are received well by their peers and indeed are socially competent in almost every respect. The difference in her conclusion may derive from the different methodology employed. Rather than measure children with Kiddie-Mach, she directly observed the behavior of socially competent versus socially inept children. Those who use both coercive and prosocial strategies (i.e., bistrategic controllers) are labeled Machiavellian (Hawley, 2003).

Only recently has a behavioral genetics study permitted insight into possible genetic and environmental causes. In addition to a genetic component in common with narcissism and psychopathy, Machiavellianism shows a substantial shared-environment component (Vernon, Villani, Vickers, & Harris, 2008). The latter implicates socialization mechanisms, such as parental modeling or an overreaction to harsh or unpredictable family environments.

A few other studies point to possible genetic-environment interactions. By late adolescence, Mach scores of sons correlated positively with parents' Mach scores, supporting a modeling hypothesis (Ojha, 2007). Daughters in father-absent families report higher levels of Machiavellianism, but not toward family members (Barber, 1998). Adding complexity, there is evidence that children's Mach scores initially oppose, but later come to match, parental scores (Gold, Christie, & Friedman, 1976).

Machiavellianism as a Personality Tradeoff

A repeated theme in this chapter is the notion that Machiavellianism harbors both adaptive and maladaptive qualities. Key to understanding this tradeoff is the distinction between agentic and communal notions of adaptiveness. Adaptiveness for agentic goals concerns the promotion of personal achievement, whereas adaptiveness for communal goals concerns the benefits to one's group.

Agentic Goals

A consistent theme in the literature has been that Machs thrive best in contexts that (1) afford face-to-face interaction, (2) allow latitude for improvisation, and (3) involve emotional distractions (Christie & Geis,

1970). Subsequent evidence has supported those three notions. As noted, Machs seem to thrive in business situations with a high latitude for improvisation (Shultz, 1993), but they perform worse in other situations, such as when latitude for improvisation is impeded (Sparks, 1994). Even after successful manipulations, Machs may suffer a decrement in reputation that reduces future opportunities (Wilson et al., 1996).

The source of evaluation may influence whether Machs are judged as successful or not. When evaluated by a supervisor, Machs seem to evoke negative evaluations, but they concomitantly report and record higher levels of sales in certain jobs (Ricks & Fraedrich, 1999).

Communal Goals

Surprising to the intuitions of some commentators, Machs may be just as generous and helpful as others, depending on the situation. For example, Bereczkei, Birkas, and Kerekes (2007) found that Machs volunteer just as much as others when their volunteering is made public, thus promoting a strong reputation (Bereczkei, 2008).

Group members may prefer high Machs for roles that help the group deal with enemies and opponents (Wilson et al., 1998). A classic example is the preference for a Machiavellian as president of the United States (Deluga, 2001; Simonton, 1986). On the other hand, Machs are less favored as friends, confidants, and business partners (Wilson et al., 1998).

Length of interaction also plays a role. As noted by Fehr and colleagues (1992), high Machs are more liked in short-term encounters (such as when participants are viewing a videotape) (Ickes, Reidhead, & Patterson, 1986). However, when individuals simulate the experience of engaging with a high Mach (such as by reading a first-person story), they judge Machs more negatively (Wilson et al., 1998).

Machiavellianism Refined: Returning to Its Roots

On the whole, our review of the literature has sustained the construct validity of Machiavellianism as measured by the Christie and Geis (1970) instruments. There is substantial confirmation of Machs' cynical

worldview, pragmatic ethics, and use of duplicitous tactics. Furthermore, the apparent exceptions noted throughout this chapter review fit a coherent pattern.

Disconcerting, however, are reports of positive associations of Mach IV with impulsivity (Marusic et al., 1995). Certainly, impulsive hostility may represent an evolutionarily viable strategy, but the appropriate label for that personality type is *subclinical psychopathy* (Paulhus & Williams, 2002). Psychopaths and Machiavellians do share similar antisocial tendencies (Mealey, 1995), but the original theory—from Machiavelli (1513) to Christie and Geis (1970)—specified clearly that Machs are cool and strategic rather than hostile and impulsive.

To support our case, we draw attention to a relatively unmined source regarding manipulative strategies, namely, Sun-tzu's (1998) *Art of War*. His writings anticipated those of Machiavelli by nearly 2,000 years yet have been singularly overlooked. Most relevant to our current point is the special emphasis that Sun-tzu placed on the cool preparation required to effect successful political and military outcomes. In sum, the emphasis on cool strategy in all key theoretical sources is not entirely consistent with current measures of Machiavellianism (see also Hawley, 2006).

Our conclusion is that the Mach IV needs refinement to better represent this strategic element. An improved scale would confirm that (1) Machs are less impulsive than psychopaths and no more impulsive than non-Machs, (2) Machs manipulate in the long term as well as the short term, and (3) Machs engage in aggression (including revenge) only to the degree that it is deemed profitable. In short, Machs should be strategic, as well as tactical.

Strategic Machiavellians should be willing to forgo short-term benefits to achieve long-term benefits. One prediction is that Machiavellians (as opposed to psychopaths) should pay close attention to their reputations. As Machiavelli suggested, the generation and maintenance of a favorable or menacing reputation can reap benefits across a sustained period of time. Although key theoretical sources emphasize its importance, reputation propagation has been overlooked by allowing impulsive content to contaminate the Mach IV scale. To rectify this deficit,

we have begun work on a refined measure, dubbed Mach VI (Jones & Paulhus, 2008). Preliminary research indicates that the Mach VI does show the necessary properties to tap a more strategic form of Machiavellianism.

Note

1. Pronounced "mack," these labels are not to be confused with "mawk," as in Mach 4 (four times the speed of sound).

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