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The Dark Triad of Personality: A Discussion of the Moral and Evolutionary Implications

Evelyn C. Brosius
DePauw University

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The Dark Triad of Personality:
A Discussion of the Moral and Evolutionary Implications

Evelyn C. Brosius

Honor Scholar Program - Senior Project

DePauw University

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Sponsor: Scott Ross
Committee Members:
Kevin Moore & Andrew Cullison

Abstract

Individuals who exhibit the Dark Triad traits of personality are considered to be among the most troublesome members of society. This review seeks to investigate how the dark traits displayed by these persons adversely impact their moral behavior as a product of evolutionary development and adaptation, and as mediated by the BFAS aspect of Compassion. Participants in the present study completed an extensive questionnaire that included measures of general personality traits, psychopathy, the Dark Triad of personality, assignment of moral weight, sociosexuality, infidelity, and a myriad additional demographic features. Predictions for the correlations between the Dark Triad traits, moral assignment, Compassion, and evolutionary based measures were generally supported.

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Table of Contents

Introduction		6
Chapter 1	Historical Context & Key Features	8
Chapter 2	Missing Morals & Empathic Poverty	18
	Morality and Psychopathy	
	Morality and the Dark Triad	
	The Effect of Affect and Empathy	
Chapter 3	Evolutionary Approaches	46
	Genetic Evidence for Psychopathy	
	The Dark Triad as an Adaptive Response	
	Biological Success of the Organism	
Chapter 4	Morality, Mating, and Models of Personality	60
References	80

The Dark Triad of Personality:

A Discussion of the Moral and Evolutionary Implications

A “go-getter” attitude is always a plus on your LinkedIn page, but subtle manipulation skills are not. Valuing your appearance and striving for perfection is lauded and advised, but only to a point—better not try too hard! Having the ability to approach emotionally taxing situations in a cogent and deliberative manner is everyone’s dream, but if you *always* handle situations in this manner, you are deemed cold and unapproachable. Regarding personality assessments and characterizations, there is really no way to win, especially when society tells us that our quirks should be accepted and embraced, but they are disparaged and ridiculed just as frequently.

The truth is, within any given population, one is bound to encounter certain abnormalities or outliers in personality and behavior. Although some of these small transgressions in normality are what makes each and every one of us unique, larger divergences in personality may be deemed aversive.

Some of the most aversive and sinister personality traits in our dreary modern world are narcissism, Machiavellianism, and psychopathy, which together form the psychological subject of the Dark Triad of personality. High levels of these traits, in combination, are believed to produce the societal exemplars of turpitude—people so “bad” that run-of-the-mill psychopaths are overcome with discomfort in their presence. Unfortunately, this level of consideration is often all that is awarded to the Dark Triad.

One need only consider the age-old advice, “keep your friends close but your enemies closer,” to see the importance of understanding the Dark Triad beyond its surface level

debauchery. If one is willing to take a dip into the minds and personalities of some of the world's most depraved individuals, a great deal of valuable, psychological information can be obtained.

Furthermore, the Dark Triad has implications related to nearly every topic one can think of, and then some. Although it is undeniably cool to see which Hogwarts houses align with which dark traits and why certain fictional characters are depicted as antiheroes, more relevant Dark Triad research exists that may guide us towards a greater understanding of some of the most arduous topics in psychology, such as moral decision-making and adaptive responses (Crysel, Cook, Schember, & Webster, 2015).

These Herculean topics will be addressed in this review, but only with the knowledge that further research is necessary and warranted by the potential ramifications of the Dark Triad. For the sake of understanding abnormal personalities in aversive and acceptable contexts, it is pertinent to pursue knowledge of that which we fear.

CHAPTER 1:

Historical Context & Key Features

In order to fully understand the malevolent potential that lies within human beings, it is necessary to delve deeper into the aforementioned psychological subject of the Dark Triad of personality, comprised of narcissism, Machiavellianism, and psychopathy. Though these three personality traits tend to overlap on many levels, differentiating between them both historically and conceptually proves useful in fully understanding their budding impact on moral behavior and social interactions.

First, one should consider narcissism, which is typically characterized by the grandiose ingrained belief that an individual exists at the center of the universe and that all other people and things ought to worship him as a result. Narcissists often have a very fragile self-esteem and will do anything and everything to preserve it. As a result, they display an unmitigated lack of empathy in their vain and egotistical pursuit of admiration. According to the DSM-5, Narcissistic Personality Disorder (NPD) may also be indicated by the inclusion of interpersonal exploitation and a general preoccupation with fantasies of success and power, along with arrogant behavior, envy of others, and a sense of entitlement (American Psychological Association [APA], 2013). It is important to note that, though many of the characteristics of NPD lend themselves to a greater understanding of general trait narcissism, the two are not synonymous. Indeed, narcissistic traits are significantly more prevalent and do not necessarily foreshadow the development of the personality disorder. Regardless, many of the characteristics remain the same.

Recently, narcissism has become more culturally bound, due in part to the increased use of social media for voicing opinions and posting flattering “selfies.” Before discussing this

further, it is important to note that this is likely the result of technological advances, not of the extreme claim that Millennials are the most narcissistic generation yet, as a result of coddling and ease of opportunity. Regardless, in a fascinating study, Buffardi and Campbell (2008) addressed the growing concern that social media sites “offer a gateway for self-promotion via self-descriptions, vanity via photos, and large numbers of shallow relationships,” which may be linked to trait narcissism (p. 1303). In an effort to glean more than just the general portrayal of narcissism in online content, the authors designed a study to see if the levels of narcissism of a single, specific user could be deduced from the content of their Facebook profile. A few interesting results became apparent: page owners who scored high in narcissism tended to post somewhat more self-promoting quotes, were perceived as more physically attractive and provocative in their profile photos, and had a greater number of “friends.” Ultimately, this provides support for the growing impact of narcissism. Social pressure is put on individuals to develop an attractive “Web presence” with content that might serve as a flattering first impression, and this pressure is increased by the natural tendency to compete with others. Preservation of this Web presence is vital to many individuals, but one can imagine how it might be perceived as nearly addictive in quality among narcissistic individuals. Humans have come a long way from falling in love with their reflections and drowning, like the eponymous Narcissus, but perhaps profile pages are just modern mirrors.

One might argue that narcissism is the least dangerous of the Dark Triad traits because it involves a greater obsession with promotion of the self—or, as Freud (2012) often described it, a nearly auto-erotic ego ideal—rather than with malice towards others. In theory, greater mental harm is done to the narcissistic individual than to his or her connections. However, this appears

to be somewhat inaccurate, especially in romantic relationships. According to Morf and Rhodewalt (2001), narcissism may be the result of certain developmental antecedents—the childhood self-needs of narcissists may not have been met due to insufficient parental empathy or consistent neglect. As a result, egocentric individuals may work to satisfy these needs in their adult relationships, many of which are ripe with antagonism and skepticism. Narcissists have no boundaries, have delusions of grandeur and unrealistic expectations of perfection, feel that everyone owes them something, and believe that they are not accountable for their actions. In combination, these behaviors can be detrimental to the mental and physical health of any individual repeatedly exposed to them, not excluding the actual narcissist. Now, imagine the horrific, damaging potential of narcissism, when supplemented with any other trait that has been deemed “dark.”

The second trait of the Dark Triad is Machiavellianism, characterized by manipulative behavior intended to bring about successful and expedient personal gain and to promote sweeping self-interest, often at the expense of the self-interest of others—similar to the element of interpersonal exploitation in narcissism. Furthermore, individuals who have high degrees of Machiavellianism typically have no regard for the feelings or goals of others, and therefore tend to have a cynical approach to morality. The concept itself has a rather interesting history, and the term, not surprisingly, is also an eponym derived from the Florentine diplomat Niccolò Machiavelli. When the ruling regime, served by Machiavelli, was overthrown, he attempted to ingratiate himself with the incoming ruler by writing a book of advice, entitled *The Prince*. The guidance provided was “devoid of the traditional virtues of trust, honor, and decency,” and backfired for Machiavelli (Wilson, Near, & Miller, 1996, p. 285). The new monarch was not

pleased with the approach, and the publication of *The Prince* is often considered to have dramatically and negatively influenced the format of politics across many nations. As a result, the employment of cunning and duplicity in everyday conduct began to increase steadily, and now undeniably plagues the political and social world.

Ironically, it is worth mentioning that Niccolò Machiavelli would likely have tested quite low for modern standards of Machiavellianism. Despite his assertions in *The Prince*, which many scholars believe to be satirical in intent, he was often considered to be selfless and opposed to manipulation, at least as far as his political power and followers were concerned (Wilson et al., 1996). In a way, this demonstrates the undeniable shift in contemporary understandings of political and social machinations. In the 16th century, politicians were expected to uphold certain virtues, like the aforementioned trust, honor, and decency, which made them better, more popular rulers. Today, however, if a politician is not perceivably capable of connivance, his career is likely over before it has even begun. This illustrates an important point—so-called “dark” traits can potentially shift in apparent darkness over time and in different contexts.

One trait that seems to remain very firmly in the “dark” abyss is that of psychopathy, a thankfully rare and riveting personality disorder. Psychopathy is most commonly characterized by enduring antisocial behavior, impulsivity, disinhibition, selfishness, callousness, and remorselessness. People high in this trait are cold-hearted, manipulative, insincere, emotionally shallow, self-serving, and disturbingly egocentric (Fix & Fix, 2015). The clear overlap in this description with the previously discussed traits may lead one to wonder, is differentiating between the Dark Triad traits necessary? Can psychopathy cover the behaviors on its own? This, in itself, is a hot topic of debate. However, for the sake of clarity and simplicity within this

review, psychopathy will be addressed both as its own construct in some cases, and as a component of a larger topic—the Dark Triad—in others. It may prove helpful to look at psychopathy as a truly nasty cocktail, with narcissism and Machiavellianism acting as an equally problematic chaser (Paulhus & Williams, 2002).

Just like the Moscow Mule, suddenly trendy again for no clear reason, the foul cocktail of psychopathy has made a recent killing in popular culture. One need only flip through an assortment of television channels to find media portrayals of psychopaths, where they are depicted as smarmy serial killers, violent and maniacal slashers, culturally refined cannibals, and more (Haycock, 2014). Despite the number of inaccuracies in these depictions, one thing is clear—viewers thrive on what they fear and long to understand.

Today, at least, understanding psychopathy has become far more manageable, thanks to progress in conclusively defining it. Psychopathy has been a hazy topic since the inception of psychiatry in the early 19th century, though it has always been evident that there are individuals who display a level of unwavering antisocial behavior that “cannot be understood in terms of mental or emotional disorder, neurotic motivations, or incompetent parenting” (Lykken, 1995, p. 113). French psychiatrist Philippe Pinel used the term “*manie sans delire*” or “madness without delusion” to describe these individuals, since they behaved psychotically without actually being insane. American psychiatrist Benjamin Rush further depicted them as having an “innate preternatural moral depravity.” As a term, “psychopathic” was coined by the German psychiatrist J. L. Koch to encompass what we now understand to be personality disorders, and only in 1915, after the repeated publication of his textbook, did Emil Kraepelin use the term “psychopathic personality” to refer to individuals with a proclivity for immoral and amoral criminality. Later

still, the American psychiatrist Hervey Cleckley produced his pioneer monograph, *The Mask of Sanity*, which helped to define and substantiate the primary psychopath in context. (Lykken, 1995). As a result, Cleckley's name remains one of the most influential in the field of psychopathy, and his initial profiles of psychopaths set the stage for all future understanding.

Although the provision of background material on psychopathy is certainly useful, but also tends to bring up more questions or fresh topics of interest than it answers or defines. For instance, since psychopathy was so commonly based around antisocial behavior, it is listed in the DSM-5 as Antisocial Personality Disorder (APD), characterized by “a pervasive pattern of disregard for, and violation of, the rights of others” (APA, 2013, p. 659). So, despite all of the decades of effort put into properly labelling psychopathy, the term itself is still not always used in a clinical setting. Additionally, most people who have watched or read any form of fiction that attempts to encapsulate the psychopathic personality have also encountered the term “sociopath.”

Despite misleading quotes, such as Sherlock Holmes' infamous “I'm not a psychopath... I'm a high-functioning sociopath,” the two terms are more or less synonymous, unless differentiated by a specific author (Moffat, 2010). For instance, Lykken (1995) uses “sociopath” to refer to individuals who actively oppose social norms as a result of their environmental or familial dysfunction, rather than psychopaths, whose antisocial behavior may result from internal malfunctions, not poor rearing. On the other hand, the DSM-5 notes that APD is often referred to as psychopathy, sociopathy, or dyssocial personality disorder, suggesting that all three are essentially synonymous. (APA, 2013).

It is important to note, however, that “psychopathic” is not synonymous with “psychotic,” which is summed up quite well by Pinel's use of “*manie sans delire*,” which touts crazy behavior

without clear mental illness. Either way, this distinction is important to keep in mind—psychopaths are not always insane, or at least not externally.

Another potentially beneficial distinction to be made is that of “immoral” and “amoral,” which are divergent in meaning. According to the Oxford Dictionary, immoral means “not conforming to accepted standards of morality,” as opposed to amoral, which means “not concerned with morality.” In simpler terms, immoral beings are more likely to be seen as evil or wrong, according to a standard ethical code, whereas amoral individuals tend to be indifferent towards those ethical standards set forth by society and simply live without them in mind. Psychopaths are both immoral and amoral—they actively oppose and avoid acknowledging ethical expectations, which produces all sorts of provocative and problematic societal interactions.

Psychopathy is a rather daunting feature, even without the undesirable augmentation of the other two Dark Triad traits. It is easy to see why the traits are considered “dark” in combination, and to understand that we often accept those aforementioned inaccurate media portrayals as a way of keeping ourselves at arm's length from potentially dangerous individuals. The media provided a target for the projection of fear—violent villains and cold-blooded murderers. Unfortunately, the truth is that people who embody the Dark Triad traits are all around us, in fiction and reality, and do not appear as daunting as one would expect. For instance, Jonason, Webster, Schmitt, Li, and Crysel (2012) make some fascinating assertions regarding popular fictional anti-heroes, like James Bond. Most Baby Boomers or early members of Generation X were exposed to the world of Ian Fleming’s flirty yet powerful MI6 secret agent, and many members of those generations passed on the cultural influence and general attraction to

those films to their Millennial (or Gen Y) children. In point of fact, the first James Bond film, *Dr. No*, was released in 1962, but the franchise has continued to grow in popularity up until the 2015 release of *Spectre*. Although the action is usually engaging and the actors who depict Bond tend to be attractive, the films themselves are often predictable and perfunctory. Why, then, have they continued to do so well over the past half-century? One might argue that the success of the James Bond films is a direct result of the titular character's exhibition of the Dark Triad (D3) traits.

Again, the Dark Triad is most easily associated with wickedness, but James Bond is supposed to be the hero. He “gets the girl,” kills the bad guy, saves the day, and repeats, all for Queen and Country. However, it is just this behavior that denotes the presence of the D3. According to Jonason et al. (2012), Bond's killer instinct and psychological comfort in taking a life, either with his bare hands or an improbable weapon, are likely supported by psychopathy—his behavior during fight scenes is cold, uncaring, and devoid of empathy. His mating style, characterized by multiple short-term relationships (often with married women), is indicative of the same psychopathic tendencies, and of the interpersonal exploitation element of narcissism. Additionally, his job as a 007 agent requires him to use Machiavellian manipulation as a means to an end—he will say or do whatever he has to in order to complete a mission. The fact that these characteristics remain consistent across the gamut of Bond actors and films suggests that Ian Fleming felt this personality was necessary to the character. Perhaps he was aware of the popularity of darkness.

In addition to the plentiful fictional depictions, one need only flip to a news channel to see a real-life exhibition of the Dark Triad, especially of late. Though the D3 traits exist in combination outside of the political world, some of the most interesting and relevant cases are

governmental, due to the maladaptive and troublesome nature of darkness bolstered by power. For instance, Jonason et al. (2012) note that America's now-President Donald Trump "fits the mold of a classic Dark Triad mass-media antihero from politics and business" (p. 197). His narcissism never wanes, and he demonstrates it in every element of his behavior, from his incessant "Tweeting" to his blatantly grandiose perspective of self. Honestly, one need only acknowledge the existence of the Wikipedia page titled, "List of things named after Donald Trump." Furthermore, he built a real estate empire and won the 2016 election through an arguably exclusive use of Machiavellian charm, and his callousness, a facet of psychopathy, is obvious in his constant disregard for human rights and constitutional expectations (and in any given episode of "The Apprentice"). Nevertheless, a good portion of Americans find him fascinating and apparently the majority consider him to be a "folk hero of fame, capitalism, and the American Dream" (p. 197).

Though there are infinite depictions and exhibitions of the Dark Triad available for discussion and analysis, those mentioned here serve three purposes. First, they highlight the fact that the D3 traits are everywhere and appear to be most dangerous when teamed with a supposed cause or momentous source of power. Second, they point out that people are often so caught up in the intrigue and allure of many of the apparent dark behaviors that they fail to truly question their motives, morality, and impact. Third, these examples emphasize the spectrum of opinions drawn out by the D3 traits—it is easy to justify them in a likeable character and even easier to lambaste them in an unpleasant one. Ultimately, knowing the categorical differences between the three Dark Triad traits brings up more questions, and provides a basis for deriving potential implications.

CHAPTER 2:

Missing Morals & Empathic Poverty

Moral psychology is quite similar to the majority of the fable-ridden 1990s PBS Kids shows, in that it seeks to understand human behavior, judgements, reasoning, and character in moral contexts. More aptly, however, it can be defined as the very broad intersection of philosophy and psychology that focuses on, not surprisingly, the psychological aspects of morality. It seeks to understand the development of a moral identity and what motivates us to form moral judgements about what is right and wrong by asking normative, conceptual, and empirical questions. Respectively, these are questions that address what should be or is good, how we best define concepts such as “goodness,” and under what circumstances we are most likely to demonstrate good behavior. (Tiberius, 2015). Additionally, moral psychology focuses on how we make the decisions that we *do*, as opposed to moral philosophy, which explores which decisions we *should* make.

Philosophers have struggled with questions regarding the principles of right and wrong in behavior for centuries, but the addition of psychology as a tool for approaching morals has proven advantageous in understanding how the moral values of a single person are cultivated to align with societal ethics.

Morality and Psychopathy

As hitherto emphasized, individuals who display the Dark Triad traits, especially psychopathy, are both immoral and amoral, suggesting that they have no regard for social rules and expectations and have not undergone any significant moral development. In many cases, as highlighted by Robert Hare (1999) in his aptly titled *Without Conscience*, this translates over to

the utter lack of remorse or guilt exhibited by psychopaths. Their behavior, though clearly morally wrong, is ego-syntonic; they are unapologetic for their actions and the resulting havoc, and talk about their conduct openly and comfortably. This characteristic apathy is likely the result of the astounding psychopathic ability to rationalize one's undertakings and disregard any semblance of personal responsibility. Additionally, individuals who display the D3 traits demonstrate a thorough poverty of empathy. As illustrated, psychopathy leads to a penchant for indifference "to the rights and suffering of family members and strangers alike," without the addition of narcissism and Machiavellianism, which would further encourage egocentrism and apathy at an abnormal level (p. 45). Still, psychopathy alone has proven to be a consistent predictor of inappropriate moral behavior across the span of the existing literature, regardless of philosophical or psychological approach.

One approach to the effect of psychopathy on morality that has unfailingly proven to generate results is to simply assess moral decision making through the lens of utilitarianism. In a recent article regarding trait psychopathy, moral judgements, and action aversion, Indrajeet Patil (2015) describes the utilitarian bias as an "increased willingness to agree to personally kill someone for the greater good," and suggests that it is fairly common in psychopaths (p. 349). According to the author, this is likely because utilitarianism, a form of consequentialism, only focuses on the repercussions of one's actions in the frame of right and wrong, without considering the reasoning behind the action itself. Patil also posits that the ethical opposite of utilitarianism is deontology, a form of Kantianism, which focuses on the consequences of one's actions in addition to the action itself, and which firmly believes that some behaviors cannot be morally permissible, regardless of the outcome, if they go against the universal rights and duties

of human beings. Psychologically, the question then arises: what sort of personality traits are more likely to lead one to take utilitarian action in the face of a moral dilemma? Of course, psychopathy, and its related features, is a frontrunner.

In order to make the understanding of psychopathy and moral decision-making a bit more approachable, Patil introduces the dual-process model of moral judgement. This model, previously defined by Joshua Greene and his colleagues, suggests that there are two sets of processes that facilitate moral decision-making, including: emotional ones, which are responses to the aversive prospect of harming another person and tend to be deontological, and deliberative ones, which are based on logically weighing the outcomes of a situation and tend to support a utilitarian approach. Processes like these are also affected by whether or not the dilemma is personal or impersonal. For instance, consider the footbridge dilemma, where one must push a man off a bridge to block a trolley from hitting five bound people. Since it requires one to physically shove a man towards an inevitable death, purely because his body is there and available and his death will be beneficial to others (making it a utilitarian action), the footbridge dilemma is extremely personal. However, in the Standard Fumes dilemma, one is given the choice to push a button to redirect noxious fumes into a hospital room with one patient, rather than a room with five patients. In both dilemmas, one person dies for the good of the many, but the impersonal nature of and psychological and physical distance provided by the fume digression creates the impression of moral acceptability. Much of this is the result of outcome aversion—the fear of a harmful outcome for others, which often guides our moral decision-making. We sometimes avoid certain actions because we know that the actions require a target who will suffer the consequences, and it is easy to empathize with potential

unpleasantness. Since no one wants to suffer, actually or vicariously, we ultimately avoid such an action and disparage its use by others. Action aversion plays a part as well—it is similar to outcome aversion but instead focuses on the harmful action, rather than the result. According to Patil, the action aversion model requires “proper recognition of distress cues and empathic response to these cues” in order to effectively develop harm norms, which then trigger the emotional cues of the dual process model of moral decision-making (p. 351). All in all, one might argue that outcome aversion is to utilitarianism as action aversion is to Kantian deontology; the former relates to the consequences of a harmful behavior and the latter to the implications of the behavior itself.

Since psychopaths tend to display a lack of empathic concern for the well-being of others and exhibit very little aversion to anything, it’s not unreasonable to claim, as Patil does, that they have both low outcome and action aversion, which is tied to a higher likelihood to resort to the utilitarian bias. In the present study, however, the author asserts that “only action aversion negatively mediates the influence of trait psychopathy on utilitarian moral judgement,” which suggests that utilitarian judgements in psychopathy are likely the result of a greater level of comfort in harming others (p. 349). To test this theory, Patil recruited 404 Italian-speaking participants between the ages of 18 and 60 through online sources and word of mouth. All participants gave informed consent and then completed an online survey, which included a modified version of an action/ outcome aversion questionnaire and a pair of moral dilemmas (where the footbridge dilemma was personal and the Standard Fumes dilemma was impersonal). Additionally, they completed the the Levenson Self-Report Psychopathy (LSRP) scale, a self-report measure of primary and secondary psychopathy that operate through two factors:

callous-unemotional traits, regarding personality, and lifestyle-antisocial traits, regarding behavior. Items are rated on a 4- point Likert scale, and higher scores indicate higher prevalence of the measured trait.

The basic results of this study were predictable. Participants reported greater aversion to harmful outcomes than to harmful actions, and felt that utilitarian approaches were more appropriate in impersonal dilemmas than in personal ones. Additionally, the responses to personal dilemmas garnered more disagreement among the participants. Men also tended to demonstrate greater levels of primary psychopathy, according to the LSRP, though there was no gender difference for secondary psychopathy. Women were more averse to both harmful actions and outcomes. Lastly, and not at all shockingly, total psychopathy score was associated with reduced action and outcome aversion, as well as greater perceived acceptability of personal and impersonal moral dilemmas. However, after controlling for variance, it became clear that only primary psychopathy was correlated with action aversion, and was connected to a greater endorsement of the utilitarian option in all decision-making. Secondary psychopathy was not strongly associated with any of the included variables. Ultimately, this supports the logic that increased levels of psychopathic traits, such as callous-unemotional traits, are positively correlated with higher likelihood to endorse utilitarian methods as morally acceptable and to perform and observe harmful actions and outcomes.

Patil wraps up his research by keenly asserting that psychopaths likely engage in harmful behavior without fear for the outcome because “they lack the moral barometer in the form of moral emotions stemming from empathic aversion that usually informs and motivates individuals

to avoid imposing harm on others,” (p. 360). In other words, psychopaths presumably hurt for moral faculties, but especially in the form of emotion perception.

Along these lines, it is impossible to deny that affect and emotion influence our moral judgements and decisions but in her recent paper, Michelle Maise (2014) suggests that emotion may actually be a vital component in moral cognition. She refers back to the dual-process model of morality and asserts that emotion and deliberation are simply not enough to fully encompass morality when psychopathic outliers are thrown in the mix. Furthermore, she claims that psychopaths do truly lack the ability to be moral cognizers, but only due to their deficient affective faculties, which leaves them with only deliberative processes to apply to moral judgements.

In contrast, Cima, Tonnaer, and Hauser (2010) sought to counter the long established theory that psychopaths lack the ability to distinguish between right and wrong as a result of deficient emotional processes. Instead, they hypothesized that psychopathic persons have a regular understanding of ethics and morality, but an “abnormal regulation of morally appropriate behavior” (p. 59). To test this hypothesis, they recruited a sample of 14 psychopath and 23 non-psychopath offenders (for a total sample size of 37 delinquents) from a psychiatric center in the Netherlands, in addition to a control group comprised of 35 Dutchmen. All participants were male, and IQ scores were obtained for 20 of the delinquents, the mean scores of which showed that psychopaths had a marginally lower IQ than non-psychopathic offenders, which counters the misconception of psychopaths as brilliant criminal masterminds. In this study, participants were assessed and diagnosed with Hare’s Psychopathy Checklist - Revised (PCL-R), one of the most common and well-respected measures of psychopathy to date, which measures a wide variety of

psychopathic traits based on medical and legal records and an extensive, time-consuming interview. The PCL-R assesses psychopathy on a two factor model, and was the pioneering measure for such an approach. Additionally, to provide further support for the link between psychopathy and emotion, all participants were given a physiological test, similar in nature to the Trier Social Stress Test (TSST), which assesses stress reactivity based on cortisol levels. This appraisal found that the cortisol levels of psychopathic offenders did not increase in response to the applied stressor, as opposed to the cortisol levels of the other two groups (non-psychopathic and healthy control), which did increase significantly. Ultimately, it became clear once more that psychopaths diverged from non-psychopath offenders in levels of diminished emotional reactivity, based on the evidence provided by the PCL-R scores and the physiological measure of stress response.

After solidifying these key differences in offender emotional response, Cima et al. presented the participants with seven impersonal and fourteen personal moral dilemmas, which ask the participant to give a “yes” or “no” response regarding their willingness to perform a certain morally murky action. However, due to the dishonest nature of psychopaths, the researchers also administered the Sociomoral Reflection (SRM-SF) questionnaire, which poses candid questions related to the moral permissiveness of a variety of common wrongdoings, such as keeping a promise to a friend or not stealing something of value. These responses were measured on a five-point Likert scale of importance, and the results were relatively predictable. Similarly to the results of the study by Patil (2015), all three test groups considered impersonal cases to be more morally permissible than personal cases, regardless of equal utilitarian gain, which is likely the result of the perception of immediacy, or distance, in said dilemmas. We tend

to perceive impersonal cases as less emotionally intense than personal cases because we can distance ourselves from them and their potentially aversive outcomes. Furthermore, although psychopaths have proven to be more utilitarian in judgement, the results of this study found no statistically significant group effect for either impersonal or personal moral dilemmas. Education and age, additionally, did not have a significant effect on judgements of the dilemmas. The authors also explored the endorsement of the utilitarian outcome as far as other- and self-serving actions were concerned, and were surprised to find that psychopaths were not significantly more likely to endorse self-serving utilitarian actions than non-psychopaths and healthy control group members, which suggests that they formed judgements using the same processes as the others, despite their callous-unemotional traits. More so, though the data was not significant, psychopaths showed slightly lower SRM-SF scores than the healthy control group and the non-psychopath offenders, which suggests that they had a generally lower threshold for what might be defined as morally permissible.

Though their research sought to address the belief that emotional processing is a necessary component in moral understanding and that the faulty processes of psychopaths elucidate their moral indiscretions and lack of concern for others, Cima et al. came to conclusions that appear contradictory, yet do disprove existing assumptions. For instance, why would a psychopath follow the same line of moral judgement as anyone else, but come to a different conclusion about the moral permissibility of an action? From these oddly antithetical results, one might glean that psychopaths do not necessarily lack the mental ability to *understand* the differentiation between right and wrong, but instead lack the *desire* to adhere to society's

moral standards. Indeed, it appears that psychopaths are the honey badgers (of viral video fame) of the human population—they simply don't care about the consequences of their behavior.

Operating on the idea that psychopaths cannot force themselves to care about moral behavior despite their ability to comprehend why something is or is not moral, we encounter a new quandary in the form of different types of morality. Do psychopaths truly not care about moral expectations as a whole, or are only certain types compromised?

Thankfully, this quandary is addressed, in depth, by Glenn, Iyer, Graham, Koleva, and Haidt (2009), who sought to evaluate the relationship between psychopathy and the foundations of morality, explore potential mediating factors, and understand how these relationships shifted with respect to the measured psychopathic dimensions.

To provide background for their research, Glenn et al. discuss five psychological systems of moral foundations that had been previously defined by Graham and Haidt (and colleagues; 2011), two highly esteemed social psychologists who have devoted years to the understanding of moral psychology. The first of these foundations is the harm/ care one, which revolves around compassion and addresses concerns regarding violence and the suffering of others. The second relates to fairness/ reciprocity, and deals with equality, justice, and balanced relations. The third moral foundation is the ingroup/ loyalty foundation, which focuses on group membership and the expected devotion and preferential treatment it demands, and the fourth is authority/ respect, which relates to obedience, duty, and honor. The fifth and final foundation is of particular interest, since it acts as an ideal rather than an expectation: it is the purity/ sanctity foundation, which represents a dignified lifestyle “based on intuitions about divinity, feelings of moral disgust, and purity of body, mind and soul” (Glenn et al., p. 386). In the past, it has been asserted

that psychopathy is most often associated with impaired harm-based moral reasoning, a factor of the harm/ care moral foundation. This assertion aligns with the previously discussed literature, and presents easy opportunities to establish connections between utilitarian posturing and poor harm-based reasoning. On the other hand, linking psychopathic behavior to the other four moral foundations has proven somewhat challenging in the past. In this study, however, Glenn et al. succeeded in determining how effectively psychopathy scores predicted the endorsement and sacredness of each foundation.

A survey was made available to 2,517 adult volunteers who had previously completed the LSRP scale on yourmorals.org. Some demographic information, including age, sex, education, and a measure of political identity, had been collected when participants initially created a personal account for the Website. From that point, respondents were authorized to complete one or more additional surveys, such as the Moral Foundations Questionnaire (MFQ), which asked participants to rate the moral relevance of foundation-specific concerns in respect to their moral judgments, and to indicate their level of agreement with some moral statements. 2,172 of the overall 2,517 volunteers completed this measure. The Moral Foundations Sacredness Scale, submitted by 1,252 individuals, measures how much an individual values each moral foundation by posing questions related to the payment one would expect in return for violating a related belief. A measure of empathy, the Interpersonal Reactivity Index, was completed by 648 participants, and a measure of preference for equality versus social hierarchy, the Social Dominance Orientation Questionnaire, was filled out by 462. Additionally, a Disgust Scale, used to see if disgust could mediate the probable relationship between psychopathy and the purity foundation, was completed by 1,343 participants and 593 took the Ethics Position Questionnaire,

which determined what might be considered moral or immoral according to two dimensions: idealism and relativism. Both of these dimensions provide a glimpse of the rigidity of certain moral beliefs.

Through various analyses, Glenn et al. found that combined psychopathy score predicted lower endorsement of the Fairness and Harm foundations and slightly higher endorsement of the Ingroup foundation. In both cases, Factor 1 of psychopathy, was an expectedly stronger predictor. Still, the Authority and Purity foundations were weakly related to it, if at all, and disgust showed no connections, which implies that individuals who test high in LSRP traits make moral judgements related to Authority, Purity, and disgust on about the same level as “normal” individuals. Additionally, regression results suggested that higher psychopathy scores were better predictors of low scores on the Empathic Concern and Perspective Taking scales, which were positively correlated with the Harm and Fairness foundations. Through this established link, the authors became aware of Empathic Concern as a mediator in the relationship between psychopathy and the Harm foundation. Individuals who had high LSRP scores tended to have low Empathic Concern scores, which then predicted a low endorsement for the Harm/ Care foundation of morality.

In addition to being the best predictor of low support for the five moral foundations, LSRP scores also predicted a greater willingness to accept a bribe to go against any personal beliefs regarding those morals, which implies that psychopaths are more ready and willing to abandon moral tenets for incentives, like money. Psychopathy scores also predicted greater idealism on the Ethics Position Questionnaire, which suggests that, unsurprisingly, psychopaths

are more willing than others to violate morals in certain situations and to believe in situational moral flexibility.

Another intriguing result came to light: higher psychopathy scores also predicted a slightly higher endorsement for the Ingroup foundation, which appears counterintuitive. Since psychopaths tend to be loners, as a result of their callousness, one might assume that they would oppose the inclusion of the Ingroup morals. However, the author suggests that the loyalty and distaste for betrayal that characterize this foundation probably take shape as a result of an increased lack of concern for outgroup members, animosity towards members of opposing or conflicting groups, and decreased tolerance for group defectors among psychopaths. Though this doesn't feel like much, it implies that it is safer to be in perceived cahoots with one's psychopathic pals.

By and large, the research performed by Glenn et al. provided support for the idea that moral deficits in psychopathy are concentrated in two main dimensions—Harm and Fairness, or rather apathy and equity, suggesting that a great deal of these results are likely related to empathy and the psychopath's inability to provide it. Though why psychopaths demonstrate such low Empathic Concern for others, and sometimes themselves, is still to be discussed, impairments in learning are a likely culprit.

Building off of the now well-established belief that individuals who are higher in psychopathy are more willing to endorse harm-based immoral behavior, authors Ritchie and Forth (2016) sought to further scrutinize the relationship between psychopathy and morality by narrowing the field of relevant factors and facets in the prediction of moral wrongdoings.

Furthermore, due to the general lack of literary discussion, they decided to investigate whether this daunting relationship was moderated by participant gender.

In order to do so, Ritchie and Forth analyzed data from a final sample of 534 willing undergraduate students who completed an online questionnaire. Participants were recruited through an electronic research bulletin, and given a single course credit upon completion. Measures included Greene's Moral Dilemma Questionnaire (MDQ), which assesses ability to make socially acceptable decisions in the face of a variety of personal moral dilemmas, and Paulhus' Self-Report Psychopathy Scale - Short Form (SRP-SF), which takes a two-factor, four-facet approach to psychopathy. These four facets are interpersonal manipulation, callous affect, erratic lifestyle, and antisocial behavior.

Through AUC analysis, the authors found that men were slightly more willing to endorse personal-harm as a method of obtaining a desirable outcome than women were, which aligned with the small amount of existing literature. Additionally, from a series of bivariate correlations, Ritchie and Forth found that positive interactions existed between moral transgressions and total psychopathy scores, as well as between both Factor 1 and Factor 2 psychopathy scores (with their four respective facets) and the endorsement of personal-moral transgressions. These results are not groundbreaking, as they suggest that individuals with higher psychopathy scores, and therefore greater levels of psychopathic traits, are more comfortable endorsing personal moral wrongdoings. In other words, psychopaths are not vexed by the prospect of harming another person, especially as a means to an end.

Numerous linear regressions were also conducted to see if gender, total psychopathy, and the interaction between these two variables forecast personal-moral transgressions. It was

determined that gender was a significant predictor of personal-moral harm endorsement, with men as the more probable transgressors. Total psychopathy score was also a significant portend for the endorsement of personal-moral harm, despite a fairly insignificant relationship between gender and psychopathy. This suggests that men with high psychopathy scores are just as likely as women with equal scores to endorse the personal, harmful behaviors. Additionally, after controlling for gender and the other three facets, only the interpersonal manipulation (IM) facet of Factor 1 psychopathy was a significant predictor of endorsement, which “suggests that the interpersonal manipulative characteristics of psychopathy drive involvement in immoral behavior” (p. 251).

To expand upon the topic of morality, Ermer and Kiehl (2010) decided to examine social exchange and precautionary reasoning in psychopathic individuals. First, they agreed with the points made by Cima et al. regarding the ability of the psychopath to understand the differences between right and wrong (even if they have little interest in doing so). The authors also noted that psychopaths “persistently violate social, moral, and legal norms, cheating family, friends, and strangers alike” and “engage in impulsive, reactive behaviors that have destructive consequences for themselves and other people” (p. 1399). Since it is a challenge to explain these characteristics outside of the context of moral “right” and “wrong,” an additional quandary becomes evident: do psychopaths comprehend and effectively reason through behavior related to risks and cheating?

Based on previous literature and statistics, Ermer and Kiehl hypothesized that psychopaths were impaired in social contract reasoning (cooperation), and precautionary reasoning (risk-management), compared to non-psychopaths, but were not impaired in

descriptive reasoning. This was evaluated through the examination of a sample of 67 incarcerated males between the age of 20-56 years from an American correctional facility, who were paid \$1.00 an hour for their time. Psychopathy was assessed with Hare's PCL-R, total IQ was estimated from a modified version of the Wechsler Adult Intelligence Scale (WAIS), and a questionnaire about post-head-injury symptoms was given to remove any participants with prior psychosis or traumatic brain injury. Additionally, inmates were given a shortened version of the Wason selection task, which consisted of 10 social contract, 10 precautionary, and 10 descriptive problems. In this context, social contracts are the rules of exchange and cooperation—something like, “if you take this, then you must do this in return.” In context, this element is related to cheating and deception. Precautionary rules are very similar, but are based more on how one prepares for potential dangers, so that “if you do this unsafe thing, then you should take these precautions. Here, they relate to one's ability to eliminate potential hazards. Descriptive problems are the most straightforward and only deal with describing something that is or is not logical through an “if—then” statement. For instance, “if a student is an Honor Scholar, then that student must love writing.”

Results were consistent with the aforementioned hypotheses—high psychopathy scores did predict significantly worse performance on social contract problems and precautionary problems. However, psychopaths and non-psychopaths performed about the same on descriptive problems, which is understandable. Descriptive problems rely more on basic logic than on an understanding of others and risks. Additionally, intelligence did not differ between psychopaths and non-psychopaths, but was significantly positively correlated with social contract reasoning and descriptive reasoning. Intriguingly, however, these results did not apply to the DSM-IV

defined APD, which suggests that impairments in certain forms of reasoning may actually be specific to the construct of psychopathy.

Furthermore, interpersonal and affective traits from Factor 1 of PCL-R psychopathy were the only traits significantly correlated with both social contract and precautionary problems. Since interpersonal manipulation and behaviors have proven to be predictors of immoral behavior, and affect is directly linked with perception of morality, Ermer and Kiehl's results provide greater support for the theory that psychopaths may actually have some impaired moral reasoning, in addition to their apathetic life views.

Acknowledging the existence of differences in reasoning between psychopaths and individuals with APD brings up an interesting and repetitive point: morality may differ to some degree between psychopaths and persons who demonstrate the Dark Triad traits, despite the overlap in characterization.

Morality and the Dark Triad

Though research has been done to link the Dark Triad to counterproductive work behavior, vocational interests, racism, low self-control and high impulsivity, empathy, and mating behaviors, very little has examined the relationship between the D3 traits and moral values. To correct this clear gap in research, Jonason, Strosser, Kroll, Duineveld, and Baruffi (2015) focused on the five moral values that were previously defined by Graham et al. (2011): harm, fairness, ingroup, authority, and purity. Jonason et al. also looked at individual v. collective interests, which were broken up into four additional social values: self-transcendence, conservation, self-enhancement, and openness to change. These reflect value systems related to

spirituality, political conservatism and conformity, personal enjoyment, power, and sensualism, and social justice and equality, respectively.

With this information in mind, three studies were performed. In Study 1, the value systems associated with the D3 traits were assessed through the application of the Dark Triad Dirty Dozen (a 12-item measure), the 20-item IPIP for the Big Five personality domains (Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism), and Graham's Moral Foundations Questionnaire (MFQ), which analyzes degree of relevancy and agreement with certain moral statements. 585 Americans between 18- 76 years old completed the task, and were awarded \$2.00 on Amazon Mechanical Turk (MTurk), a crowdsourcing Internet marketplace that allows for the use of human intelligence to perform various tasks.

Results were unsurprising—men scored higher on all D3 traits and the Ingroup moral foundation than women did, but women scored higher on the Harm and Fairness foundations, suggesting that men value loyalty among comrades, and women have high expectations for kindness and equality. Sex differences in D3 traits did partially mediate individual preference for certain foundations. More so, Machiavellianism was not specifically linked to any of the moral matrices, which suggests the maintenance of moral flexibility for the sake of success and support. Fairness, Ingroup, Authority, and Purity foundations were positively correlated with narcissism, but negatively correlated with psychopathy, which Jonason et al. believed “might reveal the socially sensitive nature of narcissism relative to the socially insensitive nature of psychopathy” (p. 103).

In the second study, 252 American university students between the age of 18-51 completed an online questionnaire for course credit. The Dark Triad was measured through

Paulhus' 27-item Short Dark Triad (SD3), and moral foundation preference was assessed through 26 taboo trade-off items, which asked participants to note the amount of money it would take to convince them to engage in a taboo behavior. Men scored higher than women did in psychopathy and Machiavellianism and women scored higher (or expected more money) on the taboo trade-offs related to Harm, Fairness, Ingroup, and Purity.

Since the first two studies focused only on morality in relation to the D3, Jonason et al. attempted to replicate their results in Study 3, with the addition of social values. This study was performed on a sample of 516 Germans between the ages of 17-48, in order to extend the generalizability of the findings. Participants were recruited for the online study through email or social media sites, and were given different incentives through the hosting website.

The researchers returned to German translations of the measures used in Study 1—the Dark Triad Dirty Dozen and the MFQ—in addition to the German version of the 21-item scale of the Portrait Values Questionnaire, which asked participants to rate their liking of a fictitious person based on presented goal motivation.

Results from Study 1 were replicated, but “men scored higher than women did on the higher-order value of individual interests, whereas women scored higher than men did on self-transcendence,” (p. 105). As expected, psychopathy was highly correlated with Individual Interests, especially Self-Enhancement, but was negatively related to Collective Interests, Self-Transcendence, and Conservation. Narcissism and Machiavellianism shared the same positive relationships, but both were negatively correlated to Self-Transcendence and the latter to Collective Interests, as well—however, these interactions disappeared when variance was accounted for.

Ultimately, Jonason et al. reached conclusions that were supportive of prior literature related to the D3 traits and psychopathy. For instance, psychopathy, here, was related to very little value placed on any moral or social foundations. Contrary to the results found in psychopaths by Glenn et al., which noted higher scores for the Ingroup foundation and lower scores for the Fairness and Harm foundation, Jonason's sample had lower scores on Fairness, Ingroup, Authority, and Purity, and no significant differences in Harm value. This likely suggests a difference in predictive ability that can only be accounted for by the variance produced by the inclusion of the other two D3 traits of narcissism and Machiavellianism.

Jonason et al. also found consistent mediation effects, which suggest that moral and social values may play a role in explaining why men and women differ on the Dark Triad traits" (p. 106). It appears that the way Machiavellianism and psychopathy play out among men, especially, is related to mating behavior and social manipulation. However, narcissism may be immune to these moral and social value effects not because narcissists are more moral or "good" people, but because they rely on the inclusion and acceptance of others in order to obtain the attention and acknowledgement that they crave.

As previously discussed, utilitarian moral judgement is consistently linked with higher psychopathy scores. Not surprisingly, this is true of the Dark Triad as well. Recently, Djeriouat and Trémolière (2014) investigated this relationship, but also sought to expand upon it by considering the mediating effect of certain personality traits, like Honesty/Humility, and moral foundations, like Harm/Care. They opened their article on an illustrative note with a reference to the original version of *Star Trek 2: Wrath of Khan*, in which Spock saves the ship from a problematic and deadly warp-drive malfunction at the cost of his life. He dies a painful, radiation

induced death, but saves the crew and memorably asserts that the good of the many outweighs the good of the few. This behavior is acceptably utilitarian in its intentions, because Spock is known for his logical approach to every situation. In contrast, however, Spock and Kirk trade places in the 2013 remake, *Star Trek: Into Darkness*. Though the sacrifice is more tear-jerking in this version, it intriguingly doesn't draw direct attention to Kirk's uncharacteristic utilitarian behavior, but instead focuses on his compassion. This is likely because, in many (human) individuals, such a sacrifice may be praised, but the logic behind it is often frowned upon.

Indeed, utilitarian inclinations are sometimes necessary, but remain to be startling in action, to a degree. There is something off-putting about deliberative, logical sacrifice, rather than a more deontological, emotion-based one. Based on this, one might assume that utilitarian judgments are more often predicted by a rational thinking style, as opposed to an intuitive one, and that if psychopathy increases utilitarian endorsement, which has been proven, then the Dark Triad traits are likely also predictive. Furthermore, this preference may not be based exclusively on moral identity, but may also be mediated by empathy-related personality features, such as Honesty/Humility and Harm/Care.

To test this logic, Djeriouat and Trémolière (2014) administered an online survey to 180 participants through MTurk. The survey included an assessment of the degree to which respondents would perform a utilitarian action or not, in addition to the SD3, and the MFQ. They also completed the 60-item HEXACO personality inventory (HEXACO-PI-R), which focuses on six factors in the understanding of personality: (H) Honesty/Humility, (E) Emotionality, (X) Extraversion, (A) Agreeableness, (C) Conscientiousness, and (O) Openness to experience.

In the end, all three D3 traits were positively and significantly correlated with predilection for utilitarian judgements, and Honesty/Humility and Harm/Care were positively correlated with the non-utilitarian actions (which would be, by definition, deontological). Gender also had an effect—within the male portion of the sample, Machiavellianism and psychopathy were correlated positively with utilitarianism, whereas with the female sample, all three D3 traits were positively correlated. All in all, Djeriouat and Trémoliere provide further support for the conclusion that interpersonally aversive traits, especially psychopathy, are linked to propensity for utilitarian moral judgements, but also add “insight into the relationship between emotion and utilitarianism in moral judgments by empirically specifying some key mediators” (p. 15). Even though all three Dark Triad traits were independent predictors of Honesty/Humility, psychopathy was the only trait that predicted Harm/Care interactions, which suggests that psychopathy may have more predictive power than the other D3 traits. Additionally, the authors point out that “emotional callousness, expressed by lack of empathic and prosocial concerns, may occasionally coincide with a decision that maximizes the aggregate well-being. In this perspective, some people would consider callous personalities sometimes useful,” especially when those people believe that utilitarian action would be a moral choice, but lack the gumption to proceed on their own (p. 15).

Curiously, Djeriouat and Trémoliere found very little interaction between narcissism and morality, which may not suggest that psychopathy outweighs the other two D3 traits regarding morality, but rather that narcissism may be mediated differently. In their now year old study, Zuo, Wang, Xu, Wang, and Zhao (2016) examined the relationships between the Dark Triad traits and two facets of personal morality. These two facets are moral identity, which refers to the amount

of value one places on being a moral person, and prosocial behavior, which refers to actions intended to benefit others (but which often lead to personal gain, as well). Additionally, moral identity has two dimensions: internalization, or “the degree to which the moral traits are central to self-concept,” and symbolization, or how an individual’s actions are reflected in the real world (p. 272). All of these components are thought to be crucial in regards to moral behavior.

Based on previous literature, the authors assert that the performance of morality and “good” moral behavior is an effective way for narcissists to maintain their self-esteem, which is definitely a win for the Dark Triad. However, this also suggests that moral decisions in narcissists are motivated by validation-seeking, and are therefore unlikely to last once the ego-threat is gone. From this, Zuo et al. hypothesized that, as opposed to psychopathy and Machiavellianism, narcissism is likely positively correlated with moral identity, especially symbolization, due to its visible and public nature. Additionally, they suspected that this behavior is entirely mediated by self-esteem, and is not actually the result of some hidden moral goodness within narcissists.

To test their hypotheses, Zuo et al. administered a paper and pencil questionnaire to 2,828 Chinese middle and high school students between the ages of 13-19. The questionnaire included the SD3, the 10-item Moral Identity Scale, the 23-item Prosocial Behavior Scale, and Rosenberg’s Self-Esteem Scale. Strangely, the results of this study did not entirely match up with results in similar studies. For instance, in this sample, males had higher scores than females on all three D3 traits, not just Machiavellianism and psychopathy, which suggests that the mediating effects of gender on the D3 may be culturally bound. However, females produced significantly higher scores on internalization, symbolization, prosocial behavior, and self-esteem.

Additionally, narcissism was positively correlated with all of the measures of personal morality, including internalization, symbolization and prosocial behaviors. On the other hand, Machiavellianism and psychopathy were negatively associated with the majority of the measures, but notably showed no interaction with symbolization at all. To the surprise of the authors, the “relationship between narcissism and internalization was non-significant when self-esteem was low but negative and significant when self-esteem was high,” (p. 275). Less surprisingly, however, the negative association between narcissism and both symbolization and prosocial behavior was significantly stronger in individuals with low self-esteem scores. All of this emphasizes the common belief that narcissism is the least nasty of the D3 traits—as Zuo et al. suggest, it is the “bright facet in the Dark Gem” (p. 275). Of course, that doesn’t make narcissism any more acceptable, but certainly provides a glimmer of hope in the gloom of the Dark Triad.

On a relatively unrelated but still fascinating note, there exists a theory that moral proclivity varies during the course of a nycthemeron, with individuals displaying lower morality in the evening. This theory, called the Morning Morality Effect (MME), has been consistently supported, but hadn’t been considered in the context of the D3 until recently. At last, however, Roeser, McGregor, Stegmaier, Mathew, Kübler, and Meule (2015) looked at the relationship between the D3 and moral behavior, as a function of the time of day.

In order to do so, the authors collected data from 195 primarily female online volunteers who were recruited through various social media sites, and were allowed to take the questionnaire between 7:00 - 10:00 a.m., or between 4:00 - 7:00 p.m.. All participants completed the SD3 and the Global vigor and affect instrument (GVA), which “consists of eight items asking

for current alertness, sadness, tension, effort, happiness, weariness, calmness, and sleepiness” (p. 74). Additionally, they performed a message-task and a matrix-task, which operationalize unethical behavior through an assessment of decision making and visual understanding of opportunities to increase profit, respectively.

In this sample, men scored higher than women on all three subsets of the SD3. Higher Machiavellianism scores predicted greater likelihood to select a dishonest message on the message-task. However, this effect was not moderated by time of day. Similarly, on the matrix-task, psychopathy was positively associated with number of lies told, but was also not moderated by time of day. Most likely, the monetary incentive included in the reasoning behind the two tasks had a more significant effect. Although time of day did not predict anything regarding moral behavior with the D3 traits, this may be because participants were not randomly assigned to either time condition, but were instead able to choose. Since it has become clear that narcissists tend to maintain the air of morality, individuals who exhibit all three D3 traits may actively choose the time of day when they feel most capable of maintaining moral behavior. Roeser et al. make another convincing point—it can be hard to justify unethical behavior based solely on personality traits that may manifest differently, to a degree, in every individual. Therefore, when assessing morality, considering the situation that may influence the behavior is relevant, in order to make a legitimate attribution of morality. However, this study does not provide support for that theory, since morality was only predicted by dark personality trait, and was unaffected by situational factors (such as time of day).

Ultimately, moral behavior and judgements truly can be considered a function of personality traits, especially the lugubrious and depressing ones of the Dark Triad. This

knowledge has many applications, but also poses some risks. If personality is assessed in individuals with the knowledge that Dark Triad traits are consistent predictors of immoral and unethical behavior, then psychologists gain a powerful tool for adumbrating and identifying potential threats to society. However, it can become too easy to fall prey to the fundamental attribution error, where one may assume that an individual's behavior is exclusively the result of his personality, when immoral behavior may truly be the result of challenging socio-economic conditions or poor social education (in some cases).

The Effect of Affect and Empathy

As has been hinted at throughout this discussion, empathy has been considered a necessary component for moral behavior since the dawn of moral discourse. Despite the clear associations between the two, defining the so-called "relationship status" of empathy and morality has proven challenging, due to the flexible definition of empathy, and the occasional mixed data regarding its value. However, it is advantageous to consider empathy from its most basic definition: "an affective response to the directly perceived, imagined, or inferred emotional state of another being," or "an other-oriented or even 'moral' social emotion" (Maibom, 2014, p. 160- 161).

As Maibom underscores, empathy is vital to some aspects of morality, even if one believes, as many scholars do, that it is not a fundamental ingredient. She argues that it may be most relevant as an epistemological mechanism, which allows the observer to experience the affective state of the observed, and to understand the consequences of certain actions as performed on others. Through this design, empathy can serve as a developmental factor which educates individuals about the outcomes of their behavior, therefore motivating them to adjust to

society's ethical expectations. In a way, empathy is the best educator, motivator, and ultimate panacea for behavior. Unfortunately, though it often guides moral behavior towards greater care for others, it risks steering us away from other potentially necessary moral principles, such as the maximization of efficiency in the face of equality. Ultimately, just like everything related to morality, empathy can be hard to define as good or bad, beneficial or distracting.

Regardless, it is impossible to assert that empathy does not play a significant part in the moral behavior of psychopaths or individuals who exhibit the Dark Triad traits. Indeed, the utter apathy among psychopathic persons provides support for empathy as a mediator for morality—it even appears that deficits in moral judgements are more common when a moral reasoning task requires consideration of the distress, fear, and additional emotions of others. (Maibom). Additionally, although psychopaths understand the distinctions within moral obligations and reasoning, their lack of emotion makes them consistently unable to comprehend or care about the importance of altering their behavior. (Schramme, 2014). In a very poignant statement that has proven the test of literary time, Johns and Quay described the empathic deficit among psychopaths as knowing “the words, but not the music” (1962, p. 217). Essentially, psychopaths know exactly what moral rightness is and how to sell it, but lack the acoustic support of emotionality and empathy that might allow them to understand and replicate it.

The Dark Triad is, logically, very similar. In a recent study, Wai and Tiliopoulos (2012) sought to expand on existing discussions of empathic influence on morality and the D3 by focusing on the affective and cognitive systems of empathy. The first of these, affective empathy, refers to “the generation of an appropriate emotional reaction in response to others’ emotions,” and is often compared conceptually to emotional contagion (p. 794). Emotional contagion is

much like the modern, cynical concept of “catching feelings,” where individuals experience strong responses towards others, regardless of whether or not they want to. Catching feelings is, like an actual contagion, denigrated among many populations who believe that distance is an emotionally safer counterpart to empathy. Cognitive empathy, however, is “the ability to discern emotional states of others without undergoing emotional contagion,” and is undoubtedly preferable and more objective in many circumstances (p. 794). However, due to its more functional nature, cognitive empathy may underlie more manipulative personalities.

To test this theory and to observe which D3 traits were related to which forms of empathy, the authors administered an online experiment to 139 university students. Measures included the Mach-IV, a 20-item measure of Machiavellianism, the 40-item Narcissistic Personality inventory (NPI), and the LSRP to assess the Dark Triad traits. Additionally, an empathy quotient (EQ) instrument, and a self-assessment manikin (SAM) were given. The participants were presented with black and white photos of individual faces, and were then instructed to rate their feelings toward the depicted individual. They were also instructed to try to identify what emotion the photographed persons might be feeling, based on their facial expressions. This provides an alternative method of assessing empathy, beyond the use of another self-report measure.

Results of the study were consistent with the previous literature and the authors predictions. Psychopathy and Machiavellianism had lower global empathy, no change in cognitive empathy, and all three traits predicted lower affective empathy. Intriguingly, however, narcissism showed a slight increase in cognitive empathy, suggesting that narcissists strive to understand the emotions of others in order to know how they themselves are perceived.

However, narcissists also tend to fall prey to the self-report bias, since they see themselves as more capable than they truly are, so their SAM responses may have been skewed. Narcissism was also positively correlated with valence towards sad images and anger identification, whereas psychopaths felt better when looking at sad, angry, and fearful images and worse when examining images with happy vibes. Additionally, higher psychopaths scores were correlated with greater inaccuracy in identifying all emotions. Machiavellians responded the same as psychopaths, but only inaccurately identified happy and sad emotions. Overall, “primary psychopathy was the only significant negative predictor of global and affective empathy, while narcissism was a significantly positive predictor of cognitive empathy” (p. 796). All in all, these clear, measurable results regarding empathic poverty provide significant support for the belief that empathy affects morality, which is affected by the D3, in turn.

Understanding morality, especially in the context of psychopathy and the Dark Triad, is an undertaking that one could easily devote her life to, and which cannot be done justice in a chunk of a thesis. However, empathy is something that we experience on a personal level (hopefully) nearly daily—optimizing our empathy and avoiding the desire to shy away from emotional contagion, except when necessary for personal well-being, may potentially reduce the risk for moral and empathic deficits in a portion of the population, and provide further insight into conceptually persistent poverty of emotion.

CHAPTER 3:

Evolutionary Approaches to Dark Traits and Morality

When it comes to weighty topics, only evolution challenges morality, and often creates challenges itself. For instance, evolution is such a broad topic that there is almost too much to be said about it. Arguably, the thoughts, behaviors, and existences of every living creature are founded in evolutionary processes, and if one examines the world through this lens, everything begins to feel overwhelming.

However, evolution is so rarely taught on a valuable and worthwhile level that discussing it can also be underwhelming. For example, most people who hear the term immediately think of Charles Darwin. Then they falter, try to push the boundaries of their memory a bit further, recall the concept of “natural selection,” and call it a day. All in all, walking the line between too much information and too little can be difficult, especially with a topic as necessary and interesting as evolution and its effects on psychopathy, morality, and other personality traits.

Despite the remark about Darwin being underwhelming, his pioneering contributions to the study of evolution are eternally relevant in the field, beyond the popularity he has garnered among amateur biologists, wannabe psychologists, and die-hard “Planet of the Apes” fans. In fact, Darwin’s theory of ethics is one that has consistently influenced evolutionary and moral psychology for decades, since it posits that ethical capacity cannot be reduced or limited to intelligence and ability, because it also involves social instincts and emotions. Since this provides support for approaching morality as a function of emotions such as empathy, one might note that Darwin’s theory has also influenced this thesis. Furthermore, like a good scientist, Darwin did not attempt to derive a theory of “right” and “wrong” from his conclusions, but instead

designated this moral dichotomy for the philosophical field, rather than to his empirical realm of evolutionary moral psychology. (Holcomb, 2004).

Darwin's theories also helped produce two etiological conceptions of psychopathy: the first of these is pathological. It suggests that psychopathy is the result of something wrong in the individual who displays the dark traits, and guides us towards classification. This perspective is what lead to the diagnosis of psychopathy as a mental illness, and to the creation of labels like APD. (Barr & Quinsey, 2004).

Though there is nothing wrong with this pathological approach, numerous studies, such as the aforementioned one by Cima, Tonnaer, and Hauser (2010), have proven that psychopaths are not mentally deficient or strapped when it comes to morality. Their behavior is not a function of their intellect, which suggests that it must result from something else. The second conception of psychopathy is that, as opposed to being the result of a broken mind, it is a response, or adaptation, to certain selective pressures. For clarity, adaptations can be defined as "specific bits of physical machinery originating in the genes, developing in a particular environment, and increasing the biological success of the organism" (Bridgeman, 2003, p. 2). This adaptive conceptualization is often referred to as Life History Strategy (LHS), a theory which "predicts that varying amounts of stress will produce differing individual biodemographic outcomes," and which is easily supported by genetic or hereditary evidence for the aversive personalities, emphasis on the necessity of the aversive traits in a specified environment, and proof that these traits increase biological success in those who display them (Patch & Figueredo, 2016).

Genetic Evidence for Psychopathy

Providing genetic and hereditary support for psychopathy as an adaptation is quite easy, especially when twin studies, which provide strong support for trait heritability, are available. Due to the relative newness of the Dark Triad construct, it has been applied to many twin studies, such as the one by Vernon, Villani, Vickers, and Harris (2008). The authors administered the NEO-PI-R, NPI, Mach-IV, and SRP-III to 75 monozygotic and 64 dizygotic twin pairs in an effort to behaviorally and genetically assess the Dark Triad variables and their relationship with other personality traits, like the Big Five. In the end, though the phenotypic results of Vernon et al.'s study were interesting, what matters most is that their twin correlations and behavioral genetic model-fitting analyses suggest that both psychopathy and narcissism have a moderate-to-large heritability component, especially among monozygotic twins, who share more genetic similarities. Machiavellianism, however, was only mildly heritable.

Furthermore, if one wishes to consider heritability and genetics in an evolutionary context, then there is nowhere better to look than among the apes. In their very recent study, authors Latzman, Patrick, Freeman, Schapiro, and Hopkins (2017) sought to examine the heritability of psychopathy subdimensions in a sample of 178 chimpanzees. These subdimensions were assessed with the previously developed and validated 18-item CHMP-Tri scales, which mirror the three factor Triarchic Psychopathy model and focus on Boldness, Meanness, and Disinhibition. The chimpanzees were rated by staff members on a 7-point Likert scale (1 = least descriptive of the chimpanzee; 7 = most descriptive of the chimpanzee), and heritability was estimated with Sequential Oligogenic Linkage Analysis Routines, which applies a variance-components approach. Early rearing experiences (mother- or nursery-reared), which may contribute to behavior, were also considered with MANCOVAs. Curiously, the authors

found that although “all three triarchic dimensions showed significant heritability among mother-reared participants, heritability was not evident for any dimension in the nursery-reared subsample” (p. 7). This provides an interesting argument for the never-ending “nature vs. nurture” discourse, since it suggests that the availability of a mother activated the D3 traits. When rearing experiences were not considered, however, boldness and meanness, but not disinhibition, were both significantly heritable across the board. These results conflict to a degree with similar studies done in human populations, where disinhibition has proven to be extremely heritable, often above all other aversive personality traits.

The Dark Triad as an Adaptive Response

Once the genetic background of adaptive qualities has been introduced, albeit on a painfully small scale level, one can next consider the idea of psychopathy and the D3 as a necessary development in response to a specific environment. Contextually, many scholars argue in favor of psychopathy as a life history strategy “involving high mating effort, social defection, high risk acceptance, and aggression,” which may provide the greatest amount of and most convincing material about psychopathy as an evolutionary response (Barr & Quinsey, p. 312). Assuming that psychopathy developed under certain selective pressures (which may have created a specific environment), such as the expectation of parental investment, it follows that, among psychopaths, mating efforts are pursued more aggressively than parental efforts.

Among most animals, the r-selection strategy, which proposes the production of many offspring but with minimal investment in each, is the key to reproductive success and guaranteeing the survival of one’s genes in the next generation. It sort of operates as a trial and error method, where one continues to try and try until successful, though in this case, success in

conception and subsequent birth. Among most humans, however, the K-selection strategy takes precedence, and demands low reproductive rates but high parental investment in the offspring. Due to this clear societal expectation of a long-lasting relationship with consistent support being absolutely necessary for reproduction, finding a mate can be especially challenging—both partners must judge the suitability of each other in a long-term capacity, but on a short-term time frame. Gender differences occur as well: men tend to approach reproduction more through r-selection, due to the ease of conception on the male's end. Females, who have to endure nine months of physiological strife, and then some, are far more likely to be selective in choosing a mate—they must specifically seek out men who are more willing to provide long-term parental investment, as well as resources and other forms of support. (Bridgeman).

Here enters the adaptive value of psychopathy, especially among males—men who *appear* to be convincingly attached to the K-selection strategy for a relationship are more likely to be chosen by women as mates. Psychopaths, of course, could care less about actual parental investment and the provision of resources for others, as supported by recent studies which have found that criminals are known to endorse and live by a strict r-selection strategy (Yao, Långström, Temrin, & Walum, 2014). Irregardless, sex (and its genetically beneficial consequences) is always a plus to a psychopath, so short-term opportunities must be obtained through evolutionary deception.

Operating on the continued assumption that psychopathy and the Dark Triad are nearly the same, due to their consistent overlap in trait features, it is worthwhile to consider methods of mate attraction in both, as available. For instance, recently, authors Fox and Rooney (2014) performed an experiment regarding trait self-objectification as a predictor for the D3, as

moderated by social media use, in a nationally representative sample of 800 men under the age of 40. Participants were given the Self-Objectification Questionnaire (SOQ), which assesses trait-level self-objectification through rankings of personal body traits related to appearance and competence from most to least important. Competence rankings are attracted from appearance rankings, and a higher final result indicates higher self-objectification. The men also took the Dirty Dozen, estimated how much time they spent per day on the five most popular social media sites, noted how many times they took and posted selfies, and responded to questions about their use of photo editing methods and effects. Ultimately, trait self-objectification, the D3 traits, and age were all correlated with time spent on social networking sites. When controlled for age, however, only narcissism and trait self-objectification were found to be significant predictors. Though this mostly tells us about a narcissist's desire to be acknowledged virtually, it suggests that men may use social media as a method of display for mate attraction.

Not surprisingly, displays like these tend to work. Based on the finding that individuals with high levels of narcissism and psychopathy are often considered to be physically attractive, Holtzman and Strube (2012) sought to assess the D3 traits as a social lure for creating good first impressions. 111 students at a university formed a target sample, and completed a series of self-report measures, including the Mach-IV, the NPI, the Narcissistic Personality Disorder (NPD) subscale of the Multisource Assessment of Personality Pathology, and the SRP, in addition to the Analogue for Multiple Broadband Inventories for the Big Five factors of personality. The target participants also provided methods of contacting some of their peers, who were asked to assess the targets based on items from the D3 related measures. From the resulting data, it became clear that individuals with higher levels of the three dark traits tend to have more

effective self-adornment. In other words, they dress better, which warrants greater attention and compliments, and creates a sort of self-fulfilling prophecy. The attention received boosts the self-esteem of people with the Dark Triad traits, and they use the gained confidence as fuel in attempting to obtain a short-term sexual partner or other goal item. Though this looked at non-genetic components of attractiveness, such as fashion, it still involves playing to one's strengths in the pursuit of a mate.

The effect of D3 men on “regular” women is also worth mentioning—in a recent study, Marcinkowska, Lyons, and Helle (2016) examined mate choice and offspring total as influenced by preferences for certain facial characteristics. These facial preferences, which have spanned the ages, “may be shaped by natural selection, as faces provide information on the individual's ability to produce high quality offspring, and can reveal qualities (such as cooperativeness) that could be desirable in a long-term partnership” (p. 287). To test the relationship between these evolutionarily founded preferences and the D3 traits, Marcinkowska et al. obtained a variety of sexual behavior and menstrual cycle related demographic data from an online sample, and also administered the Sociosexual Orientation Inventory (SOI-R) to assess sexual openness (Penke & Asendorpf, 2008). Participants were then asked to select the more attractive face in 15 sets of forced choice trials. In each of these sets was a face created from a “high” and “low” Dark Triad morph. All of the pictures were viewed twice, separately for short- and long-term mating context after a short description of the context and an understanding check was given.

Marcinkowska et al.'s results were quite interesting: women with strong preference for highly narcissistic male faces had a greater number of offspring for their respective age, as opposed to women with strong preference for highly Machiavellian faces, who had fewer

offspring. Preference for psychopathic faces was not at all related to offspring total, surprisingly. This effect may be due to the high correlation between narcissism and the Big Five factor of Extraversion, suggesting that narcissists have embraced their superficiality and have learned to use it as a social mechanism for engaging others. Furthermore, narcissism is positively correlated with social status and physical attractiveness, the product of hours devoted to personal perfection and success, and negatively correlated with infidelity, likely due to the need for consistent positive feedback and an unwillingness to risk ruining one's image. Still, it appears that narcissism is also greatly linked to short-term mating strategies, as it provides the narcissist with endless reinforcement. These results also supported those previously found by Marcinkowska, Helle, and Lyons (2015) in a similar study—women who showed preference for narcissistic (but not Machiavellian or psychopathic) faces were more sexually unrestricted (according to the SOI-R) and did not use contraception as consistently, regardless of short- or long-term mating context.

Since this study and its predecessor focused mostly on attractiveness, it is unsurprising that narcissism showed the greatest effects and most significant relationships. However, it is possible that Machiavellians and psychopaths have greater sexual success when judged for traits unrelated to physical appearance. Unfortunately, very few studies exist that don't consider mating strategies as a function only of sexual and physical veneers, which certainly introduces a topic to consider pushing further in the future.

Due to the clear connection between the D3 traits, attraction, and total number of offspring, Qureshi, Harris, and Atkinson (2016) endeavored to delve further into the relationship between D3 attraction and age. For the most part, studies of attractive features in individuals

with high Dark Triad scores have only been performed with younger women, who biologically have higher libido, are at the peak of their fertility, and seek short-term relationships, all of which makes them slightly more susceptible to the charm of the manipulative D3 men. Qureshi et al. were interested in seeing how these effects shifted in different age groups of women, since ideal traits in partners undeniably shift in congress with physical and mental development. To do so, the authors collected data online from 1001 undergraduate women and older women from various communities. Participants were asked to read short descriptions of fake men written from amalgamations of narcissistic, psychopathic, and Machiavellian personalities, and were then asked to rate the attractiveness of the D3 men on a 6- point Likert scale, in addition to indicating their willingness to engage in hypothetical interactions with the men. Lastly, the women divulged their current position in their menstrual cycle and general fertility status.

Some of the results of this study were consistent with previous literature. For instance, greater attraction towards any Dark Triad personality predicted higher desirability ratings for theoretical short- and long-term relationships. However, age had surprisingly no effect on ratings of high or low D3 personalities. Age was negatively correlated with willingness to engage in short-term affairs with the high-scoring D3 personality, but this effect was not present in low-scoring D3 constructs. This suggests that, contrary to logical belief, fertility may not always affect attractiveness ratings or perceptions of Dark Triad personalities, but age may mediate the relationship.

Hand-in-hand with sexual success is social dominance, which is often accompanied by increased access to resources and mates, higher socioeconomic status, and better health, all of which feed back into greater opportunities in mate selection. Not surprisingly, individuals with

higher Dark Triad scores tend to have more significant levels of social dominance, but how they might have gained it remains to be seen and was only recently addressed by Semenyna and Honey (2015).

The authors emphasize the use of prestige and success among humans, unlike other creatures, to establish social dominance, or, in some cases, implement leadership strategies, coalition-building, and cooperation to take control. To assess this in a sample, participants were given the Rank Styles with Peers Questionnaire, which considers dominance styles in three subscales: dominant leadership, coalition building, and ruthless self-advancement, in addition to the Dirty Dozen and the Dominance and Prestige Scale, which measures amount of striving for social success. The NPI, Mach-IV, and SRP-III were also administered to check the singular D3 constructs.

At last, Machiavellianism had its shining moment—it was significantly associated with dominance-striving and power-seeking, which makes a great deal of sense. Machiavellians most likely manipulate in an effort to gain. Narcissism was most strongly correlated with prestige-striving, which also fits. Prestige goes along with attention as well as Simon goes with Garfunkel. Amusingly, none of the D3 traits were correlated with coalition-building. No one likes to work with individuals displaying these traits, and it can be hard to support or believe in any cause that they truly endorse. Plus, D3 persons often seem to think that they'll function better on their own anyway. Along this line of thinking, many scholars believe that LHS promotes cooperation, especially in economic games, but this has proven to be untrue, suggesting that the application of LHS within the D3 does not always affect one's willingness to play with others. (Wu, Balliet, Tybur, Arai, Van Lange, and Yamagishi, 2017).

Similar to social dominance is social influence, which Dark Triad individuals also tend to acquire. How they do so, according to Jonason and Webster (2011), is far more straightforward than the process of obtaining dominance. It appears that, D3 persons run through a syntax of standardized, prepared tactics in various situations. The fluidity in application of these tactics allows them to avoid detection, but their a “whatever it takes” approach to influence is much harder to hide. According to this theory, D3 individuals will use whatever tactic is necessary to achieve a desired effect, regardless of whether it seems “insensitive to the relationship with the target” (p. 524). This is clearly adaptive, as these persons have learned to do what it takes to get what they want, no matter what they have to put other through. In some circles, this is considered good politics, or even good marketing, and certainly overlaps with the moral view of utilitarianism.

In addition to developing in an environment that involves competitiveness for mates and demands short-term relationships, psychopathy and the other Dark Triad traits likely emerged as an “offensive defense,” or, more simply, a classic defense mechanism. Very little had been done to study how certain deviant traits, like the Dark Triad, might be affected by the need to distance oneself from certain aversive situations until Richardson and Boag (2015) sought to understand how the D3 traits alter one’s approach to the process of stress management. To do so, they administered the SRP-III, NPI, and Mach-IV to an online sample of 244 individuals. Additionally, participants were asked to complete the Defensive Style Questionnaire (DSQ-40), which measures tendencies towards certain defensive behaviors and sorts them into mature, immature, and neurotic groups, and the Perceived Stress Scale (PSS-10), which measures the degree to which certain life situations are perceived as stressful.

Machiavellianism stood out again, but only because it was associated with the greatest number of immature defense strategies, such as passive aggression and projection. Psychopathy also appeared to lean towards immaturity, but favored isolation, dissociation, and acting out. Narcissism, on the other hand, was most related to mature defenses, like sublimation and anticipation. Furthermore, “narcissism was negatively correlated with stress whereas Machiavellianism was positively associated with stress and psychopathy demonstrated no relationship with stress. Out of the three traits Machiavellianism was most likely to predict stress,” (p. 150). One element of this makes perfect sense on its own—as has already been demonstrated, psychopaths care very little about the effect they have on their surroundings, and equally little about any consequences related to their behavior. Therefore, it follows that in the face of stress, psychopaths would feel nothing. According to the authors, this can be described as “exercised numbness,” and also explains why psychopaths favor isolation as a defense mechanism (p. 151). However, in this study, the results for Machiavellianism and narcissism were extremely paradoxical, and certainly warrant further research.

On another level, Jonason, Icho, and Ireland (2016) very poignantly assert that “all people may have the potential to be high or low on the Dark Triad traits. This potential comes from the encoded potential in the human genotype” (p. 9). From here, the circumstances that individuals encounter are the precipitating factors that shape personality and phenotype. The authors further assert that the Dark Triad traits are the phenotypic response, or evolutionary adaptation, to a harsh, unbending, and unpredictable world, which serves as the precipitating factor for trait activation. However, for this theory to function, it assumes that the Dark Triad traits are, indeed, genetic and heritable. This article also introduces a somewhat cyclical

argument within the discussion of the D3 and evolution—it is undeniably an adaptive response, but what came first? The environmental need for the dark traits, or the genetic predetermination to have them?

Biological Success of the Organism

The final aspect of claiming something to be evolutionary is suggesting that it increases the biological success of an organism, which is proven to be true in this case every single time a person engages in a short-term sexual relationship with someone high in D3 traits and sociosexuality, or openness to sexual experiences and opportunities. As previously discovered by Marcinkowska, Helle, and Lyons (2015), individuals who find D3 traits attractive are also less likely to be using contraception, increasing the chances of genetic distribution for the Dark Triad. Furthermore, the D3 traits are consistently related to infidelity as the result of lower levels of relationship commitment (Brewer, Hunt, James, & Abell, 2015), and primary psychopathy predicts defection on low-value social and romantic relationships (Gervais, Kline, Ludmer, George, & Manson, 2013). Both infidelity and defection create opportunities that allow for further distribution of genes, potentially guaranteeing subsequently successful generations of offspring.

In their study of the conditions related to the Dark Triad traits, Jonason et al. (2016) make another point that cannot be stressed enough: “adaptation” is not synonymous with “good.” Giraffes growing longer necks in order to reach the highest, juiciest tree leaves is a good adaptation, but it also creates challenges for other animals that had already developed that ability but now encounter competition for resources. Humans developing the manipulative, callous, and apathetic traits (to name a few) of the Dark Triad to promote short-term sexual success and to

achieve social dominance and influence is not necessarily good. Adaptations clearly benefit those who gain them the most, but when they risk harming the majority of the population through their application or present new challenges and competitions for biological opportunities, they become questionable in morality. Hence, morality and evolution remain to be hefty topics, especially when they both consider certain aversive traits.

CHAPTER 4:

Morality, Mating, and Models of Personality

The Dark Triad of personality, comprised of the traits of narcissism, Machiavellianism, and psychopathy, has demonstrated a significant effect on moral and ethical behavior, and in turn has implications regarding everyday interactions and decisions. Among these decisions are those related to other human beings, especially regarding moral and sexual judgements. Based on the evidence, support, and guidance provided by the previously reviewed literature, the present study was formulated to delve a little bit deeper into the effect of the Dark Triad (versus a single Psychopathy construct) on the assignment of moral value and sociosexual behavior and infidelity.

From the information collected in the preceding review and a handful of years of enlightening psychology courses, the author hypothesized that the Dark Triad would be a better predictor of immoral behavior than the plain psychopathy measure, despite the legitimate and scholarly assertion that psychopathy, as a construct all its own, encompasses the behaviors portrayed by individuals with high Machiavellianism and narcissism scores. Additionally, the author suspected that the Harm and Laziness factors of morality would be most significantly correlated with D3 psychopathy, or the Disinhibition construct of the TriPM. Lastly, based on the theory that morality is mediated by empathy and emotion for others, and that psychopaths are incapable of demonstrating that empathy, the author suspected that the Compassion aspect of the BFAS would be negatively correlated with, and Sociosexuality and Infidelity would be positively correlated with all three of the D3 traits.

Method

Participants & Procedure

Data was collected from a total of 188 participants (91 females) who were recruited through Amazon Mechanical Turk (MTurk), a crowdsourcing Internet marketplace that allows humans to perform various intelligence tasks for a monetary fee. In this study, “Turksters” were paid \$2.25 upon completion. The questionnaire took approximately 45 minutes to finish and was administered online through a Google form.

Measures

1.1 *Short Dark Triad (SD3) (Jones & Paulhus, 2014)*

The socially aversive traits of narcissism, Machiavellianism, and psychopathy, known in congress as the Dark Triad, were assessed through the application of Jones and Paulhus’ 27-item SD3, a brief proxy measure. This measure was designed in 2014 to provide an alternative to the previously mentioned “Dirty Dozen” (DD) scale (Jonason & Webster, 2010), which consists of only a dozen items and appears to be too short. Indeed, since the DD only has four items to measure each construct, it has demonstrated weak correspondence to the original constructs and may be lacking some essential content. The SD3, however, has 9 items for each construct and has proven to have good internal consistency. In this measure, participants are asked to rate their agreement on a 5- point Likert scale (1 = strongly disagree; 5= strongly agree) with an assortment of statements, such as: “Make sure your plans benefit you, not others” (Jones & Paulhus). Each set of 9 items is then averaged to create indexes of Machiavellianism ($\alpha = .87$), narcissism (Cronbach’s $\alpha = .86$), and psychopathy ($\alpha = .79$). Descriptive statistics and correlation coefficients among the three indices can be found in Table 1. Consistent empirical support for the

SD3 makes it the best alternative measure of the Dark Triad, comparable only to the administration of specific measures for each construct, such as the NPI, Mach-IV, or SRP-III, which Jones and Paulhus used as their standard measures.

Table 1

Descriptives, Cronbach's alphas, and Pearson's correlation coefficients among SD3 indexes.

	<i>M</i>	<i>SD</i>	α	1	2	3
1. Machiavellianism	26.93	7.64	.87	—	0.381***	0.605***
2. Narcissism	21.68	8.03	.86		—	0.505***
3. Psychopathy	18.17	6.63	.79			—

*** $p < .001$ Note. *M* = Mean, *SD* = Standard Deviation, α = Cronbach's index of internal consistency.

1.2 Triarchic Psychopathy Measure (TriPM) (Patrick, Fowles, & Krueger, 2009)

To provide further support for the role of psychopathy in predicting certain moral and mating behaviors, the TriPM was also included in the questionnaire. This allowed the authors to see if psychopathy did serve as a better predictor on its own, rather than with the inclusion of narcissism and Machiavellianism.

The TriPM was chosen over other validated measures because it assesses psychopathy along three specific phenotypic dimensions: (1) boldness, which is related to dominance, anxiousness, and audacity, (2) meanness, which reflects the psychopathic tendency towards callousness, aggression, brutality, and excitement seeking, and (3) disinhibition, which reflects “tendencies toward impulsiveness, irresponsibility, oppositionality, and anger/hostility” (p. 2). These three dimensions map well onto the D3 traits and provided a fresh, more modern approach to psychopathy than the traditional two-factor model. Furthermore, the TriPM is only 58-items long, which makes it short and sweet in comparison to many other existing measures, like the

PCL-R or the Psychopathic Personality Inventory (PPI). Descriptive statistics and correlation coefficients for the three constructs and a total TriPM score can be found in Table 2.

Regardless, the measure requires participants to rate their level of agreement with statements made about their personality on a 4-point Likert scale (0 = False; 4 = True).

Table 2

Descriptives, Cronbach's alphas, and Pearson's correlation coefficients among TriPM dimensions.

	<i>M</i>	<i>SD</i>	α	1	2	3	Total
1. Boldness	27.67	12.60	.92	—	0.099	-0.230**	0.563***
2. Meanness	12.25	9.88	.91		—	0.619***	0.807***
3. Disinhibition	13.15	9.20	.88			—	0.597***
TriPM Total	53.08	20.67	.90				—

** $p < .01$, *** $p < .001$

1.3 Moralization of Everyday Life Scale (MELS) (Lovett, Jordan, & Wiltermuth, 2012)

Morality was operationalized through individual assignment of moral weight to everyday behaviors and interactions, and was measured with the up-and-coming MELS. Participants were asked to read the 30 given scenarios, which involved a common occurrence with a questionably moral response, and then rate how morally acceptable the behavior was using a 7- point Likert scale, from 1 (not wrong at all; has nothing to do with morality) to 7 (very wrong; an extremely immoral action). Six main dimensions were represented within these vignettes: deception, harm, laziness, failure to do good, bodily violations, and disgusting behaviors. In this context, deception was related to lying and cheating, harm was related to detrimental behavior in one's community, laziness was related to decision making based only on convenience, failure to do good was tied to missed opportunities to perform supererogatory actions, bodily violations

encompassed substance use, sexual behaviors, and intentional disfigurement, and disgust was related to any other behavior that is generally considered gross. Scenarios appeared in the following format (with a Likert scale provided as well):

Noah is at an ATM outside a bank and the machine dispenses \$60 more than he requested. He keeps the money rather than taking it into the bank and explaining the situation to a bank clerk.

This example is related to the deception dimension, as Noah's behavior is clearly underhanded and, by most standards, immoral. Some of the scenarios are as straightforward as this, whereas some truly lead the participant to question her expectations of others.

All in all, the MELS scores had a satisfactory internal consistency of $\alpha = .85$. The alphas of the 6 factors and their related r values can be found in Table 3. The relatively high alphas produced by the measure suggest good internal consistency and inter-item reliability. In other words, the items as a whole and within each dimension appear to be measuring the same things, without excessive levels of redundancy. This measure was also chosen over other existing measures of morality due to its manageable length and use of everyday scenarios. Although various moral measures have been put to use more frequently, very few actually assess mundane immoral behavior. Since these day-to-day transgressions are ones that even the least "dark" of us may overlook, their inclusion is uniquely useful in fully understanding how morality is affected by the D3. Not all "bad" things are extreme, and the subtle immoral behaviors are likely more common and taxing on an individual's personality over time, as opposed to a few rare and nasty decisions. Additionally, using commonplace vignettes likely produces data with greater external validity.

Table 3
Cronbach's alphas and Pearson's correlation coefficients between MELS factors.

	α	1	2	3	4	5	6	Total
1. Deception	.80	—	0.672**	0.223**	0.458***	0.298***	0.279***	0.618***
2. Harm	.76		—	0.178*	0.481***	0.217**	0.467***	0.635***
3. Laziness	.88			—	0.621***	0.744***	0.574***	0.759***
4. Failure	.87				—	0.621***	0.586***	0.844***
5. Body	.86					—	0.655***	0.819***
6. Disgust	.81						—	0.805***
MELS Total	.85							—

* $p < .05$, ** $p < .01$, *** $p < .001$. *Note.* MELS = Moralization of Everyday Life Scale.

1.4 Big Five Aspect Scales (BFAS) (DeYoung, Quilty, & Peterson, 2007)

Since empathy (and other personality traits) is often highly correlated with morality and psychopathy, personality was assessed with the 98-item BFAS, which looks at the Big Five factors of personality, and attributes two aspects to each domain, or factor. Although the only aspect necessary to the consideration of empathy was that of Compassion (an aspect of Agreeableness with an explicit facet of empathy), the entire BFAS was administered in order to identify any other mediating traits in the discussion of morality and the Dark Triad. The nine remaining traits outside of Compassion are: Withdrawal and Volatility (Neuroticism), Politeness (Agreeableness), Industriousness and Orderliness (Conscientiousness), Enthusiasm and Assertiveness (Extraversion) and Intellect and Openness (Openness/ Intellect). Correlations among the factor scores can be found in Table 4.

The BFAS questionnaire is very similar to those previously mentioned, and requires that participants rate their level of agreement with a statement on a 5- point Likert scale (1 = strongly

disagree; 5= strongly agree). The statements directly reflect the personal views of the participants, in regards to their perception of self; for instance, “I have a very active imagination.”

The BFAS has been around for quite some time, and has been used in numerous previous studies. Its results map well onto other constructs and measures of personality, and it is decidedly shorter than some existing and commonly applied assessments. Furthermore, its use of 10 aspects, which act as subscales for the more frequently acknowledged and taught Big Five factors, provides greater opportunities for the application of personality to other phenomena, such as the D3.

Table 4

Cronbach’s alphas and Pearson’s correlation coefficients for the 10 BFAS aspects.

	α	1	2	3	4	5	6	7	8	9	10
1. Withdrawal	.90	—	.753***	-.637***	-.560***	-.480***	-.103	-.318***	-.185*	-.676***	-.035
2. Volatility	.92		—	-.388***	-.337***	-.426***	-.133	-.334***	-.371***	-.579***	-.074
3. Enthusiasm	.88			—	.664***	.423***	.309***	.549***	.082	.554***	.127
4. Assertiveness	.92				—	.608***	.267***	.338***	-.283***	.526***	.115
5. Intellect	.88					—	.449***	.354***	-.008	.501***	.087
6. Openness	.83						—	.438***	.079	.106	-.021
7. Compassion	.90							—	.377***	.494***	.180*
8. Politeness	.83								—	.252***	.208**
9. Industriousness	.89									—	.429***
10. Orderliness	.83										—

*p < .05, ** p < .01, *** p < .001

1.5 Sociosexual Orientation Inventory (SOI-R) (Penke & Asendorpf, 2008)

“Sociosexuality,” as a term, was defined by renowned biologist Alfred Kinsey in the mid-1900s, and refers to “individual differences in people’s willingness to engage in

uncommitted sexual relationships” (p. 1113). Over time, it has become clear that some individuals are more inclined to engage in these “expectation-free” relationships, but it is further apparent that certain personality types correlate with a greater proclivity for uncommitted sex. For instance, as previously discussed, psychopaths are more interested in short-term mating—they seek instant gratification, low commitment encounters. Therefore, assessing the relationship between sociosexuality and the D3 provides insight into which traits, beyond psychopathy, may predispose one to these low-stakes liaisons.

The SOI-R is a very short measure of global sociosexuality—it has just 9 items. However, these items can be further broken down to encompass three theoretically significant additional components: past behavioral experiences, attitude toward uncommitted sex, and sociosexual desire. In this study, those components are operationalized as behavior, attitude, and desire. Correlations between these components and those of a measure of infidelity are provided in Table 5.

Participants are asked to respond to three items with a numeric total, with options ranging from “0” to “20 or more.” Questions such as, “with how many different partners have you had sex within the past 12 months?” form the 3-item prior-behavior facet. Respondents are also asked to rate their level of agreement with six additional items in the form of statements, such as “sex without love is OK.” These items are measured along a 9- point scale (1 = strongly disagree; 2 = strongly agree), and items 4-6 form the attitude facet and 7-9 form the desire facet. All 9 items can be totalled together to form a global Sociosexuality score. Ultimately, lower global scores indicate a more restricted sociosexual orientation. Higher scores, of course, indicate an unrestricted orientation, and are likely related to promiscuity and flirtatiousness.

The scale itself has proven useful in understanding the different natural motivations behind sociosexuality and mating behavior, and its results consistently provide support for the idea and value of differentiating between components. With only a global measure of sociosexuality or promiscuity, some obviously component-specific effects may be lost.

1.6 Intentions Towards Infidelity Scale (ITIS) (Jones, Olderbak, & Figueredo, 2011)

Sociosexuality provides a solid foundation for understanding mating behavior, but neglects to consider an important factor—infidelity. Not surprisingly, those who are more likely to engage in uncommitted sexual relationships tend to have higher sociosexual scores, which indicates greater promiscuity. Promiscuity, as previously noted, is often highly correlated with infidelity, such that individuals who are more interested in short-term mating are more likely to ignore defined relationship boundaries and expectations in the pursuit of instant gratification. Since all of this fits the psychopathic tendency to avoid commitment and violate it when ensnared, the ITIS was administered to the sample.

Due to the never-ending emotional (and potentially medical) fallout of infidelity, authors Jones, Olderbak, and Figueredo sought to develop a measure that would allow them to predict an individual's likelihood in engaging in unfaithful behaviors, ranging from hiding relationship status from an attractive potential mate to actual planned perfidy, if the opportunity arose. From this intent came the ITIS, a 7-item questionnaire, which allows participants to respond to questions of likelihood on a scale (1 = not at all likely; 7 = extremely likely). Correlations between these the ITIS and SOI-R components can be found in Table 5.

Convergent and discriminant validity of the ITIS appears to be quite decent, and it has notably significant correlations with measures of attachment style, self-report measures of

frequency of infidelity, sociosexual attitudes and behavior, long-term mating orientation, and relationship satisfaction. Additionally, the ITIS has moderate to significant correlations with some of the Big Five factors of personality (measured by the BFAS), and with impulsive sensation seeking and aggression/hostility, similar to elements of the TriPM.

Conclusively, the ITIS predicts infidelity, relationship satisfaction, and relationship dissolution, and undoubtedly serves as an important factor in the consideration of psychopathy, sexual behavior, and morality.

Table 5

Cronbach's alphas and Pearson's correlation coefficients between SOI-R and ITIS components.

	α	1	2	3	4	5
1. Behavior	.81	—	0.510***	0.338***	0.722***	0.352***
2. Attitude	.84		—	0.562***	0.884***	0.331***
3. Desire	.92			—	0.802***	0.355***
4. Sociosexuality	.88				—	0.425***
5. Infidelity	.81					—

*** $p < .001$ Note. SOI-R = Sociosexual Orientation Inventory, ITIS = *Intentions Towards Infidelity Scale*.

Results and Discussion

Somewhat surprisingly, none of the Dark Triad indices or TriPM psychopathy dimensions were significantly related to a global morality index, assessed by the Moralization of Everyday Life Scale (MELS) total score. Zero-order correlations between all six morality subscale scores and the D3 and TriPM factors are provided in Table 6.

All three D3 traits were significantly and negatively related to Deception. Additionally, Narcissism and Psychopathy were positively correlated with Laziness, and Psychopathy was also

negatively correlated with Hurt. Machiavellianism produced no other significant relationships with the remaining MELS factors. Among the Triarchic Model components, Boldness was only weakly and positively correlated with Laziness, whereas Meanness and Disinhibition demonstrated significant relationships with Deception, Harm, and Laziness. Meanness also exhibited stronger effects, and was correlated negatively with the Failure subscale.

Table 6
Cronbach's alphas and Zero-order Correlations for the SD3, TriPM, and MELS factors.

Morality Factor	α	PSYCHO	NARCIS	MACH	BOLD	MEAN	DISINHIB
Deception	.80	-0.334***	-0.230**	-0.344***	-0.001	-0.389***	-0.267***
Harm	.76	-0.182*	-0.086	-0.045	0.045	-0.308***	-0.213**
Laziness	.88	0.244***	0.256***	0.048	0.173*	0.210**	0.177*
Failure	.87	0.012	-0.009	-0.072	0.085	-0.160*	0.005
Body	.86	-0.011	0.044	-0.082	-0.014	0.021	0.045
Disgust	.81	0.042	0.078	0.052	0.070	-0.052	-0.014
MELS Total	.85	-0.047	0.013	-0.084	0.067	-0.134	-0.042

* $p < .05$, ** $p < .01$, *** $p < .001$

Multiple regression was performed in order to determine which aspects of the Dark Triad and psychopathy were most important in their relationship to the MELS assessment of morality. The D3 indices were entered in a primary block, followed by the TriPM components in a secondary block, to predict Deception, Harm, and Laziness, in turn. Only these factors of the MELS were subjected to multiple regression due to their significant and numerous relationships within the intercorrelation matrix in Table 6.

In order to avoid multicollinearity, which can occur when a few of the predictors in a regression model are significantly correlated such as these, the Dark Triad measure of

psychopathy was used as the exclusive measure of psychopathy. Using this succinct measure also allowed for the avoidance of item overlap between the TriPM scales in the second regression block and the Dark Triad in the first.

From here, it became apparent that the Dark Triad ($\text{Adj. } R^2 = .14, p < .001$) followed by Triarchic Psychopathy ($R^2 \text{ Change} = .05, p < .05$) measures were both significant in predicting the moral factor of Deception. Intriguingly, Machiavellianism was the driving predictor ($\beta = -.21, p < .05$) from the Dark Triad, whereas Meanness ($\beta = -.23, p < .05$) was the major and sole predictor from the TriPM. For the Harm factor, the TriPM played an even greater role ($R^2 \text{ Change} = .07, p < .005$) over the D3 measure ($\text{Adj. } R^2 = .03, p < .05$): D3 Psychopathy ($\beta = -.28, p < .05$) and TriPM Meanness ($\beta = -.36, p < .005$) were the sole predictors of Harm within each block. For the factor of Laziness, the D3 was significant ($R^2 \text{ Change} = .07, p < .005$) and the TriPM added no incremental prediction ($\text{Adj. } R^2 = .03, p < .05$). Within the Dark Triad measure, all predictors were significant and of similar effect size. Whereas Machiavellianism contributed to lower scores, Narcissism and Psychopathy indices contributed to higher scores on the MELS factor of Laziness, referring to one's decisions to behave morally only when it is convenient.

Incidentally, when the composite or total MELS score was used as the criterion variable, the overall equation was not significant ($p > .35$), in which case, only TriPM Meanness approached significance ($p < .10$).

As expected, many of the D3 indices and TriPM components were significantly related to the Big Five aspects scales (BFAS) of personality, including the intended predictor of empathy, Compassion. Zero-order correlations between all ten aspects and the D3 indices and TriPM constructs are available in Table 7. These correlations with the BFAS are highly consistent with

those reported in a recent study by Jonason, Kaufman, Webster, and Geher (2013) who used the briefer measure of the D3, the Dirty Dozen.

Table 7
Bivariate Correlations for the SD3, TriPM, and BFAS.

Personality Measure	α	PSYCHO	NARCIS	MACH	BOLD	MEAN	DISINHIB
Withdrawal	.90	.09 (.09)	-.38c (.09)	.17a (.01)	-.79c	.11	.46c
Volatility	.92	.23b (.22b)	-.20b (.18b)	.19a (.14a)	-.55c	.24b	.49c
Enthusiasm	.88	-.01 (-.24b)	.46c (.06)	-.08 (-.03)	.67c	-.24b	-.33c
Assertiveness	.92	.27c (.09)	.77c (.20b)	.17a (.14b)	.84c	.09	-.18a
Intellect	.88	.02 (-.07)	.41c (-.05)	.02 (.07)	.59c	-.15a	-.36c
Openness	.83	-.10 (.00)	.18a (.02)	-.05 (-.02)	.20c	-.32c	-.16a
Compassion	.90	-.30c (-.30b)	.08 (-.07)	-.32c (-.14a)	.27c	-.62c	-.38c
Politeness	.83	-.76c (-.32c)	-.51c (-.33b)	-.52c (-.43c)	-.16a	-.76c	-.58c
Industriousness	.89	-.15a (-.16a)	.34c (-.14a)	-.13 (-.14a)	.58c	-.27c	-.59c
Orderliness	.83	-.18a (-.22b)	.11 (-.09)	.05 (-.18b)	-.02	-.21b	-.37c

a = $p < .05$, b = $p < .01$, c = $p < .001$

Note. Zero-order correlations with the Dirty Dozen reported in Jonason et al. (2013) are in parentheses.

Of the D3 traits, Narcissism was significantly related to all of the BFAS aspects except for, interestingly enough, Compassion and Orderliness. Machiavellianism and Psychopathy were more strongly correlated with fewer aspects, but both were significant and negatively related to Compassion. Humorously, all three traits were significantly and negatively associated with Politeness, and positively associated with Assertiveness, though Machiavellianism was the most significant for the latter aspect. Other intriguing but less pertinent relationships were revealed as well. Regarding the TriPM constructs, all three dimensions were significantly correlated with

Compassion, though only Boldness was positively so. Meanness was significantly related to all aspects except for Withdrawal and Assertiveness, but Disinhibition, curiously, was related to all aspects (primarily negatively) without fail.

Regarding mating behavior and intentions, all of the Dark Triad indices and all but the Boldness dimension of the TriPM were significantly and positively correlated with the total Sociosexuality score and the Infidelity measure. Zero-order correlations between the three facets and total SOI-R score, ITIS, score, and the D3 and TriPM factors are given in Table 8.

All of the D3 and TriPM dimensions were significantly correlated with the SOI-R facets and ITIS scales, except for Narcissism, which was unrelated to Desire, and Boldness, which did not correlate with Desire or Infidelity. Within the D3, Narcissism was highly and positively correlated with Attitude, suggesting that narcissists are generally in favor of uncommitted sexual encounters, likely as a method of gaining fast and passionate praise. Machiavellianism was significantly and positively related to Behavior, which is also unsurprising. This is likely the result of comfort and confidence in interpersonal manipulation—many prior uncommitted interactions. Among the Triarchic Model components, Boldness was significantly and positively correlated with Attitude and overall Sociosexuality, and Disinhibition was strongly related to attitude. This last relationship is especially meaningful, as it supports the idea that impulsiveness feeds positivity towards “meaningless” sex.

Table 8
Bivariate Correlations for the SD3, TriPM, SOI-R, and ITIS.

Sociosexual Factor	α	PSYCHO	NARCIS	MACH	BOLD	MEAN	DISINHIB
Behavior	.81	0.412***	0.310***	0.155*	0.362***	0.248***	0.255***
Attitude	.84	0.384***	0.241**	0.253***	0.226**	0.303***	0.168*
Desire	.92	0.353***	0.090	0.312***	-0.003	0.353***	0.267***
Sociosexuality	.88	0.471***	0.256***	0.301***	0.232**	0.377***	0.273***
Infidelity	.81	0.588***	0.242***	0.326***	0.026	0.521***	0.409***

* $p < .05$, ** $p < .01$, *** $p < .001$

Multiple regression was performed in order to determine which aspects of the D3 and TriPM psychopathy measures were most relevant to the SOI-R and ITIS scores. The D3 scales of Machiavellianism and Narcissism and the TriPM total score were entered in a single block to predict total Sociosexuality score. Only these measures were used as independent variables, since D3 Psychopathy did not produce any outstandingly significant relationships, and all three TriPM constructs were correlated about the same with Sociosexuality. Multicollinearity was avoided as before.

Ultimately, Machiavellianism, Narcissism, and TriPM total (Adj. $R^2 = .21$, $p < .001$) were all significant in predicting Sociosexuality. It appears that TriPM total ($\beta = .43$, $p < .001$) was the most significant predictor of Sociosexuality, which is unsurprisingly. The next most relevant was Machiavellianism ($\beta = .16$, $p < .05$), and then Narcissism ($\beta = -.07$, $p < .05$). Another regression was performed within the three TriPM constructs as well, and in that case Boldness was the most significant predictor ($\beta = .25$, $p < .001$).

An additional regression was executed to assess Infidelity with the D3 (Adj. $R^2 = .36$, $p <$

.001). Here, Psychopathy was the best predictor ($\beta = .66, p < .001$), and remained to be so when regressed with TriPM total ($\beta = .57, p < .001$). When D3 Psychopathy was removed, TriPM total ($\beta = .40, p < .05$) was the best predictor of Infidelity over Machiavellianism and Narcissism. Finally, among the TriPM constructs exclusively, Meanness ($\beta = .40, p < .001$) was the most significant predictor of Infidelity.

Lastly, an intercorrelation matrix was generated between the ITIS, SOI-R, and the MELS factors, which resulted in a couple of particularly significant relationships: Laziness was significantly and positively correlated with Infidelity (Pearson's $r = .146, p < .05$), which suggests that a great deal of unfaithful behavior may be the result of convenience and availability. Also, Harm was significantly and negatively associated with the three SOI-R facets of Behavior, Attitude, and Desire (Pearson's $r = -.181, -.159, \text{ and } -.171$, respectively, $p < .05$). Since Harm is related to the detrimental behavior exhibited towards members of one's community, "whether intimate relationship partners or simply fellow citizens," this effect may indicate that higher sociosexuality (or interest in noncommittal sexual relationships) produces lower likelihood to trample others (Lovett et al., p. 251). In a way, this makes the most sense in intimate relationships—having a long-term mate provides a frequent target for attack and abuse. Additionally, when choosing a short-term mate, one tends to avoid partners who seem inclined towards maltreatment.

Discussion and Conclusion

In addition to moral decision-making and life history approach, the current study also examined personality traits comprising the D3 constructs. Using the Big Five Aspect Scales (BFAS; DeYoung et al., 2007), it appears that the aspect of Politeness appears to be the most robust trait

related to the D3. Although these findings are similar to what Jonason et al. (2013) have reported for the D3 and the BFAS, the Big Five aspect of Compassion has been hypothesized to be an even more important BFAS correlate of psychopathy. The importance of Politeness over Compassion suggests that the tendency to break rules or otherwise nonconform seems to be a much more central characteristic than an emotional disregard for or attachment to others, within the Dark Triad. Additional analyses comparing BFAS Politeness and Compassion in the role of the D3 may prove helpful in further understanding this set of relationships. More generally, findings from the BFAS emphasize extraversion and boldness in narcissistic tendencies. Relationships with the BFAS also highlight a need to solve intellectual problems, which may play out as conniving manipulation, and a strong need to achieve and engage in competition. For Machiavellianism, Politeness was strongest (Pearson's $r = -.52$) followed by Compassion (Pearson's $r = -.32$). This effect for Compassion was only shared with Psychopathy but, as noted earlier, not with Narcissism. Perhaps narcissists, individuals likely hypersensitive to self-pain, such as criticism, may have an ironically better perspective from which to empathize. If psychopaths are less sensitive to passive punishment, at least, this may speak to some general lack of emotional sensitivity assessed by the BFAS Compassion scale.

Including the BFAS also provided a check on the validity of this study. As previously mentioned, Jonason et al. (2013) also examined the relationships between the D3 and BFAS, and when the overall pattern of relationships between the two measures are compared across samples, the findings are similar. The magnitude of the relationships observed in the present study, however, are notably stronger. A likely explanation for these differences, and weaker findings within the experiment by Jonason et al. is that they used a very brief measure of the D3

constructs, called the Dirty Dozen. As mentioned earlier, this set of scales includes only 4 items to measure each construct with reportedly low reliabilities and unexpected factor structures (Jones & Paulhus, 2014). To illustrate the difference, the most robust BFAS effect across the D3 is the negative relationship to Politeness. For Jonason et al., the average effect (Pearson's r) is .36, but for the current study it is .60. According to the results of Fisher's r -to- z transformation, the difference in the size of these correlations is significant ($p < .01$). In fact, when the same pairwise comparisons were made for the full D3 by BFAS correlation matrix, 11 of 30 correlations differed significantly between studies, and all in the direction of higher magnitude for the current study sample.

Ultimately, this study provided further insight and validity into the investigation of relationships between the Dark Triad, morality, and evolutionary behaviors such as sociosexuality and infidelity. The analyses that the author performed were by no means an exhaustive use of the collected data. For instance, other significant and interesting correlations remain to be seen, since data was gathered regarding participant religion, political leaning, socioeconomic status, family dynamics, sexual experiences, and so on. In the future, and in the author's personal time, these potential relationships will be explored. However, the results presented here emphasize the value of further research regarding all of the assessed factors.

Understanding individuals who express high levels of the Dark Triad traits is undeniably beneficial to many fields of study, from philosophy to criminal profiling. More so, one can never understand morality too well, especially with aversive personalities thrown into the societal mix. Of course, evolution fits these trends as well. Though many people simply acknowledge the existence of evolution as a counterpoint to Creationism, it provides an overwhelming amount of

insight into the inner workings and sexual, social, and emotional faculties of the mind. Further study of all three of these disciplines—personality, morality, and evolution—will always prove beneficial to those who aim to oppose ignorance and comprehend humanity beyond the normal scope.

References

- American Psychiatric Association. (2013). Personality disorders. In *Diagnostic and statistical manual of mental disorders: DSM-5*, 645-685. Arlington, VA: American Psychiatric Association.
- ‘Amoral’ or ‘immoral’?. (n.d.). In *Oxford Living Dictionaries online*. Retrieved from <https://en.oxforddictionaries.com/usage/amoral-or-immoral>
- Barr, K. N., & Quinsey, V. L. (2004). Is psychopathy pathology or a life strategy?: Implications for social policy. In Crawford, C. & Salmon, C. (Ed.), *Evolutionary Psychology, Public Policy, and Personal Decisions* (pp. 293-317). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Brewer, G., Hunt, D., James, G., & Abell, L. (2015). Dark Triad traits, infidelity and romantic revenge. *Personality and Individual Differences*, 83, 122-127.
Retrieved from <http://dx.doi.org/10.1016/j.paid.2015.04.007>
- Bridgeman, B. (2003). *Psychology and evolution: The origins of mind*. Thousand Oaks, CA: Sage Publications, Inc.
- Buffardi, L. E., & Campbell, W. K. (2008). Narcissism and social networking web sites. *Personality and Social Psychology Bulletin*, 34(10), 1303-1314.
DOI: 10.1177/0146167208320061
- Cima, M., Tonnaer, F., & Hauser, M. D. (2010). Psychopaths know right from wrong but don't care. *Social Cognitive and Affective Neuroscience*, 5(1), 59-67. DOI:10.1093/scan/nsp051

- Crysel, L. C., Cook, C. L., Schember, T. O., & Webster, G. D. (2015). Harry Potter and the measures of personality: Extraverted Gryffindors, agreeable Hufflepuffs, clever Ravenclaws, and manipulative Slytherins. *Personality and Individual Differences, 83*, 174-179. Retrieved from <http://dx.doi.org/10.1016/j.paid.2015.04.016>
- DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: 10 Aspects of the Big Five. *Journal of Personality and Social Psychology, 93*(5), 880-896.
DOI: 10.1037/0022-3514.93.5.880
- Djeriouat, H., & Trémolière, B. (2014). The Dark Triad of personality and utilitarian moral judgment: The mediating role of Honesty/Humility and Harm/Care. *Personality and Individual Differences, 67*, 11-16.
Retrieved from <http://dx.doi.org/10.1016/j.paid.2013.12.026>
- Ermer, E., & Kiehl, K. A. (2010). Psychopaths are impaired in social exchange and precautionary reasoning. *Psychological Science, 21*(10), 1399-1405.
DOI: 10.1177/0956797610384148
- Fix, R. L., & Fix, S. T. (2015). Trait psychopathy, emotional intelligence, and criminal thinking: Predicting illegal behavior among college students. *International Journal of Law and Psychiatry, 42*, 183-188. Retrieved from <http://dx.doi.org/10.1016/j.ijlp.2015.08.024>
- Fox, J., & Rooney, M. C. (2015). The Dark Triad and trait self-objectification as predictors of men's use and self-presentation behaviors on social networking sites. *Personality and Individual Differences, 76*, 161-165. <http://dx.doi.org/10.1016/j.paid.2014.12.017>

- Freud, S., Sandler, J., Person, E. S., & Fonagy, P. (2012). Freud's "On Narcissism: An Introduction." London: Karnac Books. Retrieved from <https://ebookcentral.proquest.com/lib/depauw-ebooks/detail.action?docID=879954>
- Gervais, M. M., Kline, M., Ludmer, M., George, R., & Manson, J. H. (2013). The strategy of psychopathy: Primary psychopathic traits predict defection on low-value relationships. *Proceedings of the Royal Society of London B: Biological Sciences*, 280(1757). Retrieved from <http://dx.doi.org/10.1098/rspb.2012.2773>
- Glenn, A. L., Iyer, R., Graham, J., Koleva, S., & Haidt, J. (2009). Are all types of morality compromised in psychopathy?. *Journal of Personality Disorders*, 23(4), 384-398. DOI: 10.1521/pedi.2009.23.4.384
- Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, 101(2), 366-385. DOI:10.1037/a0021847.
- Hare, R. D. (1999). *Without conscience: The disturbing world of the psychopaths among us*. New York, NY: The Guilford Press.
- Haycock, D. A. (2014, June 3). 6 incredibly common misconceptions about psychopaths. *The Huffington Post*. Retrieved from <http://www.huffingtonpost.com/>
- Holcomb, H. (2004). Darwin and evolutionary moral psychology. In Crawford, C. & Salmon, C. (Ed.), *Evolutionary Psychology, Public Policy, and Personal Decisions* (pp. 73-95). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

- Holtzman, N. S., & Strube, M. J. (2013). People with dark personalities tend to create a physically attractive veneer. *Social Psychological and Personality Science*, *4*(4), 461-467. DOI: 10.1177/1948550612461284
- Johns, J. H., & Quay, H. C. (1962). The effect of social reward on verbal conditioning in psychopathic and neurotic military offenders. *Journal of Consulting Psychology*, *26*(3), 217-220. Retrieved from <http://dx.doi.org/10.1037/h0048399>
- Jonason, P. K., Icho, A., & Ireland, K. (2016). Resources, harshness, and unpredictability: the socioeconomic conditions associated with the Dark Triad traits. *Evolutionary Psychology*, *14*(1), 1-11. DOI: 10.1177/1474704915623699
- Jonason, P. K., Kaufman, S. B., Webster, G. D., & Geher, G. (2013). What lies beneath the Dark Triad Dirty Dozen: Varied relations with the Big Five. *Individual Differences Research*, *11*(2), 81-90.
- Jonason, P. K., Strosser, G. L., Kroll, C. H., Duineveld, J. J., & Baruffi, S. A. (2015). Valuing myself over others: The Dark Triad traits and moral and social values. *Personality and Individual Differences*, *81*, 102-106.
Retrieved from <http://dx.doi.org/10.1016/j.paid.2014.10.045>
- 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
- Jonason, P. K., & Webster, G. D. (2012). A protean approach to social influence: Dark Triad personalities and social influence tactics. *Personality and Individual Differences*, *52*(4), 521-526. DOI:10.1016/j.paid.2011.11.023

- Jonason, P. K., Webster, G. D., Schmitt, D. P., Li, N. P., & Crysel, L. (2012). The antihero in popular culture: Life history theory and the dark triad personality traits. *Review of General Psychology, 16*(2), 192-199. DOI: 10.1037/a0027914
- Jones, D. N., Olderbak, & S. G., Figueredo. (2011). The intentions towards infidelity scale. *Handbook of Sexuality-Related Measures, 74-77.*
- 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
- Latzman, R. D., Patrick, C. J., Freeman, H. D., Schapiro, S. J., & Hopkins, W. D. (2017). Etiology of triarchic psychopathy dimensions in chimpanzees (*Pan troglodytes*). *Clinical Psychological Science, 5*(2), 341-354. DOI: 10.1177/2167702616676582
- Lovett, B. J., Jordan, A. H., & Wiltermuth, S. S. (2012). Individual differences in the moralization of everyday life. *Ethics & Behavior, 22*(4), 248-257.
DOI: 10.1080/10508422.2012.659132
- Lykken, D. T. (1995). *The antisocial personalities*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Maibom, H. L. (Ed.). (2014). *Empathy and morality*. Oxford University Press (UK).
- Maiese, M. (2014). Moral cognition, affect, and psychopathy. *Philosophical Psychology, 27*(6), 807-828. Retrieved from <http://dx.doi.org/10.1080/09515089.2013.793916>
- Marcinkowska, U. M., Helle, S., & Lyons, M. T. (2015). Dark traits: Sometimes hot, and sometimes not? Female preferences for Dark Triad faces depend on sociosexuality and contraceptive use. *Personality and Individual Differences, 86*, 369-373.
Retrieved from <http://dx.doi.org/10.1016/j.paid.2015.06.030>

- Marcinkowska, U. M., Lyons, M. T., & Helle, S. (2016). Women's reproductive success and the preference for Dark Triad in men's faces. *Evolution and Human Behavior*, 37(4), 287-292. Retrieved from <http://dx.doi.org/10.1016/j.evolhumbehav.2016.01.004>
- Moffat, S. (Writer) & McGuigan, P. (Director). (2010). A study in pink [Television series episode]. In Vertue, S. (Producer), *Sherlock*. London, England: British Broadcasting Corporation.
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, 12(4), 177-196. Retrieved from <http://www.sakkyndig.com/psykologi/artvit/morf2001.pdf>
- Patch, E. A., & Figueredo, A. J. (2016). Childhood stress, life history, psychopathy, and sociosexuality. *Personality and Individual Differences*. Retrieved from <http://dx.doi.org/10.1016/j.paid.2016.04.023>
- Patil, I. (2015). Trait psychopathy and utilitarian moral judgement: The mediating role of action aversion. *Journal of Cognitive Psychology*, 27(3), 349-366. DOI: 10.1080/20445911.2015.1004334
- Patrick, C. J. (2010). Operationalizing the triarchic conceptualization of psychopathy: Preliminary description of brief scales for assessment of boldness, meanness, and disinhibition. *Unpublished test manual, Florida State University, Tallahassee, FL*.
- 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. Retrieved from [http://doi.org/10.1016/S0092-6566\(02\)00505-6](http://doi.org/10.1016/S0092-6566(02)00505-6)
- Penke, L., & Asendorpf, J. B. (2008). Beyond global sociosexual orientations: A more

- differentiated look at sociosexuality and its effects on courtship and romantic relationships. *Journal of Personality and Social Psychology*, 95(5), 1113-1135.
DOI: 10.1037/0022-3514.95.5.1113
- Qureshi, C., Harris, E., & Atkinson, B. E. (2016). Relationships between age of females and attraction to the Dark Triad personality. *Personality and Individual Differences*, 95, 200-203. Retrieved from <http://dx.doi.org/10.1016/j.paid.2016.02.047>
- Richardson, E. N., & Boag, S. (2016). Offensive defenses: The mind beneath the mask of the Dark Triad traits. *Personality and Individual Differences*, 92, 148-152.
Retrieved from <http://dx.doi.org/10.1016/j.paid.2015.12.039>
- Ritchie, M. B., & Forth, A. E. (2016). Without concern: Predicting personal-moral transgressions from psychopathy and gender. *Personality and Individual Differences*, 94, 247-252.
Retrieved from <http://doi.org/10.1016/j.paid.2016.01.041>
- Roeser, K., McGregor, V. E., Stegmaier, S., Mathew, J., Kübler, A., & Meule, A. (2016). The Dark Triad of personality and unethical behavior at different times of day. *Personality and Individual Differences*, 88, 73-77.
Retrieved from <http://dx.doi.org/10.1016/j.paid.2015.09.002>
- Schramme, T. (2014). *Being amoral*. Cambridge: MIT Press. Retrieved from <https://ebookcentral.proquest.com/lib/depauw-ebooks/detail.action?docID=3339853>
- Semenyna, S. W., & Honey, P. L. (2015). Dominance styles mediate sex differences in Dark Triad traits. *Personality and Individual Differences*, 83, 37-43.
Retrieved from <http://dx.doi.org/10.1016/j.paid.2015.03.046>
- Tiberius, V. (2015). *Moral psychology: A contemporary introduction*. NY: Routledge.

- Vernon, P. A., Villani, V. C., Vickers, L. C., & Harris, J. A. (2008). A behavioral genetic investigation of the Dark Triad and the Big 5. *Personality and Individual Differences*, 44(2), 445-452. DOI: 10.1016/j.paid.2007.09.007
- Wai, M., & Tiliopoulos, N. (2012). The affective and cognitive empathic nature of the dark triad of personality. *Personality and Individual Differences*, 52(7), 794-799.
DOI:10.1016/j.paid.2012.01.008
- Wilson, D. S., Near, D., & Miller, R. R. (1996). Machiavellianism: A synthesis of the evolutionary and psychological literatures. *Psychological Bulletin*, 119(2), 285-299.
Retrieved from <http://dx.doi.org/10.1037/0033-2909.119.2.285>
- Wu, J., Balliet, D., Tybur, J. M., Arai, S., Van Lange, P. A., & Yamagishi, T. (2017). Life history strategy and human cooperation in economic games. *Evolution and Human Behavior*.
Retrieved from <http://doi.org/10.1016/j.evolhumbehav.2017.03.002>
- Yao, S., Långström, N., Temrin, H., & Walum, H. (2014). Criminal offending as part of an alternative reproductive strategy: Investigating evolutionary hypotheses using Swedish total population data. *Evolution and Human Behavior*, 35(6), 481-488.
- Zuo, S., Wang, F., Xu, Y., Wang, F., & Zhao, X. (2016). The fragile but bright facet in the Dark Gem: Narcissism positively predicts personal morality when individual's self-esteem is at low level. *Personality and Individual Differences*, 97, 272-276.
Retrieved from <http://dx.doi.org/10.1016/j.paid.2016.03.076>