

The Disunity of Moral Judgment: Implications for the Study of Psychopathy

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Abstract:

Since the 18th century, one of the key features of diagnosed psychopaths has been ‘moral colorblindness’ or an inability to form moral judgments. However, attempts at experimentally verifying this moral incapacity have been largely unsuccessful. After reviewing the centrality of ‘moral colorblindness’ to the study and diagnosis of psychopathy, I argue that the reason that researchers have been unable to verify that diagnosed psychopaths have an inability to make moral judgments is because their research is premised on the assumption that there is a specific moral faculty of the brain, or specific “moral” emotions, and that this faculty or set of emotions can become “impaired”. I review recent research and argue that we have good reason to think that there is no such distinct capacity for moral judgment, and that, as a result, it is impossible for someone’s “moral judgment faculty” to become selectively disabled. I then discuss the implications of such a position on psychopathy research, the coherence of the disorder, and the moral responsibility of psychopaths.

When it comes to diagnosing someone with the disorder of “psychopathy”, one of the key criteria is a lack of empathy and guilt, with Robert. Blair stating “The lack of empathy for victims and guilt for the transgression committed is the really remarkable feature of psychopathy” (2005, 867). In Hervey Cleckley’s initial, modern characterization of the disorder, key features include “lack of remorse or shame” and an “incapacity for love” of others (1988, 338).¹ Cleckley (1988) generally characterizes psychopaths as suffering from a kind of “moral colorblindness” throughout his influential work.

Contemporary academic philosophers and legal scholars, based on this presentation of psychopathy in the popular press (Hare, 1999; Babiak and Hare, 2007; Kiehl, 2015) and in peer reviewed material (see especially Blair 1995; Blair et al., 1995; Blair et al., 2004),² have come to interpret the psychopath as morally impaired and use the existence of such morally-impaired beings in arguments on a range of issues. For example, Victor Kumar claims that psychopaths merely make “proto moral judgments” in his 2016 article on motivational internalism (p. 334), and then further states that psychopaths are incapable of moral education in his 2022 book with Richmond Campbell on the evolutionary origin of morality (p. 48); Jesse Prinz references psychopaths in his work on moral sentimentalism, and believes that “psychopaths *seem* to comprehend morality, but they really don’t... they do not possess moral concepts; or at least that their moral concepts are fundamentally different from ours” (2007, p. 43); Jonathan Haidt characterizes psychopaths as “severely morally deficient” in his work of moral psychology (2012, p. 82); Michael Smith says that psychopaths/sociopaths do not really make moral

¹ The main diagnostic tool for psychopathy, the PCL-R, was developed on the basis of Cleckley’s criteria, as was the initial description of the disorder in the first edition of the DSM. See Creger and Widiger (2015) for a history of the description of psychopathy in the DSM.

² Jalava and Griffiths also note that philosophers have been especially drawn to the work of R.J.R. Blair, and without good reason (2017, 4). His arguments, and why we should consider them suspect, will be considered subsequently.

judgments, at least not in the same way as typical people in his book focused on moral judgment (1994, pp. 68-71); Bree Beal characterizes psychopaths as seemingly incapable of “moral cognition” (2021, pp. 21-22,) in a paper in which she aims to define “moral cognition”; in their edited volume entitled *Responsibility and Psychopathy: Interfacing Law, Psychiatry and Philosophy*, Luca Malatesti and John McMillan sum up the main conclusion of the volume in the following way: “...based upon a consideration of recent empirical literature, there are good reasons for not considering the psychopath morally responsible” (2010, p. 319).³

With the advent of advanced neuroimaging technology, psychologists have attempted to identify diagnosed psychopaths with a particular *brain* disorder; that is, they have aimed to ground the symptoms used to diagnose someone as psychopathic in specific, disordered brain regions or neural networks. For example, Blair (2005) attributes psychopathy primarily to dysfunction in the amygdala, while others have attributed psychopathic disorders to dysfunction in the frontal lobe (Gorenstein, 1982; Raine, 2002), and the paralimbic system (Kiehl, 2006), just to name a few brain areas that have been implicated in the disorder.⁴

Recently, however, primarily in the field of psychology but also within philosophy, there has been some doubt as to whether the psychopathic individual *really* is morally impaired (Jurjako and Malatesti, 2018; Marshall, Watts, and Lilienfield, 2018; Gay et al., 2018; Larsen, Jalava and Griffiths, 2020; Jalava and Griffiths, 2017; Sinnott-Armstrong, 2014; Sackris, 2021), with some even questioning whether psychopathy constitutes a distinctive disorder that can be meaningfully

³ See also Kennett, 2010; Levy, 2010; Maibom, 2005; Morse, 2008 for similar conclusions.

⁴ For a critical overview of the attempts to correlate various brain regions with the diagnosis of psychopathy, see chapter 8 of Jalava et al. (2015). This issue will also be discussed subsequently.

correlated with dysfunction in specific neural systems (Crego and Widiger, 2015; Jalava, Griffiths and Maraun, 2015; Jalava and Griffiths, 2022; Lilienfield, 2021; Marshall et al., 2016).

In this paper, I aim to do the following: First, I show that amorality or “moral colorblindness” is and has been a defining criterion for psychopathy throughout the documented history of the disorder. For many in the fields of philosophy and psychology it has become the received wisdom that psychopaths cannot make moral judgments in the same way as ordinary community members. Second, after reviewing the centrality of “moral colorblindness” in the study of psychopathy, I establish that the empirical evidence in support of the position that psychopaths are “morally colorblind” is at best quite mixed, and at worst non-existent. Third, I seek to make a novel conceptual argument that should be of interest to philosophers, psychologists, and legal theorists: based on the most recent research on moral judgment and the faculty of judgment generally, we should be skeptical that a person can be “morally impaired” in the way that psychopaths are typically presented. Finally, I consider the implications of casting doubt on the supposed moral incapacity of diagnosed psychopaths.

Put another way, I aim to bring research on moral judgment in healthy individuals into greater conversation with the research program focused specifically on the moral judgment of diagnosed psychopaths. I argue that there is good reason to think that moral judgment is not a distinctive capacity that corresponds to some specific region of the brain or neural network. I review evidence that indicates that typical human beings have a general judgment capacity that can be variously applied to a range of issues. From there, the argument is rather straightforward: If there is no “moral judgment” area of the brain, then it would be rather difficult or almost impossible for *only* someone’s moral judgment capacity to be disabled while their other judgment capacities remain intact. Yet, as I will demonstrate, this is often the exact description used to typify

psychopaths. I aim to show that such a description, based on current cognitive neuroscience, makes little sense.

If the argument advanced here successfully calls into question the idea that there is a “moral judgment capacity” and that that capacity can be uniquely impaired, this should have a general impact on the study of psychopathy. It suggests that we need to perform more basic research on the judgment processes of healthy individuals before we can confidently reach any sweeping conclusions about the judgment of psychopaths. Furthermore, this argument has important consequences for the legal field. For example, in the death penalty case of Brian Dugan in 2009, Dugan’s defense team called expert witness Kent Kiehl to testify that Dugan, as a diagnosed psychopath, had an abnormal brain which mitigated his moral responsibility for his actions. Drawing in part on neuroimaging studies, Kiehl told the jury that as a diagnosed psychopath it was likely that an individual such as Dugan made “choices [that] are not necessarily informed by emotion in the same way as ours” (Haederle, 2017).⁵ Unless significantly greater evidence comes to light regarding general judgment processes in psychopaths, I argue that a position on which diagnosed psychopaths should be held less responsible for their actions should be greeted with significant skepticism.

2. Moral incapacity as a distinguishing criterion of psychopathy

One of the earliest theories of psychopathy was offered by Benjamin Rush in the 18th century. Rush explained the disorder—which he termed *anomia* and later *moral derangement*—as an inability to distinguish between right and wrong, without losing other cognitive abilities (Rush, 1786; 1812). Allegedly, Rush based his theory on experiences working inside asylums, and in a

⁵ For an additional discussion of this case, see Hughes (2010).

1786 publication he writes about a prototypical psychopath, a person named Servin, whom he describes as a prodigy in science and art but has no comprehension and appreciation of laws and moral norms.

More recently, the late psychiatrist Hervey Cleckley characterized psychopathy as a condition where the individual appears to be normally functioning, but on closer scrutiny one quickly realizes that they exhibit a complete inability to perceive moral values. As mentioned above, Cleckley famously compared psychopathy to a strange case of *moral colorblindness*. This metaphor is telling: a colorblind person appears to have normal vision, but when their vision is put to a test it becomes obvious that a crucial perceptual capacity is missing. While a colorblind person can make many correct (or “normal”) judgments in the realm of vision, such as ascertaining the distance between objects or distinguishing between light and darkness, shades of grey, and so on, they might utterly fail in distinguishing between the colors in a traffic light or in seeing the nuances in an assortment of red apples. In his highly influential book, *The Mask of Sanity*, Cleckley uses this metaphor when describing one of his psychopathic patients:

[He] is unfamiliar with the primary facts or data of what might be called personal values and is altogether incapable of understanding such matters. It is impossible for him to take even a slight interest in the tragedy or joy or the striving of humanity as presented in serious literature or art. He is also indifferent to all these matters in life itself. Beauty and ugliness, except in a very superficial sense, goodness, evil, love, horror, and humor have no actual meaning, no power to move him. He is, furthermore, lacking in the ability to see that others are moved. It is as though he were colorblind, despite his sharp

intelligence, to this aspect of human existence. It cannot be explained to him because there is nothing in his orbit of awareness that can bridge the gap with comparison. He can repeat the words and say glibly that he understands, and there is no way for him to realize that he does not understand. (Cleckley 1988, p. 40)

Cleckley's own theory of psychopathy (which he termed *semantic aphasia*) explained psychopaths' alleged incapacity to make moral judgments as rooted in a lack of emotions, which Cleckley believed deprived psychopathic persons of the ability to truly understand and perceive moral values (e.g., Cleckley, 1988, p. 377). Since the original publication of Cleckley's book in 1941, various theories have surfaced that all expand on this basic premise that psychopathy is associated with an inability to make moral judgments. For instance, Robert Hare has argued that psychopaths have no conscience, which Hare argues effectively changes how psychopaths perceive the gravity of moral transgressions (e.g., Hare, 1996). Blair has proposed something similar, namely, that psychopathy consists in an inability to process negatively valenced emotions, resulting in an underdeveloped appreciation of interpersonal harm as something immoral (e.g., Blair, 2011). Others have argued that psychopathy consists in an incapacity to empathize with other individuals, which these theorists see as a necessary component in moral judgment (e.g., Blair et al., 2005; Dadds et al., 2009; Schramme, 2014).

In short, the inability to make moral judgments has been one of the hallmarks of the disorder. And in fact, part of the enduring interest in psychopathy lies in what many perceive as a kind of psychological paradox: the ability to function relatively normally in almost all areas of life *except* for the moral. Philippe Pinel, another early psychopathy researcher, seized on this

paradox, and labeled psychopathy as “insanity without the delirium” upon his first encounters with what we would today label as psychopaths because of this ability to “appear normal” in many contexts.⁶ Attempting to explain this paradox has been a through-line in psychopathy research that serves to connect the earliest observers of the disorder with today’s practitioners.

3. Searching for what ails the psychopath

Now that I have reviewed how “moral colorblindness” or amorality have constituted a key criterion for attributing a diagnosis of psychopathy to an individual, I now turn to the empirical efforts to verify that psychopaths really are morally impaired.

Some of the most influential empirical work on the moral capacity of diagnosed psychopath has come from Robert Blair (1995; 1997; 2007). His studies were initially taken by many to demonstrate the moral incapacity of psychopaths. Although Blair has conducted numerous experiments on diagnosed psychopaths, what has gotten the most attention in the fields of philosophy and psychology is a study in which he concludes that “psychopaths are significantly more likely to fail to make the moral/conventional distinction...” (1995, p. 25).⁷ To understand this conclusion and its supposed significance, a few words are in order on the moral/conventional distinction.

A significant body of research has been taken to show that nearly all individuals (including children as young three years old) can reliably distinguish between moral and conventional norm violations. When asked to explain the basis for the distinction, study participants readily classify

⁶ See Jalava et al. (2015) for a discussion of Pinel’s contribution.

⁷ Several philosophers and psychologists have referenced Blair’s work and taken it to demonstrate an inability to make moral judgments on the part of psychopaths: Haidt, 2012; Kumar, 2016; Nichols, 2002; Prinz, 2007. For a useful discussion of the influence of Blair’s work, see Jalava et al., 2015; Jalava and Griffiths, 2017.

moral violations as more wrong than conventional violations; they see moral violations as more authority-independent; they see moral violations as time and place independent; and they explain the wrongness of moral violations in terms of the harm they cause to others, which they do not typically do for conventional violations (Nucci and Turiel, 1978; Smetana, 1981; Turiel, 1983). So, for example, it may be a classroom rule that students must raise their hand to speak. If individuals are asked “Would it be okay to speak without raising your hand if the teacher said so?”, typical respondents say “Yes” because they view the rule about raising one’s hand as conventional or authority dependent—if the authority says it is “OK”, then it becomes permissible. However, if a classroom teacher told students “It is now permissible to hit other students”, most respondents still view hitting others as wrong, suggesting they do not view prohibitions on hitting others in the same way they view talking without raising one’s hand.⁸

In a further study on the moral capacity of psychopaths, Blair, Jones, Clark and Smith (1997) conducted an experiment designed to measure the skin conductivity of diagnosed psychopaths in response to distressing images, threatening images, and neutral images as compared to controls. The “distress” cues depicted crying faces; the “threatening” cues depicted a coiled-up snake, a shark’s mouth, and an angry face; and the “neutral” cues included items like books and a rolling pin (Blair et al., 1997, p. 195). Blair found that the psychopathic men “were significantly less responsive to the distress cue stimuli than were the non-psychopathic men” (p. 195). However, there was no difference in the processing of the threatening images or the neutral images.

One of Blair’s key conclusions from his research program is that psychopaths are deficient in their ability to feel empathy, stating “there can be no doubt that psychopathy is associated with

⁸ For a discussion of the moral conventional/distinction, and for evidence concerning the kinds of examples used with child subjects, see Smetana, 1981.

empathic dysfunction” (2007, p. 9). Although Blair does not specifically state that as a result of this empathic impairment psychopaths are unable to form moral judgments, this seems to be what he ultimately aims to explain. As established in the section above, at the heart of the diagnosis of psychopathy is ‘moral colorblindness’ or the inability to form moral judgments. In his 2007 work, for example, Blair states that “I, and others, consider the empathy dysfunction seen in individuals with psychopathy to be at the heart of the disorder” (p. 13). It is this lack of empathy that supposedly allows psychopathic individuals to commit violent acts without a second thought.

Blair attributes this lack of empathy in part to a dysfunctional amygdala (2005; 2007), but there has been no shortage of attempts to connect the moral decision-making deficits supposedly found in psychopaths to specific, dysfunctional areas of the brain. In a neuroimaging study in which psychopathic individuals were asked to consider moral dilemmas, Glenn, Raine and Schug reported that:

more psychopathic individuals show reduced activity in the amygdala during emotional moral decision making, with particularly conning and manipulative individuals showing reduced activity in the entire *moral neural circuit*. These results provide initial evidence that psychopaths exhibit deficits in brain regions essential for *moral judgment* in normal individuals (2009, p. 5, italics added).

Glenn et al. go on to enumerate other areas of the brain that showed deficits in function during this same study: the medial prefrontal cortex, the posterior cingulate, and the angular gyrus. Presumably, these are all areas that Glenn et al. take to make up the “moral neural circuit”.

In fact, however, there is no consensus about what abnormally functioning brain area(s) a diagnosis of psychopathy supposedly corresponds to. In a study conducted by Fede and colleagues (2016), diagnosed psychopaths were shown words describing different kinds of acts (stealing, charity, euthanasia) and participants had to rate the stimuli as “wrong” or “not wrong”. Diagnosed psychopaths were more likely to rate “wrong” stimuli as “not wrong”. However, Fede et al. found no abnormalities in the functioning of the amygdala during their study (2016, p. 1083). Instead, they attributed this supposed deficit in word recognition to the temporal parietal junction and dorsolateral prefrontal cortex. Despite differing on the areas of the brain that they identified as sub-optimal from previous studies, they nonetheless concluded that they had found a connection between psychopathic traits and “brain abnormalities in *moral-processing regions* during the processing of controversial moral stimuli.... This work helps to elucidate the neurological basis of impairments in moral processing in psychopathy” (2016, p. 1083, italics added).

In an overview of neuroimaging research conducted on psychopaths, Anderson and Kiehl identified abnormalities in all the following brain areas: “the orbitofrontal cortex, amygdala, and the anterior and posterior cingulate and adjacent (para)limbic structures” (2012, p. 52). Raine and colleagues identified abnormalities in a quite different brain structure, the corpus callosum, which is the bundle of nerve fibers that connect the two hemispheres of the brain (Raine et al., 2003).⁹

⁹ Although the Anderson and Kiehl study focuses on moral processing and the Rain et al. study focuses on emotion processing, Raine et al. describe their project as searching for the “etiology of psychopathic and antisocial behavior” (1134), which I take to mean that they are looking for the cause of the inability to make moral judgments. Furthermore, the inability to make moral judgments has been attributed to lowered empathy by some researchers (e.g., Cleckley, 1988). The goal here is also to illustrate the sheer number of brain regions that have been associated with diagnoses of psychopathy.

A more recent meta-analysis of 25 neuro-imaging studies of psychopaths conducted by Deming and Koenigs (2022), also failed to find evidence of reduced activity in the amygdala. Although Deming and Koenigs did correlate psychopathy with several other brain areas, their analysis failed to replicate *any* of the findings of a neuro-imaging meta-analysis conducted by Poepl and colleagues earlier that examined 16 of the same publications (2020, p. 6). Returning to the example of the amygdala, although Demings and Koenigs failed to find reduced activity, this is exactly what Poepl et al. (2019) claimed to confirm in their own analysis. These disparate findings may be more attributable to the analytic methods employed than any common, underlying abnormalities in diagnosed psychopaths.

After reading about the variety of brain areas implicated in the etiology of psychopathy, a sneaking suspicion might start to creep up on the reader: how could all these disparate areas of the brain be implicated in a single disorder? Furthermore, if one of the distinguishing features of the psychopath is “their ability to adjust without major difficulties in the social group” (Cleckley, 1988, p. 10), it seems rather surprising that people with this sort of varied and widespread brain dysfunction would be able to “pass”, so to speak, among ordinary people. Or, put another way, if diagnosed psychopaths do suffer from such widespread, varied brain dysfunction, it would be surprising if they were *only* markedly disabled in their ability to make moral judgments.

4. A critical review of the evidence

After more than two decades of research on diagnosed psychopaths, there have been no truly successful attempts at scientifically corroborating the hallmark deficit of the disorder: impairment of moral judgment capacities. Indeed, a recent large-scale (PRISMA) systematic review by Rasmus Rosenberg Larsen and colleagues (2020) summarized the past 25 years of research and concluded that clinically diagnosed psychopaths appear to be “equally capable

compared with controls” in making moral judgments (p. 306). As discussed, Blair’s (1995) study generated some enthusiasm in the fields of philosophy and psychology for demonstrating that, compared to controls, psychopaths make different distinctions between “moral” and “conventional” type norm violations than healthy controls. However, enthusiasm has long dwindled (at least in the field of psychology), as the results in Blair (1995) have been challenged and dismissed on several grounds by multiple researchers (e.g., Borg & Armstrong, 2013; Jalava & Griffiths, 2017; Marshall et al., 2018). What is more, subsequent attempts at replicating the results from Blair (1995) have failed without exception (e.g., Aharoni et al., 2012; 2014; Blair et al., 1997; Cima et al., 2010; Dolan & Fullam, 2010).

In addition to general failure of the behavioral tests, as suggested by the discussion above the attempts to investigate whether psychopathy is linked to *structural* abnormalities in brain areas that are theorized to be associated with moral judgment capacities have also been largely inconclusive.¹⁰ Systematic reviews (PRISMA) of recent neuro-imaging research in psychopathy clearly suggest that there are no meaningful (i.e., replicated, sufficiently powered, etc.) differences between psychopathic and non-psychopathic samples (e.g., Jalava et al., 2021; Griffiths & Jalava, 2017).¹¹ As discussed above, although amygdala dysfunction has historically been implicated as a cause of psychopathic dysfunction, in a systematic review of MRI studies

¹⁰ As an anonymous reviewer rightly points out, if behavior differences between diagnosed psychopaths and healthy participants on moral tasks cannot be established, it doesn’t matter what is going on in the brains of psychopaths.

¹¹ Lilienfeld (2012) also expressed skepticism that psychopathy could be connected with an underlying etiology in the brain. Cf. De Brito et al. (2021). A meta-analysis conducted by De Brito et al. correlated diagnosed psychopaths with reduction in gray matter volume in two prefrontal regions of the brain. However, their meta-analysis only made use of 7 studies, and *all* the participants in the studies they analyzed had lifetime substance abuse problems. The authors state “Notably, the individuals with psychopathy in all of the studies had a comorbid lifetime substance use disorder, meaning that we cannot rule out that some of the findings, like the effect in the orbito-frontal cortex recently reported in a large mega-analysis of substance dependence [Mackey et al., 2019], could partially reflect substance use disorder” (pg. 636).

conducted on psychopaths, Deming et al. report that “the majority of studies found null relationships between psychopathy and amygdala structure and function, even in the context of theoretically relevant [e.g., moral-judgment] tasks” (2022). In short, there have been no clearly successful attempts to link psychopathy with a specific structural abnormality in the brain, let alone a specific linkage between psychopathy and a dysfunction in the “moral processing” part of the brain.¹²

There are some key difficulties with research on psychopaths that pervade the field generally and which may explain these failures of replication: According to Hare’s widely used diagnostic tool, the Psychopathy Checklist Revised (PCL-R), a score of 30 out of 40 is typically used as the threshold for considering someone a diagnosed psychopath (Hare et al., 2018). However, for research purposes, it is typically quite difficult to find a significant sample of individuals who all score higher than the recommended threshold. For example, in Blair’s (1995) experiment on the moral/conventional task, his sample consisted of only 10 individuals he identified as psychopaths based on a review of their files. Four items from the PCL-R checklist were left off, and the adjusted average score of the 10 individuals on the PCL-R was 31.6. We are *not* told how many of the 10 individuals scored below 30, if any. Furthermore, all ten subjects were white males incarcerated at a treatment facility. Although this would be a small and highly unusual sample size in most other psychological studies, it is not an especially unusual sample in studies of psychopathy: in Blair and colleagues 1997 study, 18 diagnosed psychopaths, all males, and all incarcerated on murder/manslaughter convictions constituted the experimental group.

¹² In fact, we should be skeptical of our ability to correlate brain areas with specific cognitive tasks. Although the limbic system is thought to play a role in regulating behavior, and psychopathy has been associated with an abnormal limbic system (the limbic system includes the amygdala), a case study of an individual with a completely destroyed limbic system showed that this extensive brain damage had no impact on the individual’s conception of morality. See Feinstein et al. (2010).

Furthermore, a key criterion for diagnosing someone as a psychopath is “pathological lying” (Hare et al., 2018), making this an especially difficult population to successfully study.

To elaborate on the concerns with Blair’s sample, individuals incarcerated in a psychiatric hospital might have good reason to portray themselves as especially concerned with morality. As Blair reports, psychopathic participants were more likely than controls to treat conventional violations in the same fashion as moral violations, the exact opposite of what Blair expected (1995, p. 23). Perhaps this is because they wanted to seem especially moralistic given their incarceration. Ultimately, only 6 psychopaths failed to make the moral/conventional distinction in the same way as healthy controls in the 1995 study. This means that Blair’s influential conclusion was drawn based on the behavior of six individuals.

Given these facts, it is unsurprising that researchers have been unable to reproduce many of the seemingly significant findings that have been reported concerning the moral ability (or lack thereof) of diagnosed psychopaths. The positive findings regarding this supposed inability have typically been the result of small-scale studies that have questionable research designs, generating null-findings that are typically de-emphasized (Jalava et al., 2021). As Jalava and colleagues point out, the highly inconsistent results of the neuroimaging studies on diagnosed psychopaths tell us more about the methods of diagnosing individuals with psychopathy than about the etiology of the disorder:

Inconsistent patterns of brain activity could indicate something interesting about brain functions in different subtypes of psychopaths. However, it is just as likely that such inconsistencies reflect a poor classification strategy, which yields a group of people potentially united by nothing more than their moral transgressions (Jalava et al., 2015, p. 153).

If the method for classifying someone as a psychopath is unsound, then the resulting scientific study on said individuals is unlikely to result in meaningful data.

Finally, as Jurjako and Malatesi point out, diminished capacity on a specific task in a specific context as compared to controls should not be taken as definitive evidence of a diminished capacity (2018, p. 1010). To be fully confident that an individual or population completely lacks some capacity, we would want to see them fail at a variety of tasks that involve that capacity, and in an ideal scenario we would want to correlate that diminished capacity to specific neural mechanisms. Nothing close to this has been established in the study of psychopathy and moral judgment.

At this point there is a growing consensus in the field of psychology and cognitive science that “the current literature does not provide evidence suggesting psychopaths have severe moral cognition deficits” (Borg and Sinnott-Armstrong, 2013, p. 108). With this in mind, the main takeaway from this section should be this: Although the key diagnostic trait of psychopathy has been ‘moral colorblindness’, that psychopaths really are morally colorblind has been difficult to establish empirically, and those studies that have claimed to show that psychopaths are morally incapacitated have been largely rejected by the many in the fields of cognitive science and psychology. In addition, the goal of associating a diagnosis of psychopathy with a specific disorder in the brain has, up to this point, been largely unsuccessful with meta-analyses that either yield conflicting results or call into question the significance of previously published findings. I now turn to an argument that offers a possible explanation of these largely null and inconsistent findings: the reason that psychopaths have not been shown to have a dysfunctional moral judgment capacity is because there may be no such thing as a specific “moral judgment capacity” in the brain.

5. A theory as to why a dysfunctional moral judgment capacity has not been empirically verified

Here I aim to show that moral judgment is likely not the result of a “moral neural network” or made up of a specific set of moral emotions, and so moral judgment cannot be “dysfunctional” while other reasoning abilities remain intact in the way often portrayed by psychopathy researchers. The absence of a moral judgment faculty would explain much of the current evidence, or lack thereof, in the study of psychopathy. If it turns out that there really is no specific brain area devoted to making moral judgments, this should have implications for the study and diagnosis of psychopathy, as well as for the moral responsibility of diagnosed psychopaths.

Here is the central argument:

- 1) If psychopaths have an impaired moral decision-making faculty while their general reasoning abilities remain intact, then there should be a moral decision-making complex in the brain or set of moral emotions devoted to forming moral judgments and that can be specifically dysfunctional in some way.
- 2) Current evidence indicates that there is no specific moral decision-making complex in the brain or set of moral emotions devoted exclusively to making moral judgments.
- 3) Therefore, it should not be possible for psychopaths to have a generally impaired moral decision making faculty while their general reasoning abilities remain intact.

As we saw in section three, researchers on psychopathy are committed to the idea that there are specific brain regions devoted to making moral judgments. Some researchers also hold that

empathy is a specifically moral emotion (or that it is necessary for making moral judgments) that can be selectively impaired and that such an impairment would primarily affect moral judgment (e.g., Blair, 2007). That is, research on psychopathy seems to presuppose that there is a discrete moral judgment system in the brain that is distinct from other judgment making processes, and/or that moral judgments are somehow categorically different from other judgments via a reliance on empathy.

As a number of authors have demonstrated (Sackris and Larsen, 2022; Sinnott-Armstrong and Wheatley, 2014; Stich, 2006), the idea that moral judgment forms a distinctive judgment type or kind is a long-standing view in philosophy going back to at least Kant, and is still very much a live commitment in contemporary meta-ethics scholarship.¹³ This commitment can be similarly found in the field of moral psychology; for example, it appears to be animating the work of Lawrence Kohlberg on moral development.¹⁴ Research into the moral/conventional distinction, discussed above, also seems to presuppose moral judgment constitutes a distinctive type, as the research is driven by the assumption that certain features must distinguish judgments involving moral norms from other normative judgments.¹⁵

However, some philosophers have begun to doubt that moral judgment constitutes a distinctive kind. As Sinnott-Armstrong and Wheatley have argued, for moral judgment to constitute a distinctive kind or type, there would have to be some significant feature shared by all instances of the type (2014, p. 454). That is, if moral judgment constitutes a distinctive category of

¹³ Stich (2006) traces such a view all the way back to the *Republic*.

¹⁴ See for example Kohlberg and Hersch, 1977.

¹⁵ See Sinnott-Armstrong and Wheatley (2014) for a discussion of this history; they make a similar observation regarding the moral/conventional distinction. Bucciarelli, Khemlani and Johnson-Laird (2008) also interpret Turiel as assuming that moral judgments constitute a distinctive type. They argue against the position on which moral judgment employs a distinctive type of reasoning.

judgment, there must be some way of differentiating the moral judgments from the other judgment types or categories. They state “When a single unifying feature enables [] distinctive generalizations about a group of phenomena, that group can be called a nature kind” (2014, p. 454). Sinnott-Armstrong and Wheatly review attempts in both philosophy and cognitive science to provide said unifying feature for moral judgment as a distinctive category and conclude that there is no credible unifying feature to be found. They state that “our claim is not only that there are different kinds of moral judgments; it is also that nothing at all, at any level, unifies those kinds” (Sinnott-Armstrong & Wheatley, 2014, p. 455). Sackris (2021) also concludes that we have good reason for doubting that moral judgments form a distinctive kind, arguing that the decision context influences what properties the judgment made in said context ends up having. In their own review of cognitive science research on moral judgment, Sackris and Larsen reach the same conclusion as Sinnott-Armstrong and Wheatly (2014) about the likely disunity of moral judgment:

Although there may well be other significant features of moral judgments we could call upon as evidence of their distinctiveness as a type of judgment, if we put any stock in the idea that what typified moral judgments was that they were the result of a distinctive decision-making process(es) within the brain, then such a belief appears to be false. It now seems that what we call “moral” judgments are the result of a variety of brain areas that also play a role in the formation of what we previously would have classified as different kinds of judgments. The evidence considered suggests we should be leery of our ability to introspectively identify “types” or “kinds” of judgments (2022, p. 10).

As of right now, there is a significant body of research on the neurological components involved in making what we would classify as “moral” judgments that indicates that such judgments are the result of diverse brain processes. The evidence currently indicates that it is more likely that we have a general system for making judgments that we *apply* to contexts that we would label “moral” than that we have a specific moral judgment system (e.g., Greene 2015; Cushman and Young, 2011; Borg et al, 2011; Young and Dungan, 2012; Decety and Cowell, 2014; Bzdok et al., 2012).¹⁶

As an example of this domain general approach to judgment formation, consider Joshua Greene’s account. Although Green employs a dual process model to explain moral judgment, he is committed to such a model for explaining judgment *generally*. In his presentation of the dual process model, he theorizes that the human mind employs two distinct processes for reaching judgments (depending on the decision context), and these distinct processes can also be applied to what we typically label as moral decision contexts. He uses an analogy with an SLR camera to explain these two processes. An SLR camera has two distinct settings: automatic and manual. He says:

The human brain has the same general design. First, we humans have a variety of automatic settings—reflexes and intuitions that guide our behavior, many of which are emotional . . . Our brains also have a manual mode. It is a *general purpose* reasoning system, specialized for enabling behaviors that serve longer term goals . . . (2014, p. 696, my italics).

¹⁶ See Sackris and Larsen (2022) for an extended discussion of much of the research conducted listed here. In Fede and Kiehl’s (2020) meta-analysis they identify moral judgment with specific areas of the brain, but when digging into their findings they actually lend some support for the position being argued for here. They state that the “results indicated a distinct pattern of processing for each of the members of these paradigm pairs” (p.534). That is, their analysis indicated that different kinds of moral tasks seemed to call on different brain regions.

On Greene's current understanding of judgment, there is no distinctive or special *moral* judgment process. Human beings have fast, automatic response processes, and more deliberate, conscious reasoning processes. These two distinct processes are variously applied, including to what we typically refer to as moral judgment contexts. In his 2015b, Greene states "I believe that moral cognition is not a natural kind at the cognitive level" (p. 40).

Suppose that this recent research is correct. If what we refer to as "moral judgments" are not unified by any specific brain processes, if there is no "moral neural circuit", this would pose a significant hurdle for neuro-imaging research in psychopathy.

The research considered thus far, by itself, does not prove that there is *nothing* that unifies moral judgments. For example, one alternative approach would be to claim that *certain* emotions are always involved in the making of moral judgments, and that if these emotions do not accompany said judgments, then they aren't "real" moral judgments. If true, we might expect to uncover this via neuroimaging studies, but then again, we might not. Emotions have a phenomenological component that could make them less amenable to the neuro-imaging approach. That is, two emotion processes might look very similar or almost identical when viewed neuro-scientifically but have distinctive feelings from the subject's perspective.

As we have seen, one way of attempting to understand what ails the psychopath has been to attribute to such individuals a lack of empathy or an inability to feel emotions in the same way as a healthy individual (e.g., Blair, 2005, 2007; Cleckley, 1988; Seara-Cardosa, et al., 2022; Nentjes et al., 2022). Borg and colleagues, for example, hypothesize that psychopaths can in fact make moral judgments and engage in moral deliberation, but that they differ from typical individuals in that they are not motivated by those judgments (2011, p. 410). On this approach to explaining

what ails the psychopath, it is a lack of empathy or an affective deficit that underlies the so-called “moral colorblindness”.

However, according to several contemporary theories of the role of emotion in general judgment tasks, such an approach to explaining a deficit in *only* the moral judgment capacity is rather implausible. If an individual has a dampened emotional system, they would hardly be able to function—if we assume a position on which emotion plays a key role in motivation, not only would diagnosed psychopaths not be motivated by their moral judgments, they wouldn't be motivated by any of their judgments. If emotions are vital for moral decision-making, then they are likely vital for decision making more generally.

Consider *constructivist* accounts of emotion (e.g., Cameron et al., 2015). On this approach, there are no emotions that are specific to morality or moral judgment (such as empathy). Instead, the idea is that we are conditioned or socialized to interpret felt bodily responses *as* specific emotions. On constructivism, our emotions are composed of a general set of ingredients that can be flexibly combined and that are then variously interpreted as specific emotions, depending on the circumstances (Cameron et al., 2015, p. 373). This is not to deny our lived experience of “feeling” different emotions. Instead, the idea is that we interpret the “meaning” of our felt bodily experience as a specific emotion based on the situation in which we experience it. This is like the way in which a given context and our knowledge about that context will lead to specific interpretations of our visual or audio experience. For example, when we walk into a dark room in a house that we are unfamiliar with, we might interpret a coat rack as another human being lurking in the shadows. In this case, our context and conceptual knowledge shapes how we make sense of our visual experience. On constructivism, context and conceptual knowledge similarly play a role in how we experience our emotions. In the case of the coat rack that we mistake for a

shadowy figure, we interpret our felt bodily response as fear instead of anger. If, as Cameron and colleagues claim, that our felt emotional life is result of “domain general ingredients” that are variously combined, it is hard to see how an individual could be selectively disabled in their ability to feel so-called “moral” emotions.¹⁷

It also makes sense to consider here what is referred to as *feelings as information* or *affective arousal as information* theory (e.g., Schwarz, 2012; Storbeck and Clore, 2008). On this view, emotion is integral to judgment formation. The basic idea is that individuals attend to their feelings and bodily experiences as a source of information. As Storbeck and Clore put it, “In this view, making judgments and decisions often involves asking oneself ‘How do I feel about it?’” (2008, p. 1824). If, for the sake of argument, we take the claims of feeling as information seriously, feelings are critical to everyday judgment about a wide variety of things. In some sense, this seems highly intuitive—we are attracted to things we like and avoid the things we dislike. If these basic evaluations (like and disliking) are rooted in emotion, it is hard to see how the moral dysfunction of diagnosed psychopaths could be rooted in dampened affect. If this theory regarding the role of feelings in everyday judgment is correct, dampened affect should be seen in *all* the judgments made by psychopaths, not just the judgments related to morality. If psychopaths have dampened affect, they should have trouble deciding what food to eat, clothes to wear, and many other basic decisions that depend on assignments of emotional valence (like/dislike).

¹⁷ Augusto Blasi (1999) doubts that even if there are “moral emotions” they can be used to adequately explain moral motivation in healthy individuals. Again, this suggests that a “dampening” of ones “moral emotions” cannot explain psychopathic behavior. As Blasi points out, in many cases instead of priming us to act, our emotions actually have to be overcome for us to act. Blasi emphasizes that the connection between emotion and action is not as straightforward as psychologists like to sometimes present it.

Antonio Damasio's research on patients with injuries to the ventro-medial prefrontal cortex (research which is often appealed to by those seeking to explain the amorality found in psychopaths)¹⁸ backs up the idea that a healthy emotional life is vital to decision-making of any kind, not just moral decision making. In Damasio and van Hoesen's 1983 publication, the authors describe a condition called "akinetetic mutism", the result of a severe brain injury, in which the ability to feel emotions is allegedly greatly reduced or dampened. In this state, the patient in question, although seemingly alert, did not speak, or make any attempt to speak. Later, after a period of recovery, when the patient was asked why she did not speak she responded that it was because she had no inclination to act: "She didn't talk because she had 'nothing to say'. Her mind was 'empty'. Nothing 'mattered'" (p. 98). Damasio's case study should lead us to doubt that a "reduced affect" makes sense as an explanation of the behavior of diagnosed psychopaths. If Damasio and van Hoesen's interpretation of the situation is correct, when a person has an inability to feel or a dampened affect, they have little incentive to choose to do anything. They would likely not be selectively disabled in their ability to act upon their moral judgments. Furthermore, and more significantly to my mind, the dampened affect theory is in direct conflict with some of the other traits used for diagnosing psychopathy: impulsiveness and promiscuousness (Hare et al., 2018). If psychopaths have a lessened ability to feel emotions, we would not expect them to be simultaneously "impulsive" and "promiscuous".

The evidence considered in this section should shed considerable doubt on the notion that there is a specific region of the brain, or "moral neural circuit", devoted to the process of making moral judgments. The evidence should also cast doubt on the notion that there are specific "moral emotions" that, if dampened or disabled, would selectively inhibit moral judgment and

¹⁸ See for example Blair 1995, 2005; Prinz, 2007.

decision-making.¹⁹ It seems possible if not probable that emotion is involved in moral judgment, but this is because emotion is likely involved in judgment generally. Therefore, as the evidence stands right now, we have good reason to doubt that an individual could be selectively disabled in their ability to make moral judgments.

There may well be other ways to establish the unity of moral judgment by, say, showing that moral judgments have a distinctive phenomenal quality.²⁰ After that was established, we might then demonstrate that psychopaths somehow lack the ability to “feel” this phenomenal quality. However, it is unclear how such facts regarding the “feel” of a moral judgment would be empirically established nor how it would be shown that someone lacks this “feel”. Alternatively, we might hold that, whatever might go on in the brain during moral decision-making, what matters is that healthy individuals consistently conceive of moral judgments in a specific way.²¹ For example, the supposed significance of the moral/conventional distinction (and the failure to grasp such a distinction) rests on the view that ordinary speakers conceive of moral norms as having certain, necessary features that distinguish them from other norms. So perhaps new tests could be conceived regarding this distinction and then tried out on diagnosed psychopaths: there might yet be a way to show that psychopaths lack a complete understanding of the concept of morality. However, doubts have been raised about the stability of the distinction between moral and conventional norm violations. There is now significant empirical evidence that indicates that

¹⁹ It may well be that emotions are necessary, or sufficient, or necessary and sufficient for forming moral judgments. What I hope to have cast doubt on is the idea that there are specific emotions that solely play a role in moral judgments, such that if they were selectively disabled an individual would be unable to make moral judgments but would still be able to make other non-moral judgments. What I am saying here is entirely consistent with the possibility that emotion is necessary for all judgment formation. Even Jonathan Haidt, one of the chief advocates of moral foundationalism, does not identify moral judgments with specific emotions. See his (2012), especially chapters 6 and 7.

²⁰ See for example Glasgow (2013).

²¹ See for example Kumar (2015).

speakers do not consistently conceive of moral judgments as having a specific set of necessary properties (see Beebe and Sackris, 2016; Goodwin and Darley, 2008; Kelly et al., 2007; Margoni and Surian, 2021). If non-psychopathic individuals do not have a consistent way of conceiving of moral judgments, it becomes less clear how researchers would convincingly demonstrate that diagnosed psychopaths lack the concept in question.

6. Implications for the study of psychopathy

Suppose now, for the sake argument, that I have successfully shown that moral judgment is unlikely to be a distinctive faculty that could be selectively disabled. What does this mean for the study of psychopathy and the coherence of psychopathy as a meaningful diagnosis? First, as discussed in the introduction, there is already doubt within the fields of psychiatry and psychology that psychopathy constitutes a distinctive pathology (Crego and Widiger, 2015; Jalava, Griffiths and Maraun, 2015; Jalava and Griffiths, 2022; Lilienfeld, 2022). For those who harbor this doubt, the argument offered here should count towards substantiating that doubt. Given that “moral insanity” has been the core attribute of the disorder since the 18th century, if this argument is on the right track, then the disorder seems to lose its organizing feature.

This is not to suggest that “psychopaths don’t exist” in the sense that this position implies that there is “nothing wrong” with people who are diagnosed as psychopaths.²² The idea instead is there is nothing *uniquely* wrong with them, or that whatever is causing them to disregard the interests of other individuals cannot be linked with a specific “moral judgment” faculty in the brain. Lilienfeld, a key figure in the study of psychopathy, suggested shortly before his death that psychopathy may be more like an extreme personality type than a coherent disorder (2021).

²² Thanks to an anonymous referee for urging me to consider this point.

Lilienfeld warns psychopathy researchers against committing what he calls “the sui generis fallacy: the error of assuming that any given mental disorder should be approached separately from all others, as well as from personality psychology at large” (2021, p. 486).

Furthermore, and more concretely, the argument offered here indicates that attempts at finding “brain abnormalities in *moral-processing* regions” (Fede, et al., 2016, p. 1083) is currently a daunting task that should be put on hold until concrete evidence is found indicating that there really is a specific moral-processing region(s) of the brain. If, however, moral judgment is the result of an all-purpose judgment formation capacity, there is little to be gained from conducting brain-scans on diagnosed psychopaths to understand the root cause of their supposed moral indifference. My argument, if correct, indicates that psychopathy researchers cannot find meaningful data regarding deficits in the moral decision-making processes of diagnosed psychopaths since there may be no specific moral decision-making areas of the brain. Likely fMRI research on the moral judgment capacity of psychopaths (an expensive endeavor) should either be paused until more basic research on judgment in a typical subject population is completed or research efforts should be redirected towards correlating other traits (such as lack of remorse) with specific, disordered brain regions.

Finally, this argument has implications for philosophers and legal theorists who seek to mitigate the legal or moral responsibility of diagnosed psychopaths. For example, in their paper “Is it wrong to criminalize and punish psychopaths?”, Glenn et al. state that “there is increasing psychological and neuroscientific evidence that brain regions critical in emotion and moral capacity are impaired in psychopaths” (2011, p. 302). Stephen Morse similarly states that “moral incapacities appear to be core” to the diagnosis and that “psychopaths are color blind to moral concerns”. On the basis of such beliefs, Morse concludes “severe psychopathy should be a basis

for non-responsibility in appropriate cases....” (2008, p. 212). Cordelia Fine and Jeanette Kennett also conclude, again based on the belief that psychopaths are “incapable of forming genuine moral concepts”, that they “cannot meet the requirement of moral understanding in the criminal code” (2004, p. 425). In a study conducted with trial judges who were presented hypothetical cases involving psychopaths and expert testimony concerning the supposed biological basis of psychopathy, one participating judge said the following:

The evidence that psychopaths do not have the necessary neural connections to feel empathy is significant. It makes possible an argument that psychopaths are, in a sense, morally ‘disabled’ just as other people are physically disabled. I have received and considered such evidence in past trials (Aspinwall et al., 2012, p. 847).²³

That is, because the judges were presented with research indicating that psychopathic behavior was due to some underlying neural disfunction involving the ability to feel empathy, they were less likely to see the offenders as fully culpable.

The arguments presented here, if correct, show that there is no conclusive evidence for thinking that psychopathic offenders could be selectively disabled in their ability to make moral judgments or feel empathy, and further indicate that there is unlikely to be any conclusive evidence forthcoming that would demonstrate that they are so disabled. We have reason to doubt that a person could become selectively “morally ‘disabled’” while leaving other decision-making abilities intact. Furthermore, if a person did “not have the necessary neural connections to feel empathy” it is doubtful that *only* their ability to make moral judgments would be impaired.

²³ This is quoted in Jalava et al. 2015.

In short, arguments concerning the criminal and moral responsibility of psychopaths based on this supposed moral incapacity should not be taken into consideration when it comes to, e.g., the sentencing phase of a criminal proceeding at this time. More basic research needs to be conducted on judgement in healthy individuals before any conclusions can be confidently drawn regarding the judgment abilities (or lack thereof) of diagnosed psychopaths. I doubt that a judge would conclude that “the evidence that psychopaths do not have the necessary neural connections to feel empathy is significant” were they to confront the entirety of evidence discussed in this paper. When the field is viewed as a whole, its current unsettled nature becomes clear. Morse thinks that if it is true that psychopaths “lack moral rationality” (2008, p. 205) then they should not be held criminally responsible. However, in a later paper he also states the following: “We don’t want legal policy made or individual case outcomes affected by science that is quite uncertain” (2019, p. 3).²⁴

To speak directly to Morse’s point, the evidence that psychopaths have a distinctive brain disorder is inconclusive; add to this the fact that current evidence indicates that it is unlikely that there is a moral judgment area of the brain that could be particularly affected or disabled; finally, even on behavioral moral judgment tasks diagnosed psychopaths perform in a similar fashion to healthy subjects. Taken altogether, there are no certain grounds for thinking that psychopaths have a diminished moral capacity. As such, individual sentencing decisions should not be impacted by diagnoses of psychopathy, nor does it seem that a diagnosis of psychopathy should be admitted as the basis of a positive defense of one’s actions (i.e., not guilty by reason of insanity) at this time.

²⁴ Morse also holds that we should always defer to the behavioral evidence. If an individual by and large behaves in a rational manner, then they are rational for the purposes of a criminal proceeding (2006). Part of the historical definition of a psychopath is their ability to act rationally in most circumstances.

Based on the evidence concerning the nature of the human judgment presented here, if a person can make what we would classify as “non-moral judgments” like other healthy individuals, then they can most likely make moral judgments as well. If there is some underlying reason for why diagnosed psychopaths have a greater tendency towards violence than non-psychopaths, it is unlikely that reason is going to be found in the “moral judgment” mechanism of their brain, because there does not appear to be any such mechanism.

7. Conclusion

Although the idea of an individual who is “without conscience” or “morally colorblind” has long been a leading feature in the characterization and study of diagnosed psychopaths, the research on what *makes* psychopaths morally colorblind has been largely inconclusive over the last 25 years. I have offered an explanation as to why that should be: there appears to be no distinctive area of the brain, or cognitive faculty, or specific emotion devoted to making moral judgments. If there is no “moral faculty”, then there is no way for it to become completely disabled.²⁵

If psychopathy researchers take on the working assumption that there is a general judgment faculty that is variously applied to most decision-making contexts, this might lead to a more

²⁵ There is an alternative theory of psychopathy that does not presuppose a moral faculty and its ability to become dysfunctional. According to *response modulation* theory, or RM theory, it is not that psychopaths cannot process emotions but instead have an inability to attend to peripheral information that other, healthy individuals would take as goal-relevant and cause them to change their behavior (Nentjes, Garofalo, and Kosson, 2022). For criticisms of this approach to explaining psychopathy, see Blair 2005, 870-871; Jalava et al., 2015, chapter 8; Nentjes et al., 2022; Gillespie, et al., 2022

fruitful understanding and diagnosis of the disorder. Or it might show, as some have begun to argue, that psychopathy is not a single, distinctive pathology.²⁶

References

- Aharoni, E., Sinnott-Armstrong, W., & Kiehl, K. A. (2012). Can psychopathic offenders discern moral wrongs? A new look at the moral/conventional distinction. *Journal of Abnormal Psychology, 121*(2), 484–497. <https://doi.org/10.1037/a0024796>
- Anderson N., & Kiehl, K. A. (2012). The psychopath magnetized: insights from brain imaging. *Trends in Cognitive Science, 16*(1), 52-60. DOI: 10.1016/j.tics.2011.11.008.
- Babiak, P. & Hare, R.D. (2007). *Snakes in suits: When psychopaths go to work*. Harper.
- Beal, B. (2021). The nonmoral conditions of moral cognition. *Philosophical Psychology, 34*(8), 1097-1124. DOI: 10.1080/09515089.2021.1942811
- Beebe, J. R. & Sackris, D.C. (2016). Moral objectivism across the lifespan. *Philosophical Psychology, 29*(6), 912-929.
- Blair, R. J. R. (1995). A cognitive developmental approach to morality: Investigating the psychopath. *Cognition, 57*(1), 1- 29.
- Blair, R. J. R. (2005). Applying a cognitive neuroscience perspective to the disorder of psychopathy. *Development and Psychopathology, 17*(3), 865-91.
- Blair, R. J. R. (2007). Empathic dysfunction in psychopathic individuals. In T. Farrow & P. Woodruff (Eds.), *Empathy in mental illness* (pp. 3-16). Cambridge University Press. <https://doi.org/10.1017/CBO9780511543753.002>.
- Blair, R. J., Jones, L., Clark, F., & Smith, M. (1997). The psychopathic individual: a lack of responsiveness to distress cues?. *Psychophysiology, 34*(2), 192–198. <https://doi.org/10.1111/j.1469-8986.1997.tb02131.x>
- Blair, R. J. R., Jones, L., Clark, F., & Smith, M. (1995). Is the psychopath “morally insane”? *Personality and Individual Differences, 19*(5), 741- 752.
- Blair, R. J. R., Mitchell, D. G. V., Peschardt, K. S., Colledge, E., Leonard, R. A., Shine, J. H., Murray, L. K., & Perrett, D. I. (2004). Reduced sensitivity to others' fearful expressions

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- in psychopathic individuals. *Personality and Individual Differences*, 37(6), 1111–1122. <https://doi.org/10.1016/j.paid.2003.10.008>
- Blasi, A. (1999). Emotions and moral motivation. *Journal for the Theory of Social Behaviour*, 29(1), 1-19.
- Schaich Borg, J., Sinnott-Armstrong, W., Calhoun, V. D., & Kiehl, K. A. (2011). Neural basis of moral verdict and moral deliberation. *Social neuroscience*, 6(4), 398–413. <https://doi.org/10.1080/17470919.2011.559363>
- Borg, J. S., & Sinnott-Armstrong, W. P. (2013). Do psychopaths make moral judgments? In K. A. Kiehl & W. P. Sinnott-Armstrong (Eds.), *Handbook on psychopathy and law* (pp. 107–128). Oxford University Press.
- Sinnott-Armstrong, W. (2014). Do psychopaths refute internalism? In T. Schramme (Ed.), *Being amoral: Psychopathy and moral incapacity* (pp. 187–207). MIT Press.
- Bucciarelli, M., Khemlani, S., & Johnson-Laird, P. N. (2008). The psychology of moral reasoning. *Judgment and Decision Making*, 3(2), 121–139.
- Bzdok, D., Schilbach, L., Vogeley, K., Schneider, K., Laird, A. R., Langner, R., & Eickhoff, S. B. (2012). Parsing the neural correlates of moral cognition: ALE meta-analysis on morality, theory of mind, and empathy. *Brain structure & function*, 217(4), 783–796. <https://doi.org/10.1007/s00429-012-0380-y>
- Cameron, D. C., Lindquist, K. & Gray, K. (2015). A constructionist review of morality and emotions: No evidence of specific links between moral content and discrete emotions. *Personality and Social Psychology Review*, 19(4), 371–394. <https://doi.org/10.1177/1088868314566683>.
- 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.
- Cleckley, Hervey. 1976. *The mask of sanity: An attempt to reinterpret the so-called psychopathic personality*. Mosby.
- Creger, C., & Widiger, T.A. (2015). Psychopathy and the DSM. *Journal of Personality*, 83(6), 665-677.
- Cushman, F, & Young, L. (2011). Patterns of moral judgment derive from nonmoral psychological representations. *Cognitive Science*, 35(6), 1052–1075. <https://doi.org/10.1111/j.1551-6709.2010.01167.x>
- Dadds, M. R., Hawes, D. J., Frost, A. D., Vassallo, S., Bunn, P., Hunter, K., & Merz, S. (2009). Learning to “talk the talk”: The relationship of psychopathic traits to deficits in empathy

- across childhood. *Journal of child psychology and psychiatry, and allied disciplines*, 50(5), 599–606. <https://doi.org/10.1111/j.1469-7610.2008.02058.x>
- Damasio, A. & van Hoesen, G. (1983). Emotional disturbances associated with focal lesions of the limbic frontal lobe. In P. Satz and K. M. Heilman (Eds.), *Neuropsychology of human emotion* (pp. 85-110). Guilford Press.
- Decety, J., & Cowell, J. (2014). Friends or foes: Is empathy necessary for moral behavior? *Perspectives on Psychological Science*, 9(4), 525–537. <https://doi.org/10.1177/1745691614545130>
- Deming, P., Heilicher, M., & Koenigs, M. (2022). How reliable are amygdala findings in psychopathy? A systematic review of MRI studies. *Neuroscience and biobehavioral reviews*, 142, 104875. Advance online publication. <https://doi.org/10.1016/j.neubiorev.2022.104875>.
- Dolan, M. C., & Fullam, R. S. (2010). Moral/conventional transgression distinction and psychopathy in conduct disordered adolescent offenders. *Personality and Individual Differences*, 49(8), 995–1000. <https://doi.org/10.1016/j.paid.2010.08.011>
- Feinstein, J. S., Rudrauf, D., Khalsa, S. S., Cassell, M. D., Bruss, J., Grabowski, T. J., & Tranel, D. (2010). Bilateral limbic system destruction in man. *Journal of clinical and experimental neuropsychology*, 32(1), 88–106. <https://doi.org/10.1080/13803390903066873>
- Fine, C., & Kennett, J. (2004). Mental impairment, moral understanding, and criminal responsibility: Psychopathy and the purposes of punishment. *International Journal of Law and Psychiatry*, 27(5), 425–443.
- Gillespie, S. M., Lee, J., Williams, R., & Jones, A. (2022). Psychopathy and response inhibition: A meta-analysis of go/no-go and stop signal task performance. *Neuroscience and biobehavioral reviews*, 142, 104868. Advance online publication. <https://doi.org/10.1016/j.neubiorev.2022.104868>.
- Glasgow, J. 2013. Does direct moral judgment have a phenomenal essence? *Journal of Moral Philosophy*, 10, 52-69.
- Glenn, A. L., Raine, A. & Schug, R. A. (2009a). The neural correlates of moral decision-making in psychopathy. *Molecular Psychiatry*, 14, 5–6. <https://doi.org/10.1038/mp.2008.104>
- Glenn, A. L., Raine, A. & Laufer, W. S. (2011). Is it wrong to criminalize and punish psychopaths? *Emotion Review*, 3, 302-304. [10.1177/1754073911402372](https://doi.org/10.1177/1754073911402372).
- Goodwin, G. P., & Darley, J. M. (2008). The psychology of meta-ethics: Exploring objectivism. *Cognition*, 106(3), 1339-1366. <https://doi.org/10.1016/j.cognition.2007.06.007>
- Gorenstein, E. E. (1982). Frontal lobe function in psychopaths. *Journal of Abnormal Psychology*, 91, 368-379.

- Greene, J. D. (2014). Beyond point-and-shoot morality: Why cognitive (neuro)science matters for ethics. *Ethics*, 124(4), 695–726. <https://doi.org/10.1086/675875>.
- Greene, J. D. (2015). The rise of moral cognition. *Cognition*, 135, 39–42. <https://doi.org/10.1016/j.cognition.2014.11.018>
- Griffiths, S. Y., & Jalava, J. V. (2017). A comprehensive neuroimaging review of PCL-R defined Psychopathy. *Aggression and Violent Behavior*, 36, 60-75.
- Haederle, M. (2017). A mind of crime: How brain scanning technology is redefining criminal culpability. *Pacific Standard*. Retrieved from: <https://psmag.com/social-justice/a-mind-of-crime-8440>.
- Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. Pantheon Books.
- Hare, R. D. (1999). *Without Conscience: the disturbing world of psychopaths among us*. Guilford Press.
- Hare, R. D., Neumann, C. S., & Mokros, A. (2018). The PCL-R assessment of psychopathy: Development, properties, debates, and new directions. In C. J. Patrick (Ed.), *Handbook of psychopathy* (pp. 39-79). The Guilford Press.
- Hughes, V. (2010). Head case. *Nature*, 464(18), 340-342.
- Jalava, J.V., & Griffiths, S. Y. (2017). Philosophers on Psychopaths: A cautionary tale in interdisciplinarity. *Philosophy, Psychiatry, & Psychology*, 24(1), 1-12.
- Jalava, J.V. & Griffiths, S. Y. (2022). Psychopathy: Neurohype and Its Consequences. In L. Malatesti, J. McMillan & P. Šustar (Eds.), *Psychopathy: Its Uses, Validity and Status* (pp. 79-98). Springer.
- Jalava, J.V., Maraun, M., & Griffiths, S. Y. (2015). *The myth of the born criminal: psychopathy, neurobiology, and the creation of the modern degenerate*. University of Toronto Press.
- Jalava, J. V., Griffiths, S. Y., Larsen, R. R., & Scott, B. E. (2021). Is the psychopathic brain an artifact of coding bias? A systematic review. *Frontiers in psychology*, 12, 1-15.
- Jurjako, M., & Malatesti, L. (2018). Neuropsychology and the criminal responsibility of psychopaths: Reconsidering the evidence. *Erkenntnis*, 83(5), 1003-1025.
- Kelly, D., Stich, S., Haley, K. J., Eng, S. J., & Fessler, D. M. T. (2007). Harm, Affect, and the Moral/Conventional Distinction. *Mind and Language*, 22(2), 117-131. 10.1111/j.1468-0017.2007.00302.x.
- Kennett, J. (2010). Reason, emotion, and moral judgment in the psychopath. In L. Malatesi & J. McMillan (Eds.), *Responsibility and psychopathy: Interfacing law, psychiatry, and philosophy* (pp. 243-259). Oxford University Press.

- Kiehl K. A. (2006). A cognitive neuroscience perspective on psychopathy: Evidence for paralimbic system dysfunction. *Psychiatry research*, *142*(2-3), 107–128. <https://doi.org/10.1016/j.psychres.2005.09.013>
- Kiehl, K. A. (2015). *The Psychopath whisperer: The science of those without conscience*. Crown.
- Kohlberg, L., & Hersh, R. (1977). Moral development: A review of the theory. *Theory into Practice*, *16*(2), 53–59. <https://doi.org/10.1080/00405847709542675>
- Kumar, V. (2015). Moral judgment as a natural kind. *Philosophical Studies*, *172*(11), 2887–2910. <https://doi.org/10.1007/s11098-015-0448-7>
- Kumar, V. (2016). Psychopathy and internalism. *Canadian Journal of Philosophy*, *46*(3), 318–345. <https://doi.org/10.1080/00455091.2016.1165571>
- Kumar, V. & Campbell, R. 2022. *A better ape: The evolution of the moral mind and how it made us human*. Oxford University Press.
- Larsen, R. R., Jalava, J., & Griffiths, S. (2020). Are Psychopathy Checklist (PCL) psychopaths dangerous, untreatable, and without conscience? A systematic review of the empirical evidence. *Psychology, Public Policy, and Law*, *26*(3), 297–311. <https://doi.org/10.1037/law0000239>
- Levy, N. (2010). Psychopathy, responsibility and the moral/conventional distinction. In L. Malatesi & J. McMillan (Eds.), *Responsibility and psychopathy: Interfacing law, psychiatry, and philosophy* (pp. 213-226). Oxford University Press.
- Lilienfeld, S. (2021). Afterword: Key unresolved questions. In P. B. Marques, M. Paulino, & L. Alho (Eds.), *Psychopathy and criminal behavior: Current trends and challenges* (pp. 483-489). Academic Press.
- Maibom, H. (2005). Moral unreason: The case of psychopathy. *Mind and Language*, *20*, 237-257.
- Malatesi, L., & McMillan, J. (2010). Conclusions: Psychopathy and responsibility, a rejoinder. In L. Malatesi & J. McMillan (Eds.), *Responsibility and Psychopathy: Interfacing law, psychiatry, and philosophy*. Oxford University Press.
- Margoni, F. & Surian, L. 2021. Question framing effects and the processing of the moral-conventional distinction. *Philosophical Psychology*, *34*, 76-101. DOI: 10.1080/09515089.2020.1845311
- Marshall J., Watts, A. & Lilienfeld, S. (2018). Do psychopathic individuals possess a misaligned moral compass? A meta-analytic examination of psychopathy's relations with moral judgment. *Personality Disorders*, *9*(1), 40-50. DOI: 10.1037/per0000226.

- Morse, S. (2006). Brain Overclaim Syndrome and Criminal Responsibility: A Diagnostic Note. *Faculty Scholarship at Penn Law*, 117. https://scholarship.law.upenn.edu/faculty_scholarship/117
- Morse, S. (2008). Psychopathy and criminal responsibility. *Neuroethics*, 1, 205-212.
- Morse, S. (2019). Neurohype and the Law: A Cautionary Tale. *Faculty Scholarship at Penn Carey Law*. https://scholarship.law.upenn.edu/faculty_scholarship/2006.
- Nentjes, L., Garofalo, C., & Kosson, D. S. (2022). Emotional functioning in psychopathy: A critical review and integration with general emotion theories. In P. B. Marques, M. Paulino, & L. Alho (Eds.), *Psychopathy and Criminal Behavior* (pp. 75-103). Academic Press. <https://doi.org/10.1016/B978-0-12-811419-3.00006-6>.
- Nucci, L., & Turiel, E. (1978). Social interactions and the development of social concepts in preschool children. *Child Development*, 49(2), 400–407. <https://doi.org/10.2307/1128704>
- Poepl, T. B., Donges, M. R., Mokros, A., Rupprecht, R., Fox, P. T., Laird, A. R., Bzdok, D., Langguth, B., & Eickhoff, S. B. (2019). A view behind the mask of sanity: meta-analysis of aberrant brain activity in psychopaths. *Molecular psychiatry*, 24(3), 463–470. <https://doi.org/10.1038/s41380-018-0122-5>
- Raine, A. (2002). Annotation: the role of prefrontal deficits, low autonomic arousal, and early health factors in the development of antisocial and aggressive behavior in children. *Journal Child Psychology Psychiatry*, 43(4), 417-34. DOI: 10.1111/1469-7610.00034. PMID: 12030589.
- Raine, A., Lencz, T., Taylor, K., Hellige, J. B., Bihrlle, S., Lacasse, L., Lee, M., Ishikawa, S., & Colletti, P. (2003). Corpus callosum abnormalities in psychopathic antisocial individuals. *Archives of general psychiatry*, 60(11), 1134–1142. <https://doi.org/10.1001/archpsyc.60.11.1134>
- Rush, B. (1830). *Medical inquiries and observations upon the diseases of the mind*. Philadelphia: Grigg. <http://resource.nlm.nih.gov/66551140R>
- Sackris, D. C. (2021). Famine, affluence, and amorality. *European Journal of Analytic Philosophy*, 17, 5-29.
- Sackris, D. C. & Larsen, R. R. (2022). The disunity of moral judgment: Evidence and implications. *Philosophical Psychology*. DOI: 10.1080/09515089.2022.2056437
- Schramme, T. (2014). Being a (a-)moral person and caring about morality. In T. Schramme (Ed.), *Being amoral: Psychopathy and moral incapacity* (pp. 227-244). Cambridge: MIT Press.
- Schwarz, N. (2012). Feeling-as-information theory. In P. A. M. Van Lange, A. W. Kruglanski & E. T. Higgins (Eds.), *Handbook of Theories of Social Psychology: Volume 1* (pp. 289-308). Sage Publications.

- Seara-Cardoso, A., Vasconcelos, M., Sampaio, A., & Neumann, C. S. (2022). Neural correlates of psychopathy: A comprehensive review. In P. B. Marques, M. Paulino, L. Alho (Eds.), *Psychopathy and Criminal Behavior* (pp. 43-73). Academic Press.
- Sinnott-Armstrong, W. & Wheatley, T. (2014). Are moral judgments unified? *Philosophical Psychology*, 27(4), 451–474. <https://doi.org/10.1080/09515089.2012.736075>.
- Sinnott-Armstrong, W., & Wheatley, T. (2012). The disunity of moral judgment and why it matters in philosophy. *The Monist*, 95(3), 355–377. <https://doi.org/10.5840/monist201295319>
- Smetana, J. (1981). Preschool age children’s conceptions of moral and social rules. *Child Development*, 52, 1333-1336.
- Stich, S. (2006). Is morality an elegant machine or a kludge? *Journal of Cognition and Culture*, 6(1-2), 181–189. <https://doi.org/10.1163/156853706776931349>
- Storbeck, J. & Clore, G. (2008). Affective arousal as information. *Social and Personality Psychology Compass*, 2/5, 1824-1843.
- Turiel, E. (1983). *The development of social knowledge: Morality and convention*. Cambridge: Cambridge University Press.
- Young, L., & Dungan, J. (2012). Where in the brain is morality? Everywhere and maybe nowhere. *Social Neuroscience*, 7(1), 1–10. <https://doi.org/10.1080/17470919.2011.569146>