Brief Reports

What to Do With the Psychopaths? Treatment Successes and Failures

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The popular opinion about the treatment of psychopathy is that it is not very promising. The personality traits that define the psychopath seem to be not compatible with traditional psychotherapy. This article reviews outcome studies on the treatment of psychopaths to answer the question whether treatment of psychopaths has positive outcomes. This article also emphasizes the role of brain abnormalities in psychopaths that may lead to the conclusion that social deficits of psychopaths are a cause of brain damage and therefore not treatable at all. It appears that treatment is not at all useless for psychopaths. Rather, there has to be made more effort to tailor traditional treatment methods to the characteristics and needs of psychopaths. It also appears that treatment for adolescent psychopaths is more promising than that of adult psychopaths. Further it seems that the 'dose' of treatment determines the outcome: More treatment than 'treatment as usual' is needed to reduce violent recidivism in psychopaths.

Keywords: psychopath, traditional treatment, violent recidivism

Pendapat yang populer tentang perawatan/pengobatan psikopati adalah bahwa hal tersebut tidak banyak menjanjikan. Sifat-sifat kepribadian yang menggambarkan psikopat tampaknya tidak sesuai dengan psikoterapi tradisional. Artikel ini mereview hasil studi perawatan psikopat untuk menjawab pertanyaan apakah pengobatan psikopat memberi hasil yang positif. Artikel ini juga menekankan peran abnormalitas otak pada psikopat yang mungkin membawa pada simpulan bahwa defisit sosial para psikopat menjadi penyebab kerusakan otak dan karenanya tak mungkin diobati. Tampaknya perawatan tidak sama sekali tak berguna bagi para psikopat. Sesungguhnya, perlu lebih diupayakan mengemas metode perawatan tradisional sesuai kebutuhan para psikopat masing-masing. Tampak juga bahwa perawatan psikopat remaja lebih menjanjikan daripada psikopat dewasa. Selanjutnya tampak bahwa "dosis" pengobatan menentukan hasilnya. Lebih banyak pengobatan daripada "perawatan seperti biasanya" diperlukan untuk mengurangi kekambuhan yang ganas pada psikopat.

Kata kunci: psikopat, pengobatan tradisional, kekambuhan ganas

We probably all know psychopaths from movies. The bad guy with a grandiose sense of self-worth and a superficial charm who is neither afraid of the police nor impressed by the suffering of his victims – that is usually the psychopath. Unfortunately, psychopaths are not a creation of Hollywood but also exist in real life. The typical psychopathic personality is remorseless, callous, deceitful, and egocentric, fails to form close emotional attachments, shows low anxiety, has a superficial charm, and exhibits an externalization of blame (Lilienfeld, 1998). Yang, Colletti, Raine, Toga, & Narr (2010) also made a distinction between 'successful' psychopaths and 'unsuccessful' psychopaths. Successful psychopaths are those who are able to avoid criminal convictions, the unsuccessful psychopath is usually not able to do so. Many psychopaths end up in prison or dead. Many - but not all of them. Some of them even become successful leaders or businessmen (Cleckley, 1941). Thus one (successful) psychopath might be your boss - maybe you already guessed so - another (the unsuccessful psychopath) might be a dangerous murderer in a maximum-security prison. The first one will probably not attract attention and never be diagnosed as a psychopath and therefore is also not likely to seek treatment. The latter - the unsuccessful

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psychopath - if caught by the police, will probably well get a diagnosis as a psychopath but no treatment at all.

To treat psychopaths is very difficult. Not only that the treatment seems to be unsuccessful in most cases, it is also an ethical question why to treat them at all. Why should we treat dangerous people like psychopaths, who are often murderers, rapists etc, and why do we not just lock them away? Since there is a biological basis of psychopathy it appears that it is untreatably anyway. But that is not the best argument. First, there are other biologically based disorders which are also difficult to treat (e.g. depression, ADHD) and second, there is evidence that even psychopaths can benefit from treatment (Salekin, Worley, & Grimes, 2010). Nevertheless a clinician should be patient and hopeful when treating a psychopath. To form a trustworthy therapist-client relationship can be quite hard regarding the psychopaths' manipulativeness, suspicion, lack of trust in others and his or her pathological lying in order to get what he/she wants. Traditional cognitive therapy is aimed to change dysfunctional schemas and thoughts and requires the patient's insight into his/her problematic behavior and the wish to change this. But the psychopath often does not see the need to change and does not see that there is something wrong with him/her (Davey, 2008). Another problem is the comorbidity with other mental disorders (e.g. depression, anxiety, etc.) which further complicates the treatment (Davey).

Finally another issue regarding the treatment of psychopaths is that most of them are in prison. The prison is not the 'natural environment' of the patient and may foster antisocial behavior to 'survive' in the prison world (Davey, 2008). This might also be the reason why results of treatment outcome studies are mixed or rather mainly conclude an 'untreatability' of psychopaths, because most studies with psychopaths are conducted in prisons. Another limitation of previous research about the treatment of psychopaths is that it does not emphasize the kind of treatment but only the effect of the treatment. Outcome variable is usually recidivism. But what about other improvements that may be the result of treatment, besides recidivism, like job performance, interpersonal relationships, increased involvement in sports and hobbies, and other factors which are key indicators of life successes (Salekin et al., 2010)? However, psychotherapy of psychopaths typically focuses on teaching the patient to control his anger and impulsive behavior by recognizing the circumstances in which anger and impulsive behavior usually arises and to develop alternative coping strategies. Some therapies also concentrate on teaching empathy

(Nolen-Hoeksema, 2008). The most effective treatment of psychopaths appears to be individual psychotherapy in combination with group therapy, especially with the presence of family members (Salekin et al., 2010). Medication against antisocial behavior does not exist yet, but medication like lithium and atypical antipsychotics are used to control impulsive and aggressive behaviors in people with APD, with mixed results (Nolen-Hoeksema).

The present article aims to find out whether the treatment of psychopaths is worthwhile and if yes, which treatment can be successful. Since psychopaths seem to be a burden on society it is important to find out how to 'tame' them. The first section of this paper will explain the diagnosis of the disorder and the differences between psychopathy and antisocial personality disorder. In the second section theories of the causes of psychopathy/APD will be discussed. The third section will shed a light on the neuropsychology of a psychopath. Finally research studies about the treatment successes and failures will be discussed in the fourth section.

Psychopath or Antisocial Personality?

There has to be made a distinction between the diagnosis of APD (antisocial personality disorder) and the diagnosis of psychopathy. The DSM-IV does not include 'psychopathy' as a personality disorder. It describes the antisocial personality disorder as disregarding and violating rights of others as indicated by three or more of the following behavioral patterns: Failure to conform to social norms, deceitfulness and lying, using others for personal profit or pleasure, irritability and aggressiveness, reckless disregard for the safety of themselves and others, irresponsibility and lack of remorse. Further the DSM-IV points out that these behavioral patterns have also been referred to as psychopathy, sociopathy or dyssocial personality disorder. In contrast to APD, psychopathy refers to character traits - rather than behavioral patterns typically assessed with Hart et al.'s PCL:SV for criminal and noncriminal settings (Hart, Cox, & Hare, 1995). The PCL:SV consists of 12 items. Six items assess interpersonal and affective traits which include superficiality, grandiosity, deceitfulness, lack of remorse, lack of empathy and not accepting responsibility. The other six items assess antisocial behavior and includes impulsivity, poor behavioral control, lack of goals, irresponsibility, adolescent antisocial behavior and adult antisocial behavior. A PCL:SV score of 12 or less indicates nonpsychopathy, scores of 13-17 indicate potential psychopathy, and scores of 18 or more suggest psychopathy (Skeem, Monahan, & Mulvey, 2002). To be diagnosed with APD, the individual must be at least 18 years old and have had a history of some symptoms of conduct disorder. Typical behaviors concerning conduct disorder are aggression towards people and animals, destruction of property, deceitfulness or theft, or serious violation of rules (DSM-IV). The prevalence of APD in community samples is about 3% in males and about 1% in females (DSM IV).

Aetiology

To be able to treat a disorder it is important to know the causes of it. There are several theories about causes and risk factors of APD/psychopathy. A strong genetic and neurospychological basis may raise pessimism in treating the disorder. But not only nature, also nurture plays a role in the development of antisocial behavior.

One risk factor and also one of the best predictors of APD is childhood conduct disorder. Other good predictors for APD are early fighting and hyperactivity, low IQ and low self-esteem (Davey, 2008). Another theory is that developmental factors lead to the development of APD. That is, antisocial behavior might be learned through modeling and imitation. There is also evidence that individuals with APD have a background of family violence, poverty and conflict. The parents' failure to be consistent in disciplining and a failure in teaching empathy and responsibility to their children may also lead to the development of APD (Davey). Twin and adoption studies further strongly support a genetic cause of APD. It is evident that APD runs in families (Davey). Cognitive theories of APD argue that individuals with APD have developed dysfunctional cognitive schemas as a result of abuse and neglect experienced during childhood. These schemas may be the cause of their extreme, impulsive and changeable reactions to various situations (Davey). There is also strong support for physiological and neurological factors that may explain the behavioral pattern shown in individuals with APD. Further information here over will be given in the next section.

Neuropsychology of a Psychopath

Some symptoms present in psychopathy can be associated with functional abnormalities in specific brain areas. FMRI studies with patients with APD have found inactivity in the brain circuits known to mediate fear learning (limbic-prefrontal circuit). Furthermore, the impairment to inhibit impulsive responses in psychopathic individuals has been linked to abnormalities in the prefrontal cortex (Davey, 2008).

Blair (2008) examined the role of the amydala and the ventromedial prefrontal cortex (vmPFC) in psychopathic individuals. The amygdala plays an important role in initiating stimulus-reinforcement associations. The transmission of stimulusinformation from the reinforcement basolateral amygdala to the vmPFC is crucial for making an appropriate decision about an action. This function seems to be impaired in psychopaths. That may be the reason why some psychopaths keep being involved in criminal acts even though they have been punished for those before. fMRI data also revealed that psychopaths have reduced autonomic reactions in response to instructed fear. Their lack of fear makes them more prone to get involved in criminal acts. The reduced activity of the amgydala may also account for the lack of empathy and dysfunctional empathy-based learning in psychopaths (Blair). The vmPFC plays a role in emotional regulation and - as mentioned above - in encoding reinforcement outcome information from the amygdala, to make a decision about an action. The functional connection between amygdala and vmPFC seems to be impaired in some psychopaths. Stimulusreinforcement learning is important for socialization that will say to learn which actions can have negative consequences and to inhibit those actions that were punished before. The impairment in decision making due to abnormalities in the PFC may lead to the psychopath's disordered lifestyle. Further, the psychopath's negative decisions may lead to negative outcomes leading to frustration which in turn may have reactive aggression as a consequence, typical for psychopaths (Blair).

However, functional abnormalities in psychopath's brains are not observed in all psychopaths. Yang et al. (2010) therefore conducted a study and divided the psychopaths into two groups: 'successful' and 'unsuccessful' psychopaths. To the 'successful' psychopath group belong those that avoid criminal convictions. The 'unsuccessful' psychopaths are those that fail to do so. Indeed Yang et al. discovered structural differences in the brains of 'successful' vs. 'unsuccessful' psychopaths. In the brain imaging results of 'successful' psychopaths only abnormalities in the amygdala were found. The amygdala deficits may be the cause of their impaired fear conditioning and poor

facial emotion recognition. These deficits may lead to problems with social judgment and moral decisionmaking and may be the cause of the shallow effect and lack of remorse seen in psychopaths. In contrast, 'unsuccessful' psychopaths show more than an amygdala abnormality. In these, a hippocampal asymmetry was found which leads to the disruption of hippocampal-prefrontal circuitry. Also a reduction in grey matter in the PFC was found. The PFC abnormalities may be the cause why the psychopath is less sensitive to environmental cues which signal danger and capture. But this is only the case for 'unsuccessful' psychopaths, which explains why those, in contrast to their successful counterparts, usually keep showing risky behavior and cannot avoid criminal convictions (Yang et al.). Lesion studies support the findings of Yang et al. Damage to the OFC and DLPFC has been shown to lead to a disturbed personality and increased antisocial behavior (Yang et al.).

Treatment Successes and Failures

In a famous outcome treatment study on psychopathy, Harris, Rice, and Cormier (1991, 1994; Rice, Harris, & Cormier, 1992) concluded that treatment would make psychopaths worse. In their study they evaluated a Therapeutic Community (TC) at a forensic hospital in Penetanguishene, Ontario. The TC was aimed to develop empathy and responsibility in psychopaths. The program lasted two years, and 176 men participated. The result was that 87% of the treated psychopaths were more likely to recidivate violently after the treatment. In contrast, treated non-psychopaths were less likely to recidivate generally and violently. Unfortunately, this study is often used to emphasize that therapy is useless for psychopaths or rather makes the psychopaths worse. But the study by Rice et al. has many limitations. For example: was it not allowed for the subjects to drop out of treatment. Further was the 'treatment' highly questionable (e.g. administration of drugs like LSD to make them more accessible for treatment) (Harris et al., 1994). Salekin et al. (2010) reviewed 16 studies with respect to treatment success of psychopaths and found different results. The resume of this study was that three of eight studies with adult psychopaths showed low to moderate treatment effects, but six of eight studies with young psychopaths showed significant treatment benefits. With regard to the adult psychopath studies one study found that psychopathic offenders which showed the most improvement after treatment were more likely to re-offend than other participants (Seto & Barbaree,

1999). Another study also reported increased offending after treatment (Hobson, Shine, & Roberts, 2000).

In contrast, the results of the study of Skeem et al. (2002) suggested that treatment was effective for psychopaths in that a reduction of violence was observed. In contrast to other studies, Skeem's subjects were not in prison but psychiatric patients with psychopathic traits. Skeem et al. aimed to find out whether psychopathy moderates the effect of treatment on subsequent violence and, whether the effect depends on the 'dose' of the treatment. Therefore she tested 871 civil psychiatric patients. Based on an assessment of the degree of psychopathy in the patients, she divided them into two groups: 195 'potentially psychopathic' (PPP) and 72 'psychopathic' patients (PSY). The results showed that only 6% of PPP patients (potentially psychopathic) were violent during the 10 weeks after seven or more treatment sessions. In contrast, 23% of PPP patients who received less treatment (six or fewer sessions) were violent subsequently. Concerning the PSY patients (psychopathic cases), 8% of these were violent during the 10 subsequent weeks (after a seven or more treatment sessions) and 24% of PSY patients (with less than six sessions) showed acts of violence. Thus it appears that the 'dose' of treatment is the key to treatment success in psychopaths. Further Skeem et al. found out that PPP patients who received little treatment were not less likely to be violent during the follow-up than patients who received no treatment. Thus it seems that 'little' treatment is like no treatment for psychopathic patients. Regarding the second hypothesis whether psychopathy moderates the effect of treatment on subsequent violence, the results indicated that this was not the case. The results of this study are inconsistent with previous research and rise hope for the development of better treatment methods for psychopaths (Skeem et al., 2002).

Method

Article Search

The present article aimed to find out whether the treatment of psychopaths is worthwhile and if yes, which treatment can be successful. To answer these questions, an article search was done using the following databases: Psychological and Behavioral Sciences Collection (EBSCO), PsycARTICLES (EBSCO), PsycINFO (EBSCO), PubMed, and Google Scholar. Key terms primarily used in this article search were: psychopathy, antisocial personality disorder,

causes of psychopathy, brain abnormalities of psychopaths, treatment of psychopathy.

Results and Discussion

The purpose of the present study was to find out whether psychopathic individuals can be treated. The dominant opinion here over is that this is not the case. This is supported by many treatment outcome studies with psychopaths. For example, Harris, Rice, and Cormier (1991, 1994; Rice, Harris, & Cormier, 1992) concluded that treatment would make psychopaths more likely to recidivate violently afterwards. However, this study has too many limitations to be worth supporting the argument that psychopaths could not benefit from treatment. In their reviewed treatment outcome studies with psychopaths, Salekin et al. (2010) found mixed results. Even though many studies supported the view that treatment would have no positive effect on violent recidivism, it was not the case for all of them. In fact, three of eight studies with adult psychopaths and six of eight studies with adolescent psychopaths showed that psychopaths could benefit from treatment. Further, the study of Skeem at al. (2002) revealed, that the dosage of treatment was crucial for the success of the treatment. Skeem et al. concluded that 'some' treatment had a similar effect as no treatment and that the amount of treatment sessions was positively associated with treatment successes. When evaluating the studies about the treatment of psychopaths it is also worth thinking about the findings of Yang et al. (2010). They distinguished 'successful' from 'unsuccessful' psychopaths, evidenced by brain differences between those two types of psychopaths. The 'successful' psychopath shows abnormalities in the amygdala, but not in the PFC, in contrast to the 'unsuccessful' psychopath who appears to have dysfunctions in the amygdala and the PFC. So, the 'unsuccessful' psychopath might – among others due to abnormalities in the connection between amvgdala and PFC - not be able to avoid criminal conviction and therefore often ends up in prison (Yang et al., 2010). Since most treatment studies for psychopaths are conducted in forensic settings, the question is whether one can generalize from this study to all psychopaths. Are those subjects in prison not only the 'unsuccessful' psychopaths?

There are several limitations concerning the present literature review. First, there is more research and literature available for the treatment of antisocial personality disorder, but not for psychopathy. Even though psychopathy includes antisocial behavior, APD is not equal to psychopathy. Second, there is not much literature available about the kind of treatment used for psychopaths, it is mainly about the question whether treatment – whatever that may be - is successful or not for psychopaths. The same applies to pharmacological treatment of psychopaths. All in all it seems that psychopathy and its treatment needs much more research. Another limitation is that almost all studies about psychopathy have male subjects. Even though psychopathy is more common in males, there exist also female psychopaths. So it is questionable whether studies about male psychopaths can be generalized to all (also female) psychopaths. It would be interesting to know more about female psychopathy, its treatment and associated brain abnormalities. Maybe the brain dysfunctions are similar to those of 'successful' psychopaths which would explain why the prevalence for female psychopathy is much smaller than that for male psychopathy. It may be that female psychopaths also do not have the impulsivity and aggressiveness of 'unsuccessful' psychopaths which makes them less prone to criminal conviction.

Another question that could raise interest is what a 'successful' psychopath is. According to Yang et al. (2010) the 'successful' psychopath is someone who does not have problems with impulse control or aggression compared to the 'unsuccessful' psychopath. Rather, he or she has only problems with empathy or one can say with the 'theory of mind'. Thus is a successful psychopath comparable with someone with an autistic spectrum disorder? One thing should be clear: a 'successful' psychopath is still a psychopath. So the question is whether this kind of psychopath can be as dangerous for society as the 'unsuccessful' psychopath. Of course it is difficult to conduct research about 'successful' psychopaths since there is the problem of approaching those. The 'successful' psychopaths are probably not in prison and whether they are in a treatment program for their 'problems' is also questionable. It appears that much more research about the distinction between 'successful' and 'unsuccessful' psychopaths is needed.

References

Blair, R. J. R. (2008). The amygdala and ventromedial prefrontal cortex: functional contributions and dysfunction in psychopathy. *Philosophical Transactions of the Royal Society B: Biological Sciences, 363*, 2557-2565.

- Cleckley. H. (1941). *The mask of sanity*. Oxford, England: Mosby.
- Davey, G. (2008). *Psychopathology*. Oxford: The British Psychological Society and Blackwell Publishing Ltd.
- Harris, G., Rice, M., & Cormier, C. (1991). Psychopathy and violent recidivism. *Law and Human Behavior*, *15*, 625-637.
- Harris, G., Rice, M., & Cormier, C. (1994). Psychopaths: Is a therapeutic community therapeutic? *Therapeutic Communities*, 15, 283-299.
- Hart, S., Cox, D., & Hare, R. (1995). *Manual for the psychopathy checklist: Screening version (PCL:SV)*. Toronto: Multi-Health Systems.
- Hobson, J., Shine, J., & Roberts, R. (2000). How do psychopaths behave in a prison therapeutic community? *Psychology, Crime, and the Law, 6*, 139-154.
- Lilienfeld, S. (1998). Methodological advances and developments in the assessment of psychopathy. *Behaviour Research and Therapy, 36,* 99-125.

- Nolen-Hoeksema, S. (2008). Abnormal psychology. New York: McGraw-Hill.
- Rice, M., Harris, G., & Cormier, C. (1992). An evaluation of a maximum security therapeutic community for psychopaths and other mentally disordered offenders. *Law and Human Behavior*, 16, 399-412.
- Salekin, R.T., Worley, C., Grimes, R.D. (2010). Treatment of psychopathy: A review and brief introduction to the mental model approach for psychopathy. *Behavioral Sciences and the Law*, 28, 235-266.
- Seto, M., & Barbaree, H. (1999). Psychopathy, treatment behavior, and sex offender recidivism. *Journal of Interpersonal Violence, 14*, 1235-1248.
- Skeem, J.L., Monahan, J., & Mulvey, E.P. (2002). Psychopathy, treatment involvement, and subsequent violence among civil psychiatric patients. *Law and Human Behavior*, 26, 577-603.
- Yang, Y., Colletti, P., Raine, A., Toga, W., & Narr, K. L. (2010). Morphological alterations in the prefrontal cortex and the amygdala in unsuccessful psychopaths. *Journal of Abnormal Psychology*, 119, 546-554.