

# ***A Review of The Relationships Between Psychopathy and Facets of Personality Under The Five Factor Model (FFM)***

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**Abstract:** In general personality structure models, the Five Factor Model (FFM) is the primary model which is of the most widely adopted and very well-studied theoretic model of personality. The article argues that the FFM can be use in the understanding of psychopathy and apply in assessing psychopathy by it's facets. Researchers have studied that psychopathy traits are paralleled to specific domains of FFM. We raise some related researches as examples to represent the way FFM in assessing psychopathy traits then go deep into five facets of the FFM and specific domains in facets. The utility of FFM in psychopathy study is available for understanding the complicated personality of psychopaths and it renders analysis of the similarity between psychopathy and other personality disorders.

**Keywords:** Five Factor Model (FFM), Psychopathy, Facets of Personality

## **1. Introduction**

Psychopathy is a neuropsychiatric disorder characterized by lack of affective empathy, high rates of thrill seeking, tendencies toward proactive aggression, severely aggressive and antisocial behavior. Personality is a relatively stable trait of a person which can reveal traits of psychopathy [1]. Likewise, it can be an important predictor of psychopathy. Researchers based on the Big Five Personality, conceptualized and applied it in the assessment of psychology [2]. The Five Factor Model (FFM) is of the most widely adopted and very well-studied theoretic model of personality. It includes the five broad domains of Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. The FFM is aligned with the Big Five, the lexical model of personality structure. This article argues that the Five-Factor Model of personality (FFM) can be use in the understanding of psychopathy and apply in assessing psychopathy by it's facets.

## **2. Five Factor Model (FFM) of Personality and Psychopathy**

Psychologist suggested that the FFM can be a compelling tool to clarify underlying personality of psychopaths.

Lynam and Widiger provided the FFM to describe the traits of psychopaths [3]. Basing on FFM, they combined the PPI and HSRP and expert ratings to embedded the psychopathy within the framework of a broad model of general personality functioning. They translated PCL-R into FFM

language which is comprised of central characteristics of psychopathy -- high interpersonal antagonism, pan-impulsivity, the lack of negative self-directed affect, angry hostility, and interpersonal assertiveness. They suggested that the FFM is more effective to explain the diversity of psychopaths (e.g., the understanding of successful psychopathy). Using FFM to construct the structure can recognize and understand the core features of psychopathy without relying on a single specific method. In this way, it can promote the procession in both theory and assessment in understanding psychopathy.

Miller, Lyman, Widiger, Leukefeld examined psychopathy can be represented by using the FFM [4]. The assessment was designed to examine personality traits that were highly associated with psychopathy by developing an expert-based prototypic FFM description of psychopathy. They assessed the correlation of five domains and thirty facet scores of the NEO-PI-R with the PRI then analyzed the relations that in the view of the level of similarity between psychopathy and the FFM-based prototype. Their result showed that both FFM descriptions emphasized the same presence of facets which were low and high traits from Neuroticism and Extraversion, low traits from and Agreeableness and Conscientiousness.

They also found that the FFM understanding of psychopathy can clarify the factor structure of the PCL-R: Factor 1 elements were mostly related to low Agreeableness and Neuroticism, while Factor 2 elements were related to low Agreeableness and Conscientiousness, and high Neuroticism. The study demonstrated the FFM conceptualization can clearly represent the comprehending of the relations between psychopathy and other personality disorders, which gave a precisely description of the personality structure. This provided methods to demonstrate the level of resemblance between an individual's personality and a particular personality disorder prototype.

Nowadays, different researchers are doing further study of psychopathy traits which linked to different facets of the FFM.

### 3. Neuroticism and Psychopathy

Neuroticism can be described as emotional instability. The facet of Neuroticism has six domains including anxiety, angry hostility, depression, self-consciousness, impulsiveness and vulnerability. The aspects of neuroticism describe the psychopath to be more emotional, more passion to crime. In 6 domains, the traits of psychopath is low and high in Neuroticism which in the assessment of the FFM is low in anxiety, self-consciousness, depression, vulnerability whereas high in angry hostility and impulsiveness.

Study has showed that low fear conditioning that psychopathic individuals were impaired in their fearful vocal affect recognition may closely relevant to the broader dimension of Neuroticism. As this dimension mainly measures emotional stability and adaptability, it shows that psychopathic individuals are prone to having lower levels of neuroticism and featured with a lack of depression, anxiety, fear, and vulnerability to stress. The psychopathy deficit in anxiety of fear [5], which had been proven by startle experiments. Patrick sorted participants into 3 groups: psychopathic, nonpsychopathic, and "mixed" subjects (defined by PCL-R scores) [6]. The participants were asked to view photographic slides depicting pleasant, neutral, and unpleasant scenes. According to their startle reactions, it showed that when viewing unpleasant scenes, psychopaths showed deviant startle excitation, they were deficient in emotion modulated startle. Patrick demonstrated that psychopaths exhibit a deficit in startle reflex potentiation which can explain as the anxiety or fear when facing aversive stimuli.

Widiger suggested that from the FFM facets aspects, borderline personality personality disorder (BPD) can be explained as a facets of Neuroticism [7]. It includes traits associated with the Neuroticism such as fragility, dysregulation in affection and behavior, self-disturbance, depression, and uncertainty of anxiety.

#### 4. Openness to Experience and Psychopathy

Openness to experience refers to intellectual curiosity, aesthetic sensitivity, free values and the tendency to emotional differences [8]. Empirical openness is the broadest of the five basic factors that constitute the five-factor model (FFM), covering a wide range of relevant characteristics. Individuals with high openness tend to be open-minded and willing to try new things. Individuals with a high degree of openness can easily adapt to changes in a group and seek alternative solutions to problems. Lynam found that openness to experience predicted unique criteria for trust among teammates in personality and individual differences variables in a five-person team airport simulation task [9]. However, some researchers found no relationship between openness and perceived trustworthiness, trust intention or trust behavior. As a result, research on openness and trust has yielded mixed results. Another characteristic of open cognitive style is the use of symbols and abstract thinking, away from concrete experience. Depending on the individual's specific intellectual abilities, this symbolic cognition may take the form of mathematical, logical or geometric thinking, artistic and metaphorical use of language, musical composition or performance. People who score low on openness to experience tend to have narrow common interests. They prefer things that are simple, direct and obvious to things that are complex, vague and subtle.

Among DSM-IV personality disorders, there is no personality disorder that is uniquely associated with openness. But after careful consideration of diagnostic criteria, openness was found to be associated with several psychological personality disorders. Restrictive effects in schizophrenia, narcissistic dilatative fantasies, and behavioral rigidity in obsessive-compulsive disorder are important clinical characteristics associated with openness. In reconceptualization of personality disorders, each disorder has a specific psychological internal structure [10]. Openness is a major determinant of mental structure. It is worth considering that there may be unidentified DSM-IV personality disorders that represent open forms of pathology. Some people are so stubbornly wedded to tradition, unwilling to make any changes, that they cannot adapt to the inevitable social changes. When this closure is combined with quite less acceptableness, antisocial traits emerge. Obvious traits of openness (especially in the absence of considerable high levels of intelligence and conscientiousness) may also results personality disorders. These people may get trapped in every new idea or belief very easily and they are unable to form a complete life style.

#### 5. Extraversion and Psychopathy

Matzler performed an analysis of extroversion and its relevance to different psychopathologies [11]. They found that extraversion is associated with histrionic personality disorder in a positive way. In one earlier study, the correlation was not significant, about 0.09, but in the three newer studies, the correlation between extraversion and narcissism ranged from 0.31 to 0.40. Moreover, they found a negative association between extraversion and avoidant and schizoid personality disorder. The meta-analysis also focus on many sub-aspects of extraversion and its association with different psychopathologies. Histrionic personality disorder was most associated with extroversion of sociability. Avoidant personality disorder and schizoid personality disorder were most negatively correlated with warmth, agreeableness and positive aspects. Avoidant personality disorder has an additional negative association with self-confidence [11].

A 2019 study of 437 participants found that exaggerated narcissism was associated with extraversion, confidence, and warmth, while vulnerable narcissism was negatively associated with extraversion, confidence, and warmth [12]. Vulnerable narcissists are narcissists with low self-esteem, low extraversion, lack of confidence, and lack of dominance. In contrast, narcissists with high self-esteem are more confident and extroverted people. The researchers' attitude toward these people was sometimes to make them believe that helping the most people would help them achieve their goals.

They try to help patients shift from just meeting their own needs to seeing the more people you help, so they will get the most satisfaction, but this takes time [12].

Patients with extraverted personality disorder may suffer from long-term relationship exhaustion. This includes suspicion of infidelity due to the constant pursuit of external social efforts, leading to friction in their relationship. It is considered that the frequent comorbidities of substance use disorders due to thrill seeking and risk-taking behavior. Their social tendencies may reinforce their substance use in their daily lives. It is important to distinguish these patients from bipolar disorder in the face of maladaptive high extraversion. The patient's insane energy, thrill-seeking, and relationship dominances are not stopped or prevented by periods of withdrawal and their low energy. In addition, their conditions will be limited to their interpersonal relationships [13]. Patients can be very extroverted and form meaningful long-term relationships with people because of seeking their value by nature. If someone only cares about themselves and how can their actions and interactions affect them, then they're a narcissist and it burns relationships. A poser will tell the excitement-oriented stories they use to draw people in. They are often very good at telling stories [13].

## **6. Agreeableness and Psychopathy**

Agreeableness can be understand as desire to keep running things smoothly. Low score in agreeableness will be like stubborn, hard to forgive the mistakes, express the hostility directly and having low compassion for the others. The aspect of low agreeableness can be like antisocial, lack of sympathy, embittered, aggressive and hardened.

The study showed that the aspect of psychopathy like selfishness, callousness, interpersonal manipulation, impulsivity, instability are strongly connected to the low agreeableness (Donald R Lynam et al); which shows that the psychopathy can be shown as lack of sympathy and unstable emotions. The impulsivity that shown in the psychopathy was proven by the experiment did by Donald R Lynam, Rolf Loeber, Barbara Menting, Terri E Moffitt, they chose 1517 young man's criminal behaviors, who have been followed up from the late childhood to 20s. They made an assessment about some of these boys' cognitive impulsivity and their IQ, from the age of 12 to 13, to predict the age-crime curve. The the age-arrest curve shows higher in the boys who got high cognitive impulsivity and low intelligence. However, there are interaction between the cognitive impulsivity and intelligence. They found that the for the boys with high IQ, cognitive impulsive will affected the risen of the crime rate, then when they came adult the crime rate decreased and then crime happened at about 20s' [14].

Joshua D. Miller claimed that psychopathy is highly connected with low agreeableness in the FFM, it shows the impulsivity, self-centered personalities [5]. Personalities that represent in the low agreeableness can explain and assess the psychopath.

## **7. Conscientiousness and Psychopathy**

Conscientiousness refers to a careful and pay attention to the details natural instincts. High score conscientiousness will be like follow the rules, get ready for the things need to do, motivated by the goals and reliable. The low score conscientiousness will shows low responsibility, never follow the rules, finish the thing at the last moment and impulsive. People who get low conscientiousness usually are not reliable [15].

The study showed that the theoretical conceptualization of psychopathy and current ones converge on general FFM profile are characterized by low score on conscientiousness [5]; it shows that, unreliable, irresponsible and impulsive, these words are related to psychopathy, according to Donald R Lynam's study. Low conscientiousness related to psychopathy is already proven by the LSRP the Levenson Self-report psychopathy, scales of the Five Factor model, there are some previous study

that supported this idea, for example, LSPR secondary psychopathy was marked by low agreeableness, low 'conscientiousness', these facet scales can be used to identification of personality disorder [16].

## 8. Discussion

It is of concrete and general significance to use the common dimension of personality to represent psychopathy. Through the aspects of understanding psychopathy as a combination of personality traits and analyzing the characteristics of psychopaths in terms of personality traits, may shed light on several issues in this research area.

Widiger pointed out that one of the advantage of the FFM lies in its ability to accurately and comprehensively describe normal and abnormal personality functioning [17]. With the help of the FFM combining the research on structure and functioning of general personality with the description and understanding of personality disorders, clinicians can construct their own FFM profiles, which diagnostic manuals have not yet included. Also, they can apply the FFM to providing new clinical construct with logical and specific description, and use the prototype-matching approach to conduct empirical studies.

Widiger also raised another advantage of the FFM that it is very flexible in identifying alternative versions of any particular syndrome, such as successful psychopath which is considered as a variant of psychopathy. They exemplified Ted Bundy, a serial murderer and rapist, who was exactly an typical successful psychopath. Samuel and Widiger investigated clinicians' research on Ted Bundy's FFM profile [18] and found that his characteristics were basically paralleled to those in successful psychopaths, including all traits of antagonism, low and high traits from Neuroticism and Extraversion, and high Conscientiousness. These are traits could provide a reasonable explanation for why so many years he could avoid detection and conviction.

The FFM could also show the difference between men and women on score of its facets. Miller and Lynam assessed psychopathy by taking the approach of prototype-matching which employed by Miller et al.. They compared and matched individuals' NEO-PI-R profiles with expert-generated psychopathy prototype, then gave the score of psychopaths. The scores were associated with self-reports of drug use, aggression, and several laboratory tasks. The task related to relational aggression of psychopathy showed that the higher score has a close relation with greater aggression, whereas the relation held only for men. Women, on the other hand, had higher score on all the five facets of Agreeableness and Neuroticism besides angry hostility while higher score on warmth facet of Extraversion and lower on excitement seeking and assertiveness facets of Extraversion. As a matter of fact, the pattern of sex differences has a good reflection of expert-generated FFM psychopathy prototype.

## 9. Conclusion

In the assessment of personality disorder, the FFM provides a feasible dimensional model. First, the FFM is available for understanding the complicated personality of psychopaths, which explains why researches of basic psychiatric deficits have varieties of complex personality types and diverse psychopathic personality traits. For instance, some people may have lower levels of Neuroticism (e.g., fearlessness), others may have lower levels of Agreeableness (e.g., cold temperament), and others may have deficits in their functioning of Conscientiousness (e.g., inadequate response regulation). Second, the FFM provides a means to prove the degree of similarity between psychopathy and other personality disorders by comparing relations between them and reaches out accurately description about the personality structure of psychopaths. Also, FFM understanding of psychopathy can illustrate the factor structure of the PCL-R which concerned with different facts of the FFM which give a clearer understanding.



The direction in future research can involve the inclusion of more female participants as currently there has rare research looking into women. There are many predictions related to specific aspects of FFM, as some aspects of Neuroticism which are thought to have negative correlation with psychopathy (e.g., depression and anxiety), whereas others are supposed to have positive correlation (e.g., impulsiveness and angry hostility), future studies should also well include measurements of FFM to allow for the assessment in individual aspects. In future one could assess individuals' traits on the FFM, and design reasonable tasks to test these individuals for deficiencies in specific aspects of FFM that are assessed. Since the FFM provides a way to demonstrate the degree of similarity between psychopathy and other personality disorders, future research will well include alternative methods for assessing psychopathy and personality.

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