The Psychological Application of the Eysenck and HEXACO Models of Personality to Crime
Abstract

Historically, and much like the emergence of models of intelligence, models of personality aimed to both identify and classify traits and characteristics of abnormal behaviour. Such models that emerge, although grounded in scientific support for specific schools of thought in psychology, often encompass and merge similar dimensions from existing models to encapsulate the wide variety of human behaviours and human personality. The application of these models to abnormal behaviours such as anti-social behaviours and criminal activities allows us to identify and classify criminal behaviours with their correlating personality traits. The HEXACO model of personality encompasses dimensions from both the Eysenckian PEN model and the Big 5 model of personality. In doing so, such models allow for the expansion of what is currently known in a certain area of behaviour coupled with what can be further investigated as a means of prevention and intervention.

The current paper outlines each model and its approach in the explanation of personality. Through the support of previous meta-analytical research and studies into the application of personality models and crime, both models are compared and contrasted in their ability to effectively identify differences of personality in the criminal domain by comparing groups of offenders and non-offenders and/or re-offenders. Although heavily constructed on factors previously conceptualised for the Big 5, the HEXACO’s inclusion of the Honesty-Humility factor captures elements of unfair and insincere behaviour that the Big 5 had previously failed to incorporate. The development and addition of dimensions to existing models of personality allows researchers to explore the complexities of individual differences in behaviour in their respective domain. Although descriptive and not causal in nature, the conceptualisation and application of models of personality provide a platform for the investigation and implementation of interventional programs.
“Society wants to believe it can identify evil people, or bad or harmful people, but it’s not practical. ... There are no stereotypes. There are no family backgrounds or personality types or life-styles that are, themselves, predictors” – Ted Bundy (Michaud & Aynesworth, 2000, p. 67).

Bundy was an infamous and prolific serial killer, who up to his capture, was responsible for the kidnapping, assault, rape and murder of 30 women in the United States and is estimated to have possibly killed another 20 women in unsolved murders throughout America at the time. Bundy believed his crimes were motivated by an uncontrollable addiction to pornography. In his encounters with other criminals in prisons, Bundy stated the sole common ground between all acts of violent sexual crimes is tied into the same addiction. Bundy, contradictorily, claimed that the variety of individual differences in criminal activity were unempirical and unpredictable. Undoubtedly, individual differences between people are a definitive factor between moral and immoral judgements to commit or not commit crimes. However, the context and seriousness of the crime are factors that not only classify the crime but also classify the criminal. While Bundy believed there are no characteristic similarities between violent offenders, forensic psychologists and criminologists have sought to compile and profile criminal behaviour as a means of prevention, intervention and prediction to recidivism (Craig, Browne, Beech & Stringer 2006).

Historically, personality theories were developed to help understand and differentiate mental illness and abnormal behaviour from what is considered normal behaviour (Maltby, Day & Macaskill, 2010). Currently, personality theories are applied to the setting of criminal and anti-social behaviour (ASB) as a means of identifying and predicting personality types that are related to criminal activity. This essay will outline the application of psychology to the criminal domain and explain how it has aided in the development of criminal profiling. This essay will describe and compare Eysenck’s (1977) PEN model of personality and crime
and Lee & Ashton’s (2004) HEXACO personality model and identify how their theoretical concepts are applicable to the prediction and intervention of criminal behaviour.

While there is no single explanation for criminal behaviour, there are factors associated with criminal behaviour, such as, early influences, current circumstances and circumstances immediately before the criminal activity itself (Rebello, Herrero & Colom, 2002). Early influences can be both genetic and environmental in nature, and as with all behaviours, the interaction of both can have an altering affect on an individual’s disposition. Current circumstances are inclusive of poor socio-economic status, and criminal behaviour is recognised to be active in groups that endure similar levels of economic difficulties (Hammond, 2010). The final factor of ‘circumstances immediately prior to the criminal activity’ is influenced by the preceding two factors and by individual differences in personality. In relation to these three factors, the Eysenckian (1977) model is befitting in its application due to its biological underpinnings, inclusion of socialisation processes from an early age and explanation of personality traits in the domain of crime.

Eysenck’s (1977) biosocial model of personality originally identified two dimensions of personality; extraversion and neuroticism, but later added the dimension of psychoticism. Those high on the extravert trait are impulsive and sociable due to a biological predisposition to cortical arousal (Eysenck, 1977). Individuals that are highly extravert have low levels of cortical arousal and are prone to disinhibition and sensation seeking. In application to criminal behaviour, extraverts are more susceptible to poor socialisation, leading to lower levels of learning, conditioning and shaping of behaviour (Center & Kemp, 2003). Eysenck (1977) argues that a conditioning of a conscience makes people less likely to develop anti-social behaviours (ASB). In intervention planning, a high extravert delinquent will not respond well to punishment intended to inhibit behaviour and would be more responsive to rewards (Wakefield, 1979).
Individuals that score high on neuroticism are similar to that of extraverts and are prone to lower levels of learning due to anxiety. The neurotic individual is emotionally unstable and unpredictable, and can react strongly to aversive stimuli (Matthews & Gilliland, 1999). Neurotic delinquents respond to punishment but require a more subdued approach in intervention due to higher levels of anxiety (Wakefield, 1979). In Eysenck’s (1977) model, those that score high on extraversion and neuroticism have nervous systems that make them difficult to condition and are less likely to associate anxiety with ASB and therefore less likely to learn from their mistakes through judicial punishment (Sammons, 2002).

In the dimension of psychoticism, individuals who score high are aggressive and cold and lack a sense of empathy (Eysenck, 1977). The biological basis of psychoticism is linked to a polygenic trait, in which the added effects of a number of individual genes determine the level of psychoticism in the individual (Center & Kemp, 2003). Delinquents who score high on psychoticism are slow to learn from their behaviour and are impulsive. Wakefield (1979) suggests that individuals high on psychoticism benefit more from highly structured settings. While it is widely recognised that early interventional projects to deter criminal behaviour can have a positive effect in those high in extraversion and neuroticism, they are less likely to work with those who score high in psychoticism (Claridge, 1995; Monte, 1995).

In a meta-analysis of 52 studies, which included 97 samples, psychoticism was most strongly linked to ASB (mean effect size = 0.39), followed by neuroticism (mean effect size = 0.19), while the effect size for extraversion was minor (Cale, 2006). Additionally, studies comparing offender populations to non-offender populations have found differences between the groups in levels of neuroticism and psychoticism but not of extraversion (Gomà, 1995; Haapasalo, 1990; Rahman, 1992). In the Netherlands, Van Dam, De Bruyn & Janssens (2007) found that only a small group of offenders scored high on all three dimensions of the PEN model.
Similar to the PEN model, the HEXACO model (Lee & Ashton, 2004) uses a lexical approach in its personality theory. The HEXACO model was developed after a number of studies found that in addition to the Big 5 factor model (Costa, McCrae, 1992) a possible sixth factor existed (Di Blas & Forzi, 1998; Hahn et al., 1999; Peabody & Goldberg, 1989). After merging adjectives found in these studies together using a lexical approach, Ashton, Lee & Son (2000) suggested a six factor of ‘honesty’. The six factors include; Honesty-Humility (H-H), Emotionality (E), eXtraversion (X) Agreeableness versus Anger (A), Conscientiousness (C) and Openness to experience (O) (Maltby et al., 2010). The three dimensions of Extraversion, Openness to experience and Conscientiousness are analogues from their Big 5 predecessor. Agreeableness versus anger and Emotionality are modified versions of the Big 5 factors of Agreeableness and Neuroticism (Van Gelder & De Vries, 2012). The modification and adaption of the HEXACO model and Big 5 model also captures the similar dimensions of Extraversion and Neuroticism found in the PEN model.

The honesty-humility (H-H) factor represents individual differences in tendencies to be interpersonally genuine, avoid fraud and corruption and a reluctance to take advantage of others (Pedoeeom, 2007). Individuals low in H-H are motivated by material gain and have the ability to flatter others in pursuit of their own goals, are willing to cheat and deceive, have a desire to exhibit wealthy goods and consider themselves superior to others (Lee & Ashton, 2004). Previous studies have found that low H-H is the strongest predictor of criminal choice (Van Gelder & De Vries, 2012). Additionally, low H-H is correlated with drug use (Zuckermen, 2007) and likeliness to commit premeditated vengeful acts (Lee & Ashton, 2012). Lee & Ashton (2005) found a high negative correlation between H-H and Psychoticism, Machiavellianism and Narcissism that form the ‘Dark Triad’ of personality.

Previous research has found that Psychoticism captures elements of both HEXACO Emotionality (fearfulness, anxiety, dependence and sentimentality) and Conscientiousness
(organisation, diligence, perfectionism and prudence), and that Honesty-Humility and Psychoticism were strong predictors in self-reported acts of delinquency (Dunlop, Morrison, Koenig & Silcox, 2012). The addition of the H-H factor provides a framework for capturing unique personality characteristics of offenders, and similar to the PEN model, can help psychologists in psychological evaluation for competence to stand trial (Borum & Grisso, 1995) and evaluations of child custody (Ackerman & Ackerman, 1997).

Other factors of the HEXACO model are also useful in identifying differences between offenders and non-offenders. Rolison, Hanoch & Gummerman (2013) found that in a comparison of 45 male offenders to 46 male non-offenders, both differed on five of the six factors in the HEXACO model with agreeableness being the only factor that did not differ between groups. In a meta-analytical review of the relations between ASB and four structural models of personality, the researchers found the largest effect sizes (greater than .30) in psychoticism, agreeableness and novelty seeking (Miller & Lynam, 2001). In summarising the review using the big 5 model as a common denominator, the researchers concluded that individuals low in agreeableness and low in conscientiousness are more likely to engage in ASB.

Although both models offer a biological explanation to personality, the PEN model is somewhat more intricate than the HEXACO model in detail, offering both a functional and localisation explanation for sensation-seeking due to low or high levels of arousal. The HEXACO model shares a biological background with the PEN model in that H-H, A and E are explained with the biological theory of reciprocal and kin selection while eX, C and O are biologically driven concepts relating to separate areas of behaviour (Maltby et al., 2010). The PEN model, in relation to crime, was developed in theoretical terms of socialisation and conditioning, offering potential outcomes based on a series of interactions, while the recently developed HEXACO model excludes influential environmental factors in its theoretical
approach. Eysenck’s (1977) PEN model, which developed over 20 years prior to the HEXACO, has the distinct advantage of supportive, and equivocal, evidence in comparison to the HEXACO, and has been applied to the development of interventions and behaviour modifications for ASB, such as rational emotive behaviour therapy and cognitive behaviour therapy (Center & Kemp, 2003; Eysenck & Gudjonsson, 1989).

This essay has shown that both models have proven efficacy in identifying personality differences between groups of offenders and non-offenders. Personality models have the ability to predict recidivism in offenders and can assess differences in characteristics between violent, sex and general offenders (Craig et al., 2006). The integration of personality theories and planned interventions has had beneficial results for adaption of behaviour in delinquency and ASB (Wakefield, 1979). While individual differences may play an inconvenient role in the empirical gathering of data in profiling criminals, and current research into crime and personality is more descriptive than causal in nature, differential psychology’s ability to explain how the personality traits of the character led to the criminal behaviour allows for prevention of recidivism and planning of interventional programmes.
References


