**White Collar Offenders: Is Criminal Punishment a**

 **Successful Deterrent?**

**Abstract**

Recent decades have been witness to headline stories about white collar crimes in Israel and elsewhere. These crimes have caused untold damage, requiring a closer look to be taken at the aims of punishment in general, and those of deterrence in particular. The article describes white collar crime and presents theoretical explanations for its occurrence, together with the associated psychological, personality and cognitive characteristics that could affect rational decision-making. Against this backdrop, doubts have been cast regarding the possibility of criminal punishment, even the harshest, achieving the aims of deterrence for white collar offenders. This does not mean that offenders should go unpunished, and in certain cases it would even be justified to deal with them severely. It does, however, require more meaningful goals to be sought for their punishment.

**Introduction**

Recent decades have been witness to headline stories about white collar crimes in Israel and elsewhere, exemplified by illegal stock manipulation by Nochi Dankner in Israel, and the Ponzi scheme by Bernard Maydoff in the USA. In the wake of these crimes segments of the population have called for increasing the severity of punishment (Holtfreter et al., 2008; Huff et al., 2010) in the hope that this will prove to be a satisfactory deterrent.

No single definition of white collar crime exists, nor is there a consensus regarding its interpretation (Ragatz & Fremouw, 2010). Ever since the term was coined by Sutherland (1939) various definitions have been suggested, attesting, among other things, to the complexity of the phenomenon. According to Mann (1990), the term "white collar offender" suggests a prototype based on a group of parameters: the privileged status of the offender, abuse of position, use of camouflage and deception, economic damage, and perpetration of the crime in an organizational framework or privately. Although these parameters define the phenomenon, the absence of any one of them does not necessarily alter the fundamental nature of the prototype.

Over time attempts have been made to identify subtypes of white collar criminals. Friedrichs (2009) makes a distinction between organizational/corporate crime, which is oriented to promoting the interests of an organization, and occupational crime, which is committed in a professional capacity for the sake of personal gain. Grey collar crime has shades of white collar crime, but is committed in a "grey" area (Menard et al. 2011), consisting of an abuse of trust, including job poaching, insurance and credit card fraud, and tax evasion.

The present article refers in particular to the white collar (organizational or occupational) felon who is a member of society's privileged elite and abuses his senior position in order to commit and conceal financial crime (Logan et al., 2017; Onna et al., 2014; Sutherland, 1983). The offences that are normally associated with this category include fraud, blackmail, falsification of official documents, embezzlement, money laundering, breach of trust by means of bribery, insider trading, illegal stock manipulation, tax offences and computer crimes.

White collar offenders of the above type generally hold positions that provide them with an opening for committing their crime. Unlike blue collar crimes, the victims in this case are faceless, since there is rarely any physical contact between perpetrator and victim (Soltes, 2016). The crimes they commit are usually sophisticated, with few complainants and a host of anonymous collaborators. Discovery of the felony takes a relatively long time since there is a tendency to wrap up such cases within the organizations themselves. Law enforcement agents are therefore unsuccessful in exposing most of the crimes, and even if they do succeed, sometimes find it difficult to make a conviction (Marriott, 2018; Xie, 2015). When a conviction is eventually made the perpetrators suffer the ignominy of sullied reputations (Marriott, 2018).

Various estimates have been proposed with respect to the propensity for perpetration of white collar crimes. Some claim (e.g. Ben Zvi & Volk, 2011) that propensity is low relative to other crimes, though others estimate a high percentage of recidivism. Weisburd et al. (2001), for example, examined criminal dossiers on white collar criminals and found that a high percentage of them were habitual offenders.

White collar crime results in considerable economic damage; in the USA it is estimated to range from $ 500 billion to one trillion dollars a year (Friedrichs, 2007). Apart from the huge financial loss, it causes untold damage and suffering to the victims, while possibly also affecting the trust the public places in financial institutions, especially where corporations are involved (Ashforth & Anand, 2003; Friedrichs, 2004).

Due to the potential for concealment, white collar felons have almost never been caught, and when caught, have been given more lenient sentences than blue collar offenders (Marriott, 2018). Following years of public indifference in the face of this reality, there are signs that in the past 40-year period public opinion towards white collar crime has become more negative (Cullen et al., 2009), with calls for severer and more equitable penalization (Faichney, 2014; Reiman & Leighton, 2013; Weisburd et al., 1991). On the other hand, some claim that white collar crimes are still perceived by the public as less serious relative to other crimes, so that lenient punishment of such crimes could find support (Cedric, 2016).

Some researchers have pointed to the establishment of punitive guidelines (Federal Sentencing Guidelines, 1987) as constituting a turning point in the penalization of white collar offenders. It is claimed that development of the system has in time resulted in greater equality and severity in the punishment of white collar criminals (Kostelnik, 2012), manifested in greater recourse to imprisonment and for longer times (Gustafson, 2006). Salient examples of media splashes in this context include the case of Jeffrey Skilling, CEO of Enron Corporation, USA, who was convicted in 2006, sentenced to 24 years imprisonment and fined $ 45 million for his involvement in the collapse of the energy giant; and Bernard Maydoff, who was sentenced to 150 years in prison following exposure of his Ponzi scheme (Kostelnik, 2012; Marriott, 2018).

Notwithstanding the above, a study conducted at Yale University, USA, by Hewitt (2016) found that a significant majority of white collar criminals who were tried in New York's Northern District during the period 1987 to 2005 received prison sentences that were more lenient than those advocated in the guidelines. A research study on penalization of white collar offenders in Israel (based on 5,792 verdicts handed down during the period 2000 to 2016) shows that the sentences passed on white collar criminals in Israel were significantly more lenient than the maximum punishments imposable (Rub, 2017).

White collar crime has for long been treated as a case of instrumental crime (Friedrichs, 2009), involving profit and loss considerations (Paternoster & Simpson, 1993). The criminological explanations for the phenomenon have focused on the social and cultural implications of the act (Langton & Piquero, 2007), while ignoring the aspect of personality (Friedrichs, 2009; Perri, 2013). This approach derives from the sociologically oriented theory of white collar crime proposed by Sutherland (1939), which addresses the social and cultural impacts of individual behaviour. Since this approach views the white collar criminal as a rational person, it follows that his penalization could possibly serve as a deterrent.

Various researchers claim that the effect of deterrence is relatively more pronounced in connection with white collar crime (Alef, 2018; Kostelnik, 2012; Regev, 2008; Weisburd et al., 2001). The principal explanation given for this is based on the rational choice model for perpetration of crime, according to which white collar criminals are reasonable, level-headed individuals who plan their strategy meticulously; they should thus be deterred by severe punitive measures since in most cases they stand to lose something (money, social status, etc.). An aspect lending support to the assumption that white collar crime (e.g. tax evasion) is rational is that these acts are essentially instrumental, necessitating prior thought and planning, and are not generally accompanied by expressions of anger or violence.

Based on the above concept, and in order to better achieve the effect of deterrence, punishment of white collar felons should be made harsher, such that the expected loss from perpetration of the crime will be greater than the expected gain. Among other things, more resources must be invested in serious investigations that will lead up to conviction, thus reinforcing the element of certainty with respect to penalization: it is claimed that the difficulty in making convictions (latent crime, lack of resources, dearth of skilled investigators) could affect deterrence adversely (Marriot, 2018; Regev, 2008).

Research on the personalities of white collar criminals has for long been a neglected area (Alalehto & Azarian, 2018; Babiak et al., 2010). In recent years, however, there has been an increasing trend to focus on the effect of the personality traits of perpetrators; indeed, based on studies in the field, the relevant population does appear to possess specific personality attributes (Nee et al. 2019). The present theoretical study is therefore aimed at revisiting the premise that white collar offenders are rational, level-headed individuals and, as such, would be subject to deterrence in the form of criminal punishment.

This article opens with a presentation of the complex makeup of the aims of punitive deterrence. Relevant theories regarding white collar crime are presented alongside a review of the literature on unique personality characteristics in this context which could have an adverse effect on rational thinking. Since white collar crime is mostly associated with financial decisions, a review is presented of irrational processes involved in the act of financial decision-making. Reference is made to the implications of the above on the possibility that criminal punishment will constitute a deterrence for white collar criminals. The article ends with an attempt to identify more meaningful goals for punishment together with the appropriate response to these crimes.

**Deterrence with Respect to Offenders**

One of the aims of criminal punishment is to deter individuals from causing physical, mental and economic harm to persons, organizations or companies. This aim is also brought home to the general public with a view to setting an example to others (Zimring & Hawkins, 1976).

The basis for deterrence can be found in Beccaria (1764/1963) and Bentham (1789/1970), who treat the potential criminal as a rational individual who calculates his moves based on benefit vs. cost considerations: if the anticipated gain does not justify the anticipated punishment, the offender will arrive at the logical conclusion and desist from committing the crime.

Criminal penalties do not appear to be successful in achieving the aims of deterrence (primarily specific deterrence) across the board, and as far as is known their effect is complex. The literature refers to groups of variables associated with predicting the degree of differential deterrence inherent in criminal punishment. These refer principally to the type of offence, especially in the context of its instrumentality or expressivity (Chambliss, 1967), the nature of the criminal punishment imposed and the offender's attributes (age, level of recidivism, personality, etc.) (Lernau, 2016; Shoham et al., 2009).

A series of variables exist which affect deterrence; these include irrationality in decision-making, inability to plan or adhere to a plan, and personality traits (a tendency to focus on the present, extraversion, optimism, overuse of defence mechanisms, external locus of control, inability to defer gratification, low frustration threshold, pathological conditions, and others). Despite the threat of criminal punishment or even its imposition, the legal system has not succeeded in using it to achieve personal deterrence (Shoham et al., 2009). Neutralization of the personal deterrence factor in punishment is noted especially with offenders having personality disorders, such as psychopathy, narcissism, borderline personality disorder, paranoia and impulsive personality disorder (Curtis, 1980; Zimring & Hawkins, 1976)

**White Collar Crime – Theoretical Rationale**

Prior to their run-in with the law, white collar offenders are known in most cases to have lived normal lives. As they do not comprise a homogeneous group, there does not appear to be only one explanation for the phenomenon, in its myriad manifestations.

Despite the fact that definitions can be found in the existing literature that describe this type of crime as the product of conscious, rational exploitation of opportunities which present themselves to the potential offender, theories also exist with respect to factors that attest to the blurring of reason.

The theory proposed by Cressey (1953), which gained the epithet Fraud Triangle, was originally intended to explain offences related to fraudulent conduct, and was recently extended to explain white collar crime (Gottschalk, 2015). The theory proposes a three-factor model for white collar crime in order to account for more than the mere existence of an opportunity that comes the offender's way. It adds two conditions to the risk-taking decision: the existence of a financial problem, and the use of a defence mechanism in the form of rationalization, allowing the white collar felon to clear his conscience with a satisfactory explanation both before and after the act.

Under Cressey's influence, Soltes (2016) conducted a study in which some 50 senior managers serving time in prison for serious financial convictions were identified. He corresponded with them and gained their trust, resulting in their sharing their personal stories with him candidly. His findings emphasize the murky aspects of rational thinking on the part of white collar offenders. One of the more conspicuous phenomena identified among his interviewees was the lack of awareness of the seriousness of the crime at the time it was perpetrated, exemplified by the statement of one interviewee: "I never thought I was doing anything bad" (Soltes, 2016, p. 115). The aberrant acts committed by the white collar criminals were never perceived as criminal behaviour, but rather as legitimate exploitation of loopholes in the system to their advantage, a manoeuvre in a grey area where no criminal line was crossed – and even if it was, the offence was viewed as merely technical in nature, simple and harmless. Soltes analyzed the factors involved in the criminal activity and concluded that they stemmed from a number of reasons, among them the absence of direct contact between offender and victim, minimizing the seriousness with which the offender views his deed. Other reasons include a heavy work load (triggering speedy decision-making without devoting time to thinking things through), a lack of sufficient awareness of the full consequences, and frequent changes in regulation (with which ethical management principles are not always able to keep pace and make adjustments accordingly). Finally, use is made of a cognitive dissonance mechanism that generates justifications (rationalizations), assisting the offender in overcoming any uneasiness he might have felt at committing an unethical act.

The Fraud Diamond theory elaborates on the theory of Cressey and adds two components to the equation: motivation for committing the crime, and ability to commit the crime. Ability in the psychological sense includes cognitive capability (high intelligence); personality traits, such as self-confidence, resilience and ability to lie; and knowledge of and status within the organization (Wolfe & Hermanson, 2004).

Wheeler (1990), like Cressey, offers an explanation linking white collar crime to financial difficulties. According to Wheeler, white collar crime takes place in times of distress and fear of personal financial collapse. He describes white collar felons as those who initially experienced financial successes but subsequently found themselves in an uncontrollable downward economic spiral which greatly jeopardized their businesses. Wheeler claims that the potential offender is not willing to deal with the loss and return to a more modest lifestyle, or is afraid to admit that he has failed. He is therefore willing to try his hand at flouting the law in the short term, with the hope of stabilizing his business and repaying debts, without a commitment to adopt it as a way of life. This explanation gains support from the literature (e.g. Dearden, 2019), which asserts that economic hardship fosters rationalization in perpetration of a crime. In contrast, Alef (2018) claims that white collar crimes are committed not during financial ebbs but rather during periods of economic success, when the person feels an "entitlement to everything" and abuses the power he wields.

Common to the principal theories explaining white collar crime is the fact that apart from their recognition of white collar offenders as rational individuals, they incorporate elements that could adversely affect rational thinking. Examples of this are the use of defence mechanisms that make the offence appear insignificant or allow the potential offender to unconsciously disregard the unlawfulness of his actions, as also the probability of his being caught and punished. According to the theory held by both Cressey and Wheeler, rational thinking is compromised when the threat of economic hardship becomes real, since the ensuing stress can disrupt the decision-making mechanism (Dearden, 2019). Similarly, the decision-making process can be distorted in cases where the individual is intoxicated with power (Piff et al., 2011).

Recent research studies have shown that in addition to opportunity and cultural factors, personality differences must be taken into account as an etiological basis for white collar crime (Benson & Manchak, 2014; Levi, 2013; Simpson, 2013). In addition to the psychological explanations, studies have begun to be published that also point to the possibility of a biological basis for crimes of this nature (Ling et al., 2019; Raine et al., 2012). These deterministic explanations base their claims regarding the conduct of white collar offenders on the existence of an element that adversely affects free choice and rational decision-making.

**Irrational Processes in Financial Decision-Making**

The offences of white collar felons are associated mostly with risk-taking decision-making in the sphere of finances (including, among other things, insider trading, illegal stock manipulation and securities fraud). A significant number of research studies exist that deal with decision-making, with the emphasis on the field of economics (Arieli, 2012; Kahneman, 2003).

The ability to behave rationally has been reviewed extensively in the literature, especially since rational decision-making is a key assumption in most basic economic and financial models. The failure of models to predict the behaviour of the financial market is attributed to the possibility that people in the world of finance do not always behave rationally due to psychological biases that influence financial decision-making. In most cases the biases have an emotional basis, such as self-confidence (Odean, 1999) and self-attribution (Daniel, et al., 1998). Shefrin (2000) states that these biases are extremely common and generally have an adverse effect since they can raise the incidence of unnecessary risk-taking (see Baker & Nofsinger, 2002). In addition to psychological biases, Durand et al. (2008) also point to personality traits, such as extraversion, lack of conscience and exaggerated masculinity – factors that could be associated with erroneous, risk-taking decision-making among financiers.

A biological basis, including hormonal, genetic and neurological factors, could also play a part in decision-making by people belonging to the financial world. Coats & Herbert (2008), for example, show that high levels of the stress hormone cortisol could predict irrational decision-making. Similarly, Lo and Repin (2002) point to distinct changes in physiological variables, such as blood pressure, among traders during fluctuations in the financial market. Additional findings which correlate biological variables and decision-making in the field of finance show that the use of medication and drugs can affect decisions involving risk-taking (Lane et al., 2005).

In the context of irrational economic decision-making, mention may be made of the term "winner effect", according to which a combination of successful investments in the financial market and a high level of testosterone serves as fertile ground for irrational decision-making which could eventually lead to criminal activity (Apicella et al., 2008; Takahashi et al., 2006; Zethraeus, 2009).

Dearden (2019) describes the manner in which heuristics and biases, with their adverse effect on rational decision-making, could promote criminal economic activity. For example, it may be reasonably assumed that an optimism bias would have a disruptive effect on decision-making by white collar offenders, especially in times of stress, since it is sustained by the difficulty in exposing such offences and the considerable time that elapses from the moment of its discovery to the taking of punitive action. The feeling of optimism, engendering hope in committing the offence, lessens the certainty of penalization, which is a significant element in deterrence in general, and deterrence in white collar offences in particular.

Rub (2017), who investigated senior officers convicted of financial crimes using the intuitive decision-making questionnaire based on the theory of Kahneman & Tversky (1973), came to the conclusion that the officers made decisions based more on intuition and gut feeling, and less on rational thinking. Soltes (2016), carried out a qualitative research study in which he interviewed senior managers who had been convicted of financial crimes, and reached a similar conclusion: "I never thought about the benefit versus the loss" was one of the statements made by a white collar offender who was convicted of insider trading (Soltes, 2016, p. 99).

**Psychological Traits of White Collar Offenders**

Research on the personalities of white collar offenders has long been neglected (Alalehto & Azarian, 2018; Babiak et al., 2010), as a result of which only a few studies exist in the field (Shover & Hunter, 2010). This is possibly due to the perception that the felony is committed by basically respectable people who are guilty of no more than a one-time transgression. According to this notion, a typical white collar offender is middle-aged, educated, decent, a dutiful citizen, and one who has been impelled by unusual circumstances to carry out an uncharacteristically fraudulent act (Perri, 2011; Weisburd, 1991). White collar crime is thus often explained more through the existence of situational factors, such as temporary economic hardship or opportunities for profiting, and less on personality and behavioural characteristics (Bucy et al., 2008; Engdahl, 2009; Heath, 2008).

Recent studies on white collar felony emphasize the influence of personality traits that determine a higher risk of committing offences such as fraud and tax evasion. The population involved is extremely heterogeneous, so that contradictory findings are at times obtained; however, the little research conducted on the subject indicates that the personality traits of this population are indeed unique (Nee et al., 2019).

Interest has recently been focused on the correlation between the characteristics in the so-called Dark Triad (psychopathy, narcissism and Machiavellianism) and white collar crime, and a high level of narcissism was indeed found among these offenders (Blickle et al., 2006; Bromberg, 1965; Hogan & Hogan, 2001).

Inherent in the narcissistic disorder are a grandiose sense of self-importance, a constant need for admiration, and a lack of empathy – all existing as a recurring pattern (Alalehto & Azarian, 2018; American Psychiatric Association, 1987). Narcissists generally tend to take advantage of interpersonal relations manipulatively and instrumentally. They do not balk at perpetrating crimes since they live with a sense of entitlement to special privileges over others (Perri, 2011).

Narcissism is typified by individuals with a mania for succeeding at any cost (Bromberg, 1965). They are driven by an overwhelming need to prove to the world that they are talented and special (surpassing others in owning the most beautiful home, the most flourishing business, etc.), without which they experience emptiness and failure – situations with which they would not be able to cope. The more intense the disorder, the more the individual's vision is impaired, the greater is his thirst for achievement, and the more serious the danger of his crossing the line into antisocial conduct, with the attendant shortcuts being taken in the search for immediate gains (Egan et al., 2015; Jones et al., 2017). The drive behind their ambition and, generally speaking, positive deeds, is the need to prove their worth to the world. However, certain degrees of narcissism can impair the individual's vision, leading to his possible adoption of antisocial behaviour patterns.

In similar vein, a correlation was found between white collar crime and Machiavellianism (Tang et al., 2008). However, the most disturbing trait of those comprising the Dark Triad which is associated with white collar felony is psychopathy, defined as a lack of conscionableness (Hare, 1993). Clearly, a deficient conscience aids rationalization and promotes fraudulent acts (Trompeter et al., 2013).

Recent decades have revealed an increasingly clear picture of psychopathy (Babiak et al., 2010), including the possibility of its existence in different forms. The new definitions of psychopathy revert to the original one (Cleckley, 1941) and take into account characteristics such as sociability (personal charisma, initiative, intelligence) while placing less emphasis on past criminal behaviour (Cooke et al., 2007). It is estimated that six percent, or even up to twenty percent according to some estimates, of senior personnel in organizations suffer from this disorder (Babiak et al., 2010; Fritzon et al., 2017), as compared to only one percent in the population as a whole (Neumann & Hare, 2008). Employees of this kind, pathological dissemblers (Nee et al., 2019), succeed to a certain extent in concealing their negative attributes, exhibit control over their impulses, and convey an impression of being normal and successful. They use their talents manipulatively, devoid of compassion, guilt or empathy. They are cold, calculating individuals who do not accept responsibility for their actions (Wall et al., 2015). It is possible that previous studies which did not consider these traits missed identifying this personality disorder among white collar felons (Rolseh et al., 2017). Thus, with the exception of isolated studies (e.g. Ray & Jones, 2011), there is a paucity of knowledge regarding the relationship between psychopathy of this type and white collar crime.

Another form of psychopathy has been found to be associated with white collar offences (Alalehto & Azarian, 2018; Collins & Schmidt, 1993). Manifestations include a dubious life style, impulsiveness, outbreaks of violence, risk-taking and antisocial leanings (Hare & Neumann, 2010), with no acceptance of responsibility and no setting of long-term goals (Hare, 1994). Perri (2011) points to particularly dominant psychopathy in instances where white collar offenders become "red collar criminals" (resorting to murder in response to a fear of exposure). He claims that the perception that white collar offenders are not violent is mistaken (Perri, 2011): a subgroup of white collar offenders under certain conditions, especially when faced with the possibility that they are being tracked down, turn to violence, to the extent of "going red" and resorting to murder (Alalehto & Azarian, 2018; Perri, 2011).

According to researchers, traits such as psychopathy and narcissism increase the probability of violence and can serve in certain circumstances as a trigger for violent acts (Perri, 2011).

Some studies that examined the personalities of white collar offenders concluded with mixed findings. On the one hand, Collins & Schmidt (1993) sampled 300 white collar criminals and found evidence of psychopathic tendencies, manifested in an absence of responsibility, unreliability and violation of norms. On the other hand, Blickle et al. (2006), who conducted research in Germany based on personality questionnaires distributed to 76 prisoners – company directors who were serving sentences for white collar crimes – found a high level of hedonism, a search for thrills and a lack of self-control, but higher conscientiousness in comparison to 150 law-abiding directors in other companies.[[1]](#footnote-1) This surprising finding is in line with that of another German study (Bresser, 1978, in Blickle et al., 2006), which found that white collar felons are extremely persevering and target-oriented. High conscientiousness is in keeping with the image of rational, level-headed businessmen who wish to promote their own personal interests as well as those of their firm. According to the researchers, these offenders need high conscientiousness in order to fill senior managerial positions, and unlike managers who are non-offenders, have a high level of technological knowledge, aiding them in committing white collar crimes.

Bailey (2017) presents a unique combination of personality and circumstances in explaining white collar crime. This is based on a model that incorporates psychopathy as a personality attribute in the fraud triangle (Cressey, 1953; Trompeter et al., 2013) as well as in its extended version (Dorminey et al., 2012). The most self-evident consequence of the psychopathic makeup is its effect on rationalization. The act of seizing opportunities can be curbed when the control systems associated with a fear of being caught or penalized are activated (Dorminey et al., 2012); psychopaths, however, are typified by fearlessness, a lack of emotion, and confidence in their ability to find a way to evade punishment (Babiak & O'Toole, 2012). The motivation for deceit can also be more pronounced among psychopaths for two reasons: 1) selfishness and a sense of entitlement (Kranacher et al., 2011); and 2) greater impulsiveness and a search for thrills (Babiak & O'Toole, 2012; Paulhus & Williams, 2002), which in itself can be an incentive for committing a fraudulent act.

Individuals who are high on the psychopathic scale are less "accidental" felons driven by circumstances, and in their case "criminal mindset and arrogance replace pressure and rationalization" (Dominey et al., 2012, p. 367). While existing theories do not appear to offer a comprehensive explanation for all white collar offenders, they are even less fitting for psychopathic white collar offenders.

Another personality trait found to be associated with white collar crime is extraversion – Scale E in the questionnaire of Eysenck et al., (1985). It was found that relative to the population as a whole (Nee et al., 2019) and even to blue collar offenders (Craig & Piquero, 2017; Rub, 2017), white collar felons are higher on the scale in terms of thrill-seeking, impulsiveness, absence of social inhibitions and risk-taking, and lower in self-regulation and anger control. The search for thrills among white collar offenders can be understood considering the risks they take in a variety of areas, involving social, financial and status-related aspects (Craig & Piquero, 2017).

The attraction to risks can explain why individuals who have everything (money and respect) are nonetheless avaricious and are willing to risk their fortunes and reputations for the extra profit that can be gained. This fact stands in contradiction of the law of diminishing marginal utility, which states that the more riches a person has, the more marginal is the additional profit perceived to be gained by him; thus the more wealth a person amasses, the less is the incentive to take risks for an additional marginal benefit. Nevertheless, one explanation for the phenomenon could be that the very risk involved in breaking the law and engaging in fraudulent dealings constitutes a thrill, enhancing the benefit of the act in the eyes of the offender (Wheeler, 1990).

Ragatz & Fremouw (2010) conducted a meta-analysis of 16 research studies, deemed to be sufficiently valid, that examined the psychological profiles of white collar criminals, and concluded that white collar offenders are relatively low on the scale of social graciousness and self-control. They noted, however, the existence of limitations in their studies, chief of which were non-uniformity with respect to definitions and a lack of control over intervening variables (since comparison groups did not exist in every case). They recommend further research with a view to consolidating knowledge in the realm of therapy with respect to gender differences and psychological variables such as criminal mindsets, psychopathy and motivation.

**White Collar Crime: Is Criminal Punishment a Successful Deterrent?**

The results of research conducted on the effect of deterrence are not identical for all types of offences or offenders (Lernau, 2016). Only a few controlled studies have been carried out to examine the effectiveness of criminal punishment in achieving the aims of personal and/or general deterrence among white collar criminals. Irrespective of the methodological complexity of research in the sphere of deterrence, there is a difficulty in exposing white collar crimes; thus the reliance on recidivism as indicative of the effect of punishment as a deterrent in the case of this population is limited. In addition, existing studies do not always take into account the heterogeneity of white collar felons (differences in personality and type of offence, e.g. corporate or individual) (Logan et al., 2017; Onna et al., 2014).

Despite the fact that the few studies performed in the field support the possibility that deterrence through formal punishment (Regev, 2008; Weisburd et al., 1995) as well as social punishment (Aviram, 2011; Kostelnik, 2012) is effective with white collar offenders, recent developments in understanding the complexity of this type of crime point to the need for further research.

It appears that the rational model in its pure form is not enough to understand white collar crime in its entirety. The study of human decision-making and judgment is characterized by a tug-of-war between the rational model and psychological considerations, which are not always in keeping with the principles of rational decision-making. The conflict is rooted in the fact that human behaviour and thinking are multifaceted: they include elements that reflect insight, rationality and efficiency, but also flawed thinking, misdirected considerations and erroneous decision-making. Research incorporating elements of economics and psychology (Kahneman & Tversky, 1979) found that "rules" were being followed in certain cases of irrational behaviour.

The effectiveness of deterrence using criminal punishment depends, among other things, on the offender's mode of decision-making and his personality traits. These factors, especially when intertwined with irrational thinking, could neutralize the effect of deterrence, and therefore must be taken into account, at least on the theoretical level, in examining the efficacy of specific types of deterrence for white collar offenders.

**Considerations Regarding the Aims in Penalizing White Collar Offenders – If not Deterrence, What?**

In examining the penalties meted out to criminals in general, and to white collar felons in particular, consideration must be given to the aims of punishment )e.g. retribution, exclusion / prevention, compensation, deterrence, rehabilitation) as presented in the literature (Kanai, 2001) and the potential for their being achieved.

As regards the aim of personal deterrence, it appears that despite the entrenched wisdom regarding white collar offenders, a substantial databank has been built up that serves as a basis for theorizing that the offender's conduct involves a melange of components (personality disorders, use of defence mechanisms, cognitive biases) that disrupt rational thinking and have an adverse effect on personal deterrence based on criminal punishment. Since the offender population is heterogeneous, in cases where rational thinking does take place it appears that social punishment (Aviram, 2011; Kostelnik, 2012), or the very fact of being taken to court could result in deterrence (Regev, 2008; Weisburd et al., 1995). This conclusion is in line with the existing knowledge in the literature regarding the complexity involved in achieving this aim (Lernau, 2016; Pratt et al., 2011) as also with Amendment 113 of the Israel Penal Law (2012), which relegates this recourse to the lowest level of importance. Clearly, this cannot be construed as stating that formal punishment of white collar offenders should be discontinued, and in certain cases there is possibly room for even stricter treatment. However, more meaningful aims must be found for their penalization.

A highly important aim in penalization in general, and penalization of white collar criminals in particular, appears to be the maintenance of social order. Since senior officials, public figures and representatives of the law enforcement system (who comprise a significant percentage of the white collar criminal population) are constantly subject to scrutiny by the public, their penalization is important as it serves to reinforce social order. This approach is in keeping with the Functional Theory proposed by Merton (1971), which maintains that the social status of offenders makes it possible for them to be punished in a way that is disproportionate to the severity of their act – the intention not being for the offenders to be penalized for a specific transgression but rather to serve the needs of the public as a whole, namely, to ensure that citizens abide by the laws of the land (social solidarity).

White collar crime causes nations huge economic losses, damage and untold suffering for the victims, while possibly triggering a decline in public trust in national institutions and laws (Ashforth & Anand, 2003; Friedrichs, 2004). Accordingly, one of the goals of punishment called for is just and proportionate retribution for serious crimes (Canton, 2019; Hegel, 1952; Kant, 1965; von Hirsch, 2017). This is in keeping with Amendment 113 of the Israel Penal Law, in which this adequacy clause appears in top order of importance. Although to the best of our knowledge no surveys have been conducted in Israel with respect to the public attitude towards penalization of white collar offenders, based on public opinion polls performed in the USA it may be seen that that the public does recognize the seriousness of the offences and calls for proportionately strict punishment for white collar criminals (Holtfreter et al., 2008; Kane & Wall, 2006; Reiman & Leighton, 2013).

Punishment of white collar offenders with the aim of their expulsion from society and prevention is related, as stated, to their dangerousness to society. In this context it appears that there are still no built-in tools to assess the dangerousness of white collar criminals, as there are in the case of offenders accused of sex crimes or domestic violence (Abulafia & Hovav, 2019). Based on the increasing data being accumulated from research and experience in working with the population of white collar criminals, development of a unique diagnostic tool to assess their dangerousness is called for.

Apart from court rulings (sentencing and its aims, parole, etc.) the assessment of dangerousness as a diagnostic tool could serve as a basis for therapy and rehabilitation. The goal of rehabilitation which has been set in Israel as an important punitive target according to Amendment 113 of the Penal Law (Lernau & Sharon, 2012) – and which appears to be gaining ground in the past decade on the legal level as well as in its practical application (Lernau, 2016; Lernau & Oz, 2019) – appears to be particularly relevant in cases found to have a high potential for change and to be suited to psychological intervention. Since these offences have been determined to be associated with various types of personality disorders, overuse of defence mechanisms or irrational thought processes, the suitability of psychological therapy and the chances of its success must be considered on a case-by-case basis, while adapting the treatment method to the offender. For instance, a personality disorder such as narcissism, characterized by an obsessive pursuit of success, can be moderated through therapy (Dimaggion & Attinà, 2012; Kohut, 1971). In contrast, psychopathy is known to respond poorly to treatment, although some therapists are of the opinion that even this extreme disorder can be treated. A survey conducted in England showed that of more than 500 forensic therapists, only a small number believed that it would not be possible to treat psychopathy, with more than two-thirds feeling that treatment could succeed despite the fact that they were unable to specify the optimal method to be used (Tennet et al., 1993). Whatever the case, it should be borne in mind that white collar offenders are generally smart and manipulative, using defence mechanisms which, among other things, minimize the seriousness of the offence in their eyes. Accordingly, skilled and experienced professionals are needed for this purpose, with the appropriate tools for diagnosis and therapy.

**Summary and Conclusions**

White collar felony hits the headlines from time to time in Israel and elsewhere. Being a crime that causes untold damage, it is possible to understand the outcry from segments of the public and the calls for increasing the severity of punishment. Alongside this, the issue necessitates close scrutiny of the aims of punishment.

The present article describes white collar crime and the personality attributes of its perpetrators. It also presents theoretical explanations for its occurrence together with the processes involved in decision-making that have both exemplified and challenged the concept that views white collar offenders as rational individuals in every way, who can potentially be deterred by criminal punishment.

It appears that the least achievable aim, even where harsh criminal punishment such as imprisonment is imposed, is personal deterrence, due perhaps to the impaired rationality associated with this offence.

The principal aim in penalization of white collar criminals appears to be the restoration of social order. White collar criminals, who belong by and large to the higher stratum of society, have the potential to undermine the existing social order, and their penalization could restore public trust in state institutions in general, and the law enforcement system in particular. An additional aim which can been achieved, over and above the retributive aims of adequacy and prevention, is rehabilitation. Since the white collar crime population appears to be governed unconsciously by irrational elements, affecting not only their behaviour but also their decision-making mechanism, therapeutic intervention would be required for their rehabilitation. There appears, however, to be a lack of research studies that examine the types of suitable therapies and their effectiveness.

Clearly, in light of the above conclusions with respect to the aims of punishment, there is a need to examine the types of penalization that are appropriate to this complex population. It appears that appropriate actions for achieving the principal aims of punishment in the case of white collar crime (restoration of social order, reward, compensation, prevention and rehabilitation) are chiefly fines, probation warrants and imprisonment.

As regards imprisonment, it is recommended to impose it only in unusual cases, while in light of diminishing marginal productivity (Lernau, 2016) it is possible that short prison terms would suffice. Although imprisonment of white collar criminals could help in restoring the social order and serve the retributive aims of adequacy and prevention, achievement of deterrence and rehabilitation is cast in doubt. As regards deterrence, because of the complex characteristics of the population, even severe punishment in the form of imprisonment does not appear likely to succeed.

With respect to rehabilitation in prison, to the best of our knowledge there is a lack of research on the efficacy of dedicated therapy programs for this population. Some indications regarding attainment of this goal may be found in the research conducted by Peled-Laskov et al. (in print), which quotes white collar criminals as stating that the therapeutic framework in prison did not answer their rehabilitation needs. It was also found that the stay in prison exacerbated anger in the inmates towards the state, even rendering them "less patriotic". Imprisonment also sees white collar criminals, who are getting on in age to start with, growing old behind bars and remaining there even after they have reached an age where they are in any event less likely to be involved in crime (Shichor & Sechrest, 1996; Zimring et al., 2001).

The conclusion regarding the marginal benefit of imprisonment, at least for some white collar offenders, ties in with an issue that has engaged the attention of the criminal justice system in Israel in recent years: the crowded conditions in prisons and the obligation of the state to implement the Supreme Court ruling to increase the living space for individual prisoners and detainees in order to meet regulation requirements (Supreme Court Case 1892/14). Penalization of white collar felons outside the prison walls or through imprisonment for relatively short periods could improve the state's capability in executing the Supreme Court decision.

In contrast to imprisonment, the imposition of fines could be instrumental in restoring public order, while achieving the aim of retribution, compensation and prevention, on the one hand, and preventing the damage caused by imprisonment on the other. A heavy fine could worsen the financial status of the prisoner by stripping him of a significant element that enables him – according to various theories such as the Fraud Diamond Theory (Wolfe & Hermanson, 2004) – to commit a white collar crime. An excessively high fine, on the other hand, could precipitate a condition of dire financial straits for the offender which, according to Cressey (1953) and Wheeler (1990), could increase the risk of his committing a white collar crime. A combination of fines and rehabilitative penalization, including imposition of a probation warrant, could serve all purposes, among them prevention and rehabilitation.

The imposition of punishments (e.g. fines, probation warrants)that are perceived as lighter than imprisonment undoubtedly have the potential for undermining public trust in the law enforcement system and upsetting the social order. On the other hand, it appears at present that white collar crimes are regarded by the public as less serious than other crimes, so that light punishments for such transgressions could enjoy some support (Cedric, 2016).

In conclusion, white collar crimes are unique, their definition is complex, and they can be conceived as a system supported by an irrational base. Despite the resentment they arouse in certain public circles and the expectation of reprisal in the form of severe punishment – the practical implication of this being long prison sentences – the type of punishment and its aims must be carefully examined. Personality features that have been neglected for years, as also research on the effectiveness of deterrence, call for additional studies that will enable serious attention to be paid to the aims of punishment, including rehabilitation, and the limited capacity for deterrence through punishment, in this variegated and complex population.

**References**

Abulafia, J., & Hovav, M. (2019). *Risk Assessment: Clinical, Legal and Social Aspects.* Jerusalem: Carmel and Keshet Publishers (in Hebrew).

Alalehto, T., & Azarian, R. (2018). When white collar criminals turn to fatal violence: The impact of narcissism and psychopathy. *Journal of Investigative Psychology and Offender Profiling, 15,* 215-226.

Alef, A. (2018). On Power, Money and White collar crimes. *Law and Business, 21,* 263-306. (in Hebrew).

American Psychiatric Association (Ed.) (1987). *Diagnostic and statistical manual of mental disorders (3rd edition).* Washington, DC: APA.

Apicella, C.L., Dreber, A., Campbell, B., Gray, P.B., Hoffman, M., & Little, A.C. (2008). Testosterone and financial risk preferences. *Evolution of Human Behavior, 29,* 384–390.

Arieli, D. (2012). *The (honest) truth about dishonesty: How we lie to everyone especially ourselves.* New York: Harper Collins.

Ashforth, B.E., Anand, V. (2003). The normalization of corruption in organizations. *Research Organization Behavior, 25,* 1–52.

Aviram, H. (2011). Does Sentencing Achieve its Aims? Answers from the World of Empirical Research. In D. Hacker and N. Ziv (Eds.), *Is Sentencing Important?* (pp. 25-64). Tel Aviv: Tel Aviv University (in Hebrew).

Babiak P., Neumann, C.S., Hare, R.D. (2010). Corporate psychopathy: talking the walk. *Behavioral Science and the Law, 28,* 174–193.

Babiak, P., O’Toole, M.E. (2012). The Corporate Psychopath. *FBI Law Enforcement Bulletin 81*(11), 7–11.

Bailey, C.D. (2017). Psychopathy and accounting students' attitudes towards unethical professional practices. *Journal of Accounting Education, 41,* 15-32.

Baker, H.K., & Nofsinger, J.R. (2002). Psychological biases of investors. *Financial Services Review, 11*, 97-116.

Beccaria, C. (1764/1963). *On crimes and punishments* (H. Paolucci, Trans.). Indianapolis: Bobbs-Merrill. (Original work published 1764).

Benson, M.L., & Manchak, S.L. (2014). The Psychology of White collar Crime. In *Oxford Handbooks Online in Criminology and Criminal Justice.* New York: Oxford University Press.

Bentham, J. (1789/1970). *An introduction to the principles of morals and legislation*. In J.H. Burn, & H.L.A. Hart (Eds.), Collected works of Jeremy Bentham. London: Athlone Press. (Original work published 1789).

Blickle, G., Schlegel, A., Fassbender, P., & Klein, U. (2006). Some personality correlates of business white collar crime. *Applied Psychology: An International Review, 55*(2), 220-233.

Braithwaite, J. (1985). White collar crime. *Annual Review Sociology, 11,* 1–25.

Bromberg, W. (1965). *Crime and the mind.* New York: Macmillan.

Bucy, P.H., Formby, E.P., Raspanti, M.S., & Rooney, K.E. (2008). Why do they do it: The motives, mores, and character of white collar criminals. *St. John's Law Review, 82,* 401.

Canton, R. (2019). Censure, dialogue and reconciliation. In A. du Bois-Pedain & A.E. Bottoms (Eds.). *Penal censure: Engagements within and beyond desert theory* (pp. 253-276). Oxford: Hart, Bloomsbury.

Chambliss, W.J. (1967). Types of deviance and the effectiveness of legal sanctions. *Wisconsin Law Review,* 703-719.

Cleckley, H. (1941). *The mask of sanity*. St. Louis, MO: Mosby.

Coates, J. M., & Herbert, J. (2008). Endogenous steroids and financial risk-taking on a London trading floor. *Proceedings of the National Academy of Sciences,* 6167- 6172.

Collins, J. M., & Schmidt, F.L. (1993). Personality, integrity, and white collar crime: A construct validity study. *Personnel Psychology, 46,* 295-311.

Cooke, D. J., Michie, C., & Skeem, J. (2007). Understanding the structure of the psychopathy checklist – revised: an exploration of methodological confusion. *British Journal of Psychiatry, 49,* 39-50.

Craig, J. M., & Piquero, N. L. (2017). Sensational offending: An application of sensation seeking to white collar and conventional crimes. *Crime & Delinquency, 63*(11), 1363–1382.

Cressy, D. (1953). *Other People's Money.* Glencoe, IL: Free Press.

Daniel, K. D., Hirshleifer, D., & Subrahmanyam, A. (1998). Investor psychology and security market under- and over-reactions. *Journal of Finance, 53,* 1839-1886.

Dearden, T. E. (2019). How modern psychology can help us understand white collar criminals. *Journal of Financial Crime, 26*(1), 61-73.

Dimaggio, G., & Attinà, G. (2012). Metacognitive interpersonal therapy for narcissistic personality disorder and associated perfectionism. *Journal of Clinical Psychology, 68,* 922–934.

Dorminey, J. (2012). The Evolution of Fraud Theory. *Issues in Accounting Education, 27*(2), 555-579

Durand, R. B., Newby, R., & Sanghani, J. (2008). An intimate portrait of the individual investor. *Journal of Behavioral Finance, 9,* 193-208.

Egan, V., Huges, N., & Palmer, E. (2015). Moral disengagement, the dark triad and unethical consumer behavior. *Personality and Individual Differences, 76,* 123-128.

Engdahl, O. (2009). Barriers and back regions as opportunity structures for white‐collar crime. *Deviant Behavior, 30*(2), 115–143.

Eysenck, S. B., Eysenck, H. J., & Barrett, P. (1985). A revised version of the psychoticism scale. *Personality and Individual Differences, 6*(1), 21-29.

Faichney, D. (2014). Autocorrect? A proposal to encourage voluntary restitution through the white collar sentencing calculus. *The Journal of Criminal Law & Criminology, 104*(2), 389-415.

Friedrichs, D.O. (2007). *Trusted criminals. White collar crime in contemporary society (3rd ed.)*. Belmont, CA: Thomson Wadsworth.

Fritzon K., Bailey, C., Croom, S., Brooks, N. (2017). Problem personalities in the workplace: development of the corporate personality inventory. In: P. A. Granhag, R. Bull, A. Shaboltas, E. Dozortseva (eds.). *Psychology and law in Europe: When west meets east,* pp. 139–166. Boca Raton: CRC Press.

Gottschalk, P. (2015). Fraud examiners in white collar crime investigations. *CRC Press*, Boca Raton.

Grasmick, H. G., & Bursik, R. J. (1990). Conscience, significant others, and rational choice. Extending the deterrence model. *Law and Society Review, 24*(3), 837-861.

Gustafson, J. L. (2006). Cracking down on white collar crime: An analysis of the recent trend of severe sentences for corporate officers. *Suffolk University Law Review, 40,* 685–702.

Hare, R. (1993). *Without conscience.* New York: The Guilford Press.

Hare, R. D. (1994). Predators: the disturbing world of the psychopaths among us. *Psychology Today, 27*(1), 55–63.

Hare, R. D., Neumann, C. S. (2010). Psychopathy: assessment and forensic implications. In: L. Malatesti, J. McMillan (Eds.). *Responsibility and psychopathy: interfacing law, psychiatry and philosophy* (pp. 93–123). Oxford University Press.

Heath, J. (2008). Business ethics and moral motivation: A criminological perspective. *Journal of Business Ethics, 83*(4), 595–614.

Hewitt, J. (2016). Fifty shades of gray: Sentencing trends in major white collar cases. *The Yale Law Journal, 125,* 1018-1071.

Hogan, R., & Hogan, J. (2001). Assessing leadership: A view from the dark side. *International Journal of Selection and Assessment, 9,* 40–51.

Holtfreter, K., Shanna, S. V., Bratton, J., & Gertz, M. (2008). Public perceptions of white collar crime and punishment. *Journal of Criminal Justice, 36,* 50–60.

Jones, B. D., Woodman, T., Barlow, M., Roberts, R. (2017). The darker side of personality: Narcissism predicts moral disengagement and antisocial behavior in sport. *The Sport Psychologist, 31*(2), 109-116.

Kahneman, D. (2003). A perspective on judgment and choice: Mapping bounded rationality. *American Psychologist, 58,* 697-720.

Kahneman D., Tversky, A. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology, 5,* 207-232.

Kahneman, D., & Tversky, A. (1979). An analysis of decision under risk. *Econometrica, 47*(2), 263-291.

Kanai, R. (2001). Probation Warrant: From Alternative to Alternative Punishment. *Legal Research, 15,* 353-376 (in Hebrew).

Kostelnik, J. (2012). Sentencing white collar criminals: when is shaming viable? *Global Crime, 13*(3), 141-159.

Kranacher, M. J., Riley, R. A., & Wells, J. T. (2011). *Forensic accounting and fraud examination.* New York. NY: John Wiley & Sons.

Lane, S. D., Tcheremissine, O. V., Lieving, L. M., Nouvion, S. O., & Cherek, D. R. (2005). Acute effects of alprazolam on risky decision-making in humans. *Psychopharmacology, 181,* 364-373.

Lernau, H. (2016). *Crime and Law Enforcement. Theory, Policy, Control.* Haifa: Pardes Publishers (in Hebrew).

Lernau, H., & Oz, A. (2019). The Criminal Enforcement System in Israel in the Past Decade: Can the Winds of Change be Felt? *Hasenigor, 249,* 4-13 (in Hebrew).

Lernau, H., & Sharon, I. (2012). Eight Balanced Decisions in Enacting the Judicial Discretion in Sentencing Law. *Hasenigor, 183,* 14-21 (in Hebrew).

Levi, M. (2013). Individual differences and white collar crime. In F. T., Cullen & P., Wilcox, (Eds.). *Encyclopedia of Criminological Theory* (pp. 469-473). Thousand Oaks, CA: Sage.

Ling, S., Raine, A., Yang, Y., Schug, R. A., Portnoy, J., & Ringo Ho, M. H. (2019). Increased frontal lobe volume as a neural correlate of grey-collar offending. *Journal of Research in Crime and Delinquency, 56*(2), 303-336.

Lo, A. W., & Repin, D.V. (2002). The psychophysiology of the real-time financial risk processing. *Journal of Cognitive Neuroscience, 14,* 323-339.

Logan, M.W., Morgan, M.A., Benson, M.L. and Cullen, F.T. (2017). Coping with

 imprisonment: Testing the special sensitivity hypothesis for white collar

 offenders. *Justice Quarterly*, 1, 1-30.

MacKenzie, D. L. (2000). Evidence based corrections: Identifying what works. *Crime and Delinquency, 46*(4), 457-471.

Marriott, L. (2018). Pursuit of White collar crime in New Zealand. *Journal of Australian Taxation, 20,* 1-20.

Merton, R. (1971). *Social Theory and Social Structure.* Tel Aviv: Yachdav (in Hebrew).

Nee, C., Button, M., Shepherd, D., Blackbourn, D., & Leal, S. (2019). The psychology of the corrupt: Some preliminary findings. *Journal of Financial Crime, 26*(2), 488-495.

Neumann, C. S., Hare, R. D. (2008). Psychopathic traits in a large community sample: links to violence, alcohol use and intelligence. *Journal of Consulting and Clinical Psychology, 76,* 893–899.

Odean, T. (1999). Do investors trade too much? *American Economic Review, 89,* 1279-1298.

Onna, J.H.R., Geest, V.R., Huisman, W. and Denkers, A.J.M. (2014). Criminal

 trajectories of white collar offenders. *Journal of Research in Crime and*

 *Delinquency*, *51*, 759-784.

Penal Law (Amendment 113), 2012 (in Hebrew).

Perri, F. S. (2011). White‐collar criminals: The ‘kinder, gentler’ offender? *Journal of Investigative Psychology and Offender Profiling, 8*(3), 217–241.

Piff, P.K., Stancato, D.M., Cote, S., Mendoza-Denton, R., Keltner, D. (2011). Higher social class predicts increased unethical behavior. *PNAS, 109*(11), 4086-4091.

Pratt, T.C., Cullen, F.T., Blevins, K., Daigle, L.E., & Madensen, T.D. (2011). The empirical status of deterrence theory: A meta-analysis. In F. T., Cullen, J. P., Wright, & K. Blevins (Eds.), *Taking stock: The status of criminological theory* (pp. 367-396). New Brunswick, NJ: Transaction.

Ragatz, L., & Fremouw, W. (2010). A critical examination of research on the psychological profiles of white- collar criminals. *Journal of Forensic Psychology Practice, 10,* 373-402.

Raine, A., William, S., Laufer, Y. Yang, K.L. Narr, P.T., & Arthur, W.T. (2012). Increased executive functioning, attention, and cortical thickness in white collar criminals. *Human Brain Mapping, 33,* 2932-2940.

Ray, J.V., & Jones, S. (2011). Self-reported psychopathic traits and their relation to intentions to engage in environmental offending. *International Journal of Offender Therapy, 55,* 370–391.

Regev, B. (2008). *Economic and Quantitative Aspects of Policy Regarding Enforcement of a White collar crime Law in Israel.* Thesis for award of Ph.D. Jerusalem: The Hebrew University of Jerusalem (in Hebrew).

Reiman, J., & Leighton, P. (2013). *The Rich Get Richer and the Poor Get Prison: Ideology, class and criminal justice.* Pearson Publishing.

Rolseh, A., Edens, J. F., Cox, J. (2017). Triarchic model personality traits and their impact on mock juror perceptions of a white collar criminal defendant. *Journal of Personality Assessment, 99*(5), 453–464.

Rub, J. (2017). *Criminological aspects of reduction of white collar criminality in Moldova and Israel: Criminal behavior approach.* Thesis of Doctor of Philosophy in Law. University of Moldova.

Shefrin, H. (2000). *Beyond greed and fear: Understanding behavioral finance and the psychology of investing.* Boston: Harvard Business School Press.

Shoham, S. G., Shavit, G., Kavleon, G., & Einat, T. (2009). *Crime and Punishment: Introduction to Phenology. On the Theory of Punishment and Rehabilitation, Crime Prevention and Law Enforcement*. Kiryat Bialik: Ach Publishers (in Hebrew).

Shover, N., & Hunter, B. W. (2010). Blue-collar, white collar: crimes and mistakes. In W. Bernasco (Ed.), *Offenders on Offending*. Wilan, Cullompton.

Simpson, S. (2013). White collar crime: A review of recent developments and promising directions for future research. *Annual Review of Sociology, 39*, 309-331.

Soltes, E. (2016). *Why they do it? Inside the mind of the white collar criminal*. New York: Public Affairs.

Sutherland, E. H. (1939). White collar Criminality. *American Sociological Review, 5,* 1-12.

Sutherland, E.H. (1983). *White Collar Crime – The Uncut Version*. New Haven,

 CT: Yale University Press.

Tang, T. L., Chen, Y., Sutarso, T. (2008). Bad apples in bad (business) barrels: the love of money, Machiavellianism, risk tolerance, and unethical behavior. *Management Decision, 46*, 243–263.

Tennent, G., Tennent, D., Prins, H., & Bedford, A. (1993). Is psychopathic disorder a treatable condition? *Medicine, Science, and the Law, 33*, 63–66.

Trompeter, G.M., Carpenter, T., Desai, N., & Riley, R. A. (2013). A synthesis of fraud-related research. *Journal of Practice and Theory, 32,* 287-321.

Von Hirsch, A. (2017). *Deserved criminal sentences.* Oxford, Hart: Bloomsbury publishing.

Wall, T. D., Wygant, D. B., & Sellbom, M. (2015). Boldness explains a key difference between psychopathy and antisocial personality disorder. *Psychiatry Psychology and Law, 22,* 94–105.

Wheeler, S. (1990). White collar crime: Findings from a Socio-Legal and Thought Research Program on the Problem of Motivation in White collar crimes. *Law Reviews, 15,* 446-448 (in Hebrew).

Weidenfeld, K., & Spire, A. (2017). Punishing tax offenders in France and Great Britain: two criminal policies. *Journal of Financial Crime, 24*(4), 574-588.

Weisburd, D. (1991). *Crimes of the middle Classes: White‐collar offenders in the Federal Courts.* New Haven: Yale University Press.

Weisburd, D., Waring, E., & Chayet, E. (1995). Specific deterrence in a sample of offenders convicted of white collar crimes. *Criminology, 3*3(4), 587-607.

Weisburd, D., Waring, E., & Chayet, E. (2001). *White collar crime and criminal careers.* Cambridge University Press.

Wolfe, D. T. & Hermanson, D. R. (2004). The fraud diamond: considering the four elements of fraud. *The CPA Journal, 74,* 38–42.

Xie, J. (2015). The optimization of judicial rules on anti-insider trading in China: Focusing on the judicial interpretation for the crime of insider trading. *International Journal of Law, Crime and Justice, 43*, 151-193.

Zethraeus, N. (2009). A randomized trial of the effect of estrogen and testosterone on economic behavior. *Proceeding of the National Academy of Science, 106,* 6535–6538.

Zimring, F. E., Hawkins, G. (1976). *Deterrence: The legal threat in crime control*. Chicago: University of Chicago Press.

Zimring, F.E., Hawkins, G., & Kamin, S. (2001). *Punishment and democracy: Three strikes and you're out in California.* New York: Oxford University Press

1. Conscientiousness encompasses attributes such as orderliness, performance of obligations, ambition and self-discipline (Costa & McCrae, 1992) – desirable qualities in management, according such a person an edge over others. [↑](#footnote-ref-1)