PERSONALITY AND LOW SELF-CONTROL AS CONTRIBUTING FACTORS FOR SCAM VICTIMIZATION: A CONCEPT PAPER

<sup>1</sup>Fatin Adha Murad, <sup>2</sup>\*Mohammad Rahim Kamaluddin, <sup>3</sup>Wan Shahrazad Wan Sulaiman, <sup>4</sup>RozaineeKhairudin, <sup>5</sup>Azianura Hani Shaari

ABSTRACT--Commercial crimes such as scams are of great concerns especially to a society. Official reports indicate that there is a progressive increase in terms of amount of losses in frauds and scams every year. The worrying and escalating trends of scams are the rationale for this concept paper to exist. Following this, the current paper aims to review previous studies to explain why people are getting scammed from the victims' psychological viewpoint. The present paper employs archival analysis as the main methodology to retrieve information from related journal articles. As such, previous journal articles were reviewed thoroughly to identify the contributing factors for scam victimizations. This paper includes two of the most researched factors in understanding commercial crime victimization – personality and self-control factors. In-depth understanding on victims' psychological factors is imperative as it can provide substantial information for the development of psychosocial interventions for at-risk individuals.

Key Words--scam, commercial crimes, psychosocial factors, victimization

## I. INTRODUCTION

Crimes committed without violence have often been neglected or underestimated. Commercial crimes especially frauds and scams although not directly causing physical harms to human, they can ruin victims economically thus affecting victims' psychosocial well-being. Although social media facilities bring a new dimension for communication and digital marketing (Ali Salman & Siti Minanda Pulungan, 2017, Saodah Wok et al., 2016), the advancement of such technology is also giving new opportunities for criminals to commit scams using various cyber platforms (Norazlina Zainal et al., 2018).

According to Commercial Crime Investigation Department (2019), commercial crime is defined as the fraudulent act done to deceive a person or company to obtain goods and money. This criminal act is committed

<sup>&</sup>lt;sup>1</sup>Faculty of Social Sciences and Humanities, The National University of Malaysia, Bangi, Malaysia.

<sup>&</sup>lt;sup>2</sup>\*Criminologist and Senior Lecturer, Faculty of Social Sciences and Humanities, The National University of Malaysia, Bangi, Malaysia, rahimk@ukm.edu.my

<sup>&</sup>lt;sup>3</sup>Faculty of Social Sciences and Humanities, The National University of Malaysia, Bangi, Malaysia.

<sup>&</sup>lt;sup>4</sup>Faculty of Social Sciences and Humanities, The National University of Malaysia, Bangi, Malaysia.

<sup>&</sup>lt;sup>5</sup>Faculty of Social Sciences and Humanities, The National University of Malaysia, Bangi, Malaysia.

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mainly as the consequences of greed, gullibility of potential victims and employment uncertainty

(LinthiniGannetion et al., 2015). Some of the examples of commercial crimes as listed by the Commercial Crime

Investigation Department (CCID), Malaysia Royal Police (2019) include credit card fraud, online banking fraud,

inheritance fraud, insurance fraud, international fraud, romance scam and parcel scam. In Malaysia, some of the

laws are already being introduced relating to commercial crimes such as Act 56 (Evident Act 1950), Act 593

(Criminal Procedure Code), Act A1430 Penal Code (Amendment), Anti Money Laundering and Anti-Terrorism

Financing Act 2001, Panel Code Act 574, and Computer Crimes Act 1997. These laws will result in being fined or

imprisonment or both if one is found guilty.

The impacts on victims in commercial crimes (i.e fraud and scam) are distressing and devastating. Individuals

who have been victims in this crime are not only suffering financially but also psychologically. For example,

victims of love scam experience a wide range of psychological distress such as depression, stress and trauma

because they were cheated by his or her romantic partner who they have trusted (Buchanan & Whitty, 2014). With

prolonged psychological distress, some may develop cognitive distortion (self-blaming, hopelessness, helplessness

and preoccupation with danger) (Zamani et al., 2014) and some even committed suicide (Buchanan & Whitty,

2014). Besides that, Buchanan and Whitty (2014) and Ross and Smith (2011) also documented that victims of love

scam may experience social withdrawal as well as problems with interpersonal relationships.

In this context, victims not only lose large amount of money due to scam but also lose the social support from

their surrounding people (family members, friends and colleagues) because the family members and friends of the

victims assume victims as ignorant and useless individuals. In addition, victims of fraud or scams also experience

some social withdrawals i.e., less participation in social events and to some extent they might come up with drastic

changes such as changing jobs, alter daily routines and avoid communication. It is argued that the economic,

physical and social consequences of commercial crimes such as frauds and scams are far greater than those

associated with conventional crimes (LinthiniGannethion et al., 2015).

II. THE MODUS OPERANDI

On top of the impacts and escalating trend of these types of crimes, the nature of frauds and scams is viewed as

complex and dynamic. Particularly, the modus operandi of such crimes iscomplex and complicated. Due to the

exponential growth of cyberspace, many scammers and fraudsters are taking advantage to con people including

those individuals from professional lines. Furthermore, the modus operandi seems to be very dynamic. Offenders

tend to employ various strategies to manipulate and then con the victim to obtain goods or money from them. The

most common strategy employed is by disguising as a person of authority to deceive their victim (Azianura Hani et

al., 2019; Button et al., 2014; Williams, Beardmore & Joinson, 2017). In this scenario, the perpetrator will pretend as

uniformed officers (e.g. police officer or custom officer) before they take advantage on their victims. According to

Modic and Lea (2013), authority figures will affect the individual level of trust and make them disclose their

personal information.

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target (Whitty, 2013).

Furthermore, the perpetrator will spend long hours building a relationship with their victims before making them comply with their requests. Usually, the strategy used by the perpetrator is by using the social media or exchanging emails that would lure the victim to establish a relationship and gaining the victim's trust (Azianura Hani et al., 2019). The perpetrator uses a fake profile (Whitty, 2013) and a charming language persuasive style to attract the victims and eventually deceive them (Cukier, Nesselroth& Cody, 2007). This grooming phase may take up months and the syndicate may start requesting for large amount of money once they are confident with their

Azianura Hani et al. (2019) identify three levels that are involved in an online romance scam. The first level includes building rapport with the potential victim. The second level operates to get their victim's trust and establishing a personal relationship with them. The scammer would offer gifts and promises to their victims. To gain money, the scammer would create a crisis such as getting detained by the custom officers or involved in an accident that requires a sum of money to get out of the situation. They would also disguise themselves as authorities to make it more genuine. Next step is the continuity of the scam. In this step, the scammer would instruct and ask for more money from their victims. They would use a threat, warning and alarm on their victims if they are not complying with their requests.

From the linguistic perspective, it is clear that the scammer would neglect the correct use of grammar and punctuations (Cukier, Nesselroth& Cody, 2007; Tan Hooi Koon & David Yoong, 2013). Studies were done by analyzing Nigerian Letter emails (Cukier&Nesseltroth, 2007) and online romance victims' email exchange share some similarities. Both studies show that the scammer would include religious language style to portray themselves as a trustworthy person with good intention. The scammer would also introduce themselves as an elite or professional with high income. The studies also show that scammers would aim for their victim's emotional state to make them feel pity towards the scammers. Also, according to Tan, Mohammad and Chen (2017), a friendly and casual chatting atmosphere is created by the fraudsters to gain their victims' trust by pretending as relatives or friends. They would create a story and ask for money, consistent with their lies and able to persuade victims to comply. Politeness strategy also involved in the opening phase, but eventually, they will become aggressive and impulsive especially when they ask their victims for money.

Meanwhile, Atkins and Huang (2013) studied persuasion technique that has been used by the fraudsters by examining a total of 200 phishing and advance-fee emails. The study shows that fraudsters use three types of triggers that are alert, warning, and attention to trigger fears among their victims when they received the emails and eventually make them quickly respond to the emails. Atkins and Huang (2013) also found that fraudsters use emails that would affect their victims' emotional state such as pitiful and fearful. They also use formality and courteous to make their victims feel comfortable when replying their emails (Atkins & Huang, 2013).

Another modus operandi employed by credit card fraudsters is by calling the potential victims by using the name or certain banks. During the conversation, the syndicate would act as a bank officer by informing the victims that there is an illegal transaction is taking over in overseas and the urgency to block the card immediately. This

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panic inducement coupled with other persuasive techniques by the syndicates would allow the victims to provide all

the needed details to the syndicates and eventually being the victim of credit card fraud (Commercial Crime

Investigation Department, 2019).

'Why people are getting scammed?' always remains a popular question among public. A number of studies

have been focussed to understand the contributing factors for scam victimization from various perspectives. In-

depth understanding on these factors can inculcate awareness among public and also at-risk individuals. With this in

mind, the present conceptual paper presentspsychological factors related to scam victimization. In regard to

psychological factors, two important domains, personality traits and self-control, will be acknowledged as

contributing factors for scam victimization. This is because many past researches acknowledged the important role

of personality traits in predicting commercialcrime victimization (Kirwan, Fullwood& Rooney, 2018, Modic& Lea,

2012; Oyibo&Vassileva, 2019). Self-control, on the other hand, also has been proven in facilitating scam

victimization among victims (Bossler & Holt, 2010; Modic& Lea, 2013; Reyns&Randa, 2019).

III. METHODOLOGY

The present study employs archival methodology using available articles on the topic of interest as a means for

data collection. Manuscripts as well as e-books focussing on psychological factors were searched and retrieved. For

identifying articles that focused on these psychological traits with scam victimization, the terms such as

'personality/ personality traits', and 'self-control' were used. These terms were searched with the relation of other

terms such as 'commercial crime', 'scam' and 'victimization'. With regards to psychological factors, articles

focussing on personality traits and self-control kept for analyses. Articles outside of these scopes were excluded. In

addition, snowball search method was also employed in order to retrieve more related articles that were used as

reference in one particular article. This methodology was utilized in previous study especially for concept paper

(Nazira Sadiron et al., 2019, Mohammad Rahim Kamaluddin et al., 2015). All the articles were searched using

several databases such as Google Scholar and Elsevier. Collating information from various sources ensure the

rigour and richness of information on the topic of interest. All of the articles retrieved as well as the information

collected from other sources were carefully refined and explored. The most relevant and informative articles were

chosen for this current review. In the end, 19 papers that are related to the personality and self-control themes are

selected to be analysed.

IV. RESULTS AND DISCUSSION

As mentioned earlier, two psychological traits, personality traits and self-control, will be microscopically

reviewed in order to offer better understanding on these two domains as contributing factors for scam victimization.

With regard to this, previous findings will be presented to strengthen the contributory roles of personality traits and

self-control.

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V. **PERSONALITY** 

According to the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric

Association (APA), personality traits are defined as the enduring patterns of perceiving, relating to, and thinking

about the environment and oneself that are exhibited in a wide range of social and personal contexts. From the view

of psychologists, personality is referred to as a person's unique long term pattern of thinking, emotions, and

behaviour (Burger, 2008). While personality reflects the unique characteristics of an individual, traits are defined as

"dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings and actions"

(McCrae & Costa, 1990).

Modic and Lea (2012) found that an introverted person is more prone to respond to fraud while people with

agreeableness trait are more likely to trust people who share common things with them. Meanwhile, Buchanan and

Whitty (2014) proved that individuals with romantic idealisation in their romantic relationship is more likely to

become an online romance scam victim. On the other hand, Oyibo and Vassileva (2019) found that neuroticism,

openness and consciousness are predictors to social influence (social learning, social comparison and social proof).

Their study showed that individuals who scored higher in neuroticism and/or scored low in openness and

agreeableness are prone to social influence strategies.

Apart from that, Judges et al. (2017) found that honesty-humility personality and consciousness acted as

predicting commercial crime risk victimization among the elderly sample. Kirwan, Fullwood and Rooney (2018)

suggested that individuals who scored low in extraverted, high openness to experience are more prone to click on

videos with phishing elements and would increase the likelihood to social media victimization. In contrast, study by

van de Weijer and Leukfeldt (2017) showed that personality traits are generally related to victimization but not

exclusively to cybercrime victimization. Conscientiousness and low emotional stability are found as predictors to

cybercrime victimization but only conscientiousness shows a relation with cybercrime victimization.

A study done by Alkıs and Temizel (2015) shows that extravert, agreeableness, consciousness and neuroticism

are easily influenced by using reciprocation while extraverted and neuroticism related to scarcity strategy. Wall and

colleagues (2019) generate three typology profiles based on the Big-Five personality, the Dark Triad personality

and Type D personality. The individual with malevolent profile (higher Dark Triad personality; above-average

extroversion and negative affect) is susceptible using scarcity strategy. Meanwhile, Socially Apt profile (higher

extraversion, agreeableness and conscientiousness; above-average openness) is more likely to be persuaded using

commitment strategy. Next, Fearful (higher score of neuroticism, social inhibition and negative affect; lower

extroversion; higher Type D personality) is easily persuaded with reciprocity, consensus, and commitment

strategies. Whitty (2019) added those with low romantic beliefs, had detected a scam and take their time to response

are more likely accurate in detecting a scam. On the other hand, Emami, Smith and Jorna (2019) found out that

victims are more likely had a relationship crisis and are more impulsive than their counterparts among Australian

sample.

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Some of the personality traits that are commonly studied in past researches include extroversion/introversion, conscientiousness, openness, neuroticism and agreeableness. Rehman, Nabi and Shahnawaz (2018) found that individuals with higher Machiavellian personality would use soft strategy (e.g. inspiration, rational persuasion, consultation, personal appeals, and ingratiation) and hard or forceful strategy (e.g. pressure, coalition and legitimizing) compared to low Machiavellianism. Based on previous researches, it is proven that personality factor is one of the contributing factors to explain commercial crime victimization. Table 1 depicts summary of few related studies on personality and scam victimization.

Table 1:Summary of Studies (Personality Factor)

Author(s)	Year	Method	Sample	Key findings
Modic& Lea	2012	Online survey	506 respondents aged 22 years old and above	Significant predictors Scam Response rate are premeditation, extroversion and agreeableness
Buchanan & Whitty	2014	Online survey	853 online daters aged between 19 to 81 years old	Romantic idealization shows higher chances of getting manipulated by scammer
Oyibo&Vassileva	2019	Mixed method	350 subjects	Neuroticism, openness and conscientiousness are predictors to social influence strategies
Judges et al.	2017	Survey	151 respondents aged 60 and 90 years old	Factors like lower cognitive functioning, lower honesty-humility and lower conscientiousness are exhibited by elderly victims
Kirwan, Fullwood& Rooney	2018	Online survey	295 sample of undergraduate students	Lower extraversion, higher openness to experience, using fewer devices and being on social medias for hours are predictors to vulnerability to video clickbait
Van de Weijer&Leukfeldt	2017	Survey	3 648 sample of Dutch individuals	Lower conscientiousness and emotional stability are predictors of cybercrime victimization but conscientiousness is related to the victimization

Alkış&Temizel	2015	Online	381 sample of	Reciprocation strategy effected on extrovert,
		survey	undergraduate	agreeableness, consciousness and
			students	neuroticism while scarcity strategy can be
				exerted on extrovert and neuroticism
Wall et al.	2019	Online	316 participants	Malevolent profile can be influenced by
		survey		scarcity strategy, Socially Apt profile is
				susceptible using commitment strategy
				while Fearful profile is most susceptible
				using reciprocity, consensus, and
				commitment strategies.
	2010	0.11		
Whitty	2019	Online	261 participants	Accuracy in human detection of dating scam
		survey		can be predicted with personality and
				behavior
Emami, Smith	2019	Survey	352 Australian	Amount of money, money transfer methods,
&Jorna			respondents (176	personal characteristics and distressing life
			victims and 176 non-	events are predictors of fraud victimization
			victims)	
Rehman,	2018	Survey	195 final-year	Machiavellianism is significant with both
Nabi&Shahnawaz			professional course	soft tactic and hard influential tactics

### VI. SELF-CONTROL

A growing body of literature has empirically assessed the General Theory of Crime (GTC) and supports the claim that low self-control is significantly related to crime and other analogous or imprudent behaviors (Mohammad Rahim Kamaluddin et al., 2013, Pratt & Cullen, 2000). According to GTC, self-control is defined as "the tendency to avoid acts whose long term costs exceed their momentary advantages" (Hirschi&Gottfredson, 1990). It reflects the ability of an individual to refrain from short term gratification. In other words, individuals who lack self-control are less likely to consider the negative outcomes of their actions and are more readily to indulge in behaviours that produce short term pleasures.

Hirschi and Gottfredson (1990) have stressed that low self-control produced a number of negative effects which include failure in activities, relationships, and social institutions that require planning, delayed gratification, and preferences for verbal and cognitive activities. It was proposed that such elements of self-control are established during early childhood and tend to exhibit such characteristics throughout lifespan and operate in tandem

(Hirschi&Gottfredson, 1990). Most importantly, such elements have been said to be persistent over the lifespan to produce a stable coherent construct within an individual (Hirschi&Gottfredson, 1990).

Mesch and Dodel (2018) summarized that communication activity and low self-control would increase the likelihood to disclose private information and answer malicious emails. Also, low self-control is found among online romance scam victims compared to non-victims (Whitty, 2018). Whitty (2013, 2018) states that victims who have low self-control are prone to get addicted to their relationship due to the occurrence of near win phenomena caused by their perpetrator (i.e buying a flight ticket to reunite with their lover). Modic and Lea (2013) state that psychological factors affect the susceptibility to scam including social influence, obeying to authorities, need for consistency and low self-control. A study done by Bossler and Holt (2010) proved that individuals with low self-control would experience password theft, may cause another person to alter their information that is saved inside their computer files. They are also likely to experience online harassment.

A recent study done by Reyns and Randa (2019) among college students found a direct relationship between peer deviance, low self-control and hacking victimization on identity theft. Holtfreter et al. (2010) found that self-control overlaps between fraud offending and victimization exposure among 305 undergraduate samples. The study also shows that self-control partially supports typical offending (i.e shoplifting, credit card fraud, driving licence fraud and academic fraud). Individuals with low self-control are also would risk themselves becoming a victim by increasing their exposure to fraud victimization. According to Yilu et al. (2019), individuals with poor self-control tend to help others. They are also shown to have higher altruism in the situation of crises. Thus, based on past studies, self-control does affect individual behaviour in predicting commercial crime victimization. Table 2 depicts the summary of few studies relating self-control and victimization.

**Table 2:**Summary of Studies (Self-Control Factor)

Author(s)	Year	Method	Sample	Key Finding
Mesch&Dodel	2018	Survey	1 539 participants	Online activities and low self-control related
				to sharing personal details
Whitty	2018	Online	200 participants,	Victims show high in impulsivity and lack of
		survey	victims and non-	self-control and also scored higher on
			victims	addiction towards their relationship
				compared to non-victims
Whitty	2013	Interview	20 participants,	The near win phenomena that is created by
			victims and non-	scammers also been included while
			victims	developing the Scammers Persuasive Model

Modic& Lea	2013	Experimental	Study 1	Younger individuals are more sceptics
			249 undergraduate	towards scam but would likely to respond to
			students	malicious offer.
			Study 2	Social psychological factors that are
			1 700 undergraduate	influence scam compliance are social
			and postgraduate	influence, compliance with authority, the
			students (wave I)	need for consistency and lack of self-control.
			Sample from an IT	
			web magazine (wave	
			II)	
			Samples from the	
			Scam Victims United	
			(wave III)	
Bossler &	2010	Survey	573 university	Self-control associated with password
Holt			students	violation by other person and online
				harassment
Reyns&Randa	2019	Online	972 undergraduate	Identity theft is associated with peer
		survey	students	deviance, low self-control and hacking
				victimization
Holtfreter et	2010	Survey	305 undergraduate	Low self-control partially explains the
al.			students	overlap between fraud offending and
				victimization exposure

Yilu et al.	2019	Experimental	Study 1	People with lack of self-control show more
			162 participants	altruism compared to those with high self-
				control
			Study 2	
			76 college students	
			Study 3(a)	
			73 college students	
			Study 3(b)	
			146 college students	
			Study 4	
			77 college students	

## VII. CONCLUSION

Nonviolent crimes such as commercial crimes such as frauds and scams are often understudied and underexplored. The extent and nature of frauds and scams in Malaysia can be viewed as perplexing and the prevalence are at an alarming rate. This paper also discusses the risk of commercial crime victimization by focussing on personality traits and self-control. It is crucial to highlight the importance of psychological factors in order to come out with a new solution to combat commercial crimes. For future research, other psychological factors such as cognition process or decision making while encountering with a risky financial decision should be considered to understand why people become commercial crime victims. As such, it is always vital to understand the factors contributing to scam victimization. In-depth understanding on contributing factors especially psychological factors can provide substantial input for developing psychosocial interventions for at-risk individuals to ameliorate those factors to avoid being the easy target.

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