Contextual and multifactorial influence on perception of safety from crime among selected Malaysians

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ABSTRACT

Despite official crime figures showing a continuous decline in the rate of crime, the perception of the high level of crime by many Malaysians suggests other factors are affecting their perception of safety from crime. The objective of this study is to identify and understand these factors through a qualitative study that employs online focus group discussions. This study argues that the perception of safety from crime is the result of interactions of a number of factors such as the experience of victimisation, crime information, neighbourhood conditions as well as the perception of law enforcement and government crime reduction policy. The sense of safety from crime is also contextual as it may fluctuate according to time, place, activities and situations. Analysis of the data from the focus group discussions found that participants generally have a high perception of safety from crime. However, participants felt less safe when they were in public places and when interacting with online services. In most circumstances, participants' sense of safety is affected by the pressure to be vigilant and to avoid criminal victimisation. This pressure is exacerbated by low-quality information on crime that is often received through social media. Crime information on social media has a significant impact on participants' perceptions of crime. The overall analysis of the findings suggests that the most important factor which affects the perception of safety from crime among these selected Malaysians is their sense of safety in their homes and their neighbourhood. Hence, efforts to increase the sense of safety among Malaysians should focus on this context.

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Introduction

Feeling safe is an important factor in determining the well-being of a society. (OECD, 2020). Perception of safety has significant influence on daily life of members of society. Feeling safe affect decision making on personal, familial social and commercial matters. High level of sense of safety shows a positive attitude towards life. It also shows confidence in society and authorities' ability to handle risk of crime to person and property (see Skogan, 1986; Ross, 1993).

Although perception of safety broadly covers various aspect of safety, which ranges from personal safety, digital safety and food safety (see The Economist Intelligence Unit, 2015). the term is often linked to personal safety from crime. Lately, there is an increase trend to evaluate perception of safety, which is more complex, than perception of crime. Public perception of crime and safety is the

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result of interaction of a number of factors including experience of victimisation and information on crime as well as perception of effectiveness of law enforcement and government policies in providing safety from crime. Additionally, steps taken by member of society to avoid or reduce risk from harm and victimisation also affect their perception of safety from crime. (see Box, S *et al.*, 1988). Thus, exploring the public sense of safety from crime is necessary, particularly as part of government policy making in relation to individual and social well-being.

In Malaysia, the number of index crime had been declining from 355.2 per 100,000 population in 2016 to 194 in 2020 (Bernama.com., 2020; Jabatan Statistik Malaysia, 2020; Malay Mail, 2016; Channel News Asia, 2016). Despite this constant decline, surveys conducted by the Federal Government (primarily by Pemandu and Ministry of Home Affairs) indicated the persistence of fear of crime among members of society (The Sun Daily, 2018). This apparent discrepancy between official rate of crime and public perception of rate of crime would often be attributed to the persistence of fear of crime among the population. (see Garofalo, J. And Laub, J., 1978). However, this situation clearly indicates that there is an issue of perception of safety from crime among the Malaysian population. Based on this context, this study hopes to offer insights into the perspective on safety from crime among selected Malaysians through focus group discussions.

This study posits that perception of safety from crime is formed by the interaction of various factors and contextual conditions. Various factors affect the views and feeling of individuals about risk of criminal victimisation and their exposure to crime. (see Box, S *et al.*, 1988). Even if individuals might normally feel safe in general, their level of feeling safe may vary according to time, place, activities and situations. This is because the perception of safety from crime is also contextual. Hence, the objective of this study is to explore the perception of safety among selected Malaysians, in relation to criminal risks to their person and property. The knowledge gained from this study will be valuable to the development of measures, policies, or programmes to improve public sense of safety.

Literature Review

Perception of safety from crime and fear of crime

A person's perception of safety can be conceptualised as a sense of freedom from fear, harms or losses. Brand *et al.* (2021) in their study found three interconnecting themes that link to perception of safety: "the absence of negative aspects, the presence of positive aspects and not having to think about safety". According to a study by OECD (2020), "...safety is about freedom from harm – whether that harm comes in the form of crime, conflict, violence, terrorism, accidents or natural disasters".

A sense of safety from crime broadly means a sense of being free from crime. It includes a sense that exposure to crime and the risk of becoming victim of crime is low or non-existence. A person's sense of safety includes a sense of personal ability to deal with threat to the safety of his person, family and property. Feeling safe is in conjunction with a natural sense and desire for a life of peace and contentment. The sense of safety from crime could be seen as working inversely to fear of crime. A person could be said to have a lower perception of safety when the level of his fear of crime is high. The lesser he is concerned about becoming a victim of crime the higher would be his perception of safety. Arguably, a lower sense of safety does not immediately translate into a higher fear of crime. Factors that negatively affect perception of safety from crime are not necessarily the same factors that induce fear of crime. Instead, the presence of fear of becoming a victim of crime is only one indicator that connects perception of safety from crime and fear of crime.

There are other specific factors that are not related to fear of crime but could affect perception of safety from crime. For example, being able to own and live in a home could contribute to a sense of safety and have very little to do with fear of crime (Petersson, *et al.*, 2021). According to Hinkel (2004), perception of safety is not similar to perception of fear of crime. Individuals would evaluate the condition of their personal safety from the aspect of the quality of life they are experiencing in contrast to fear of crime which would require their evaluation or estimation of the impact of crime on them were it to happen (Jansson, 2019). For example, an indicator for feelings of safety is whether a person feels safe walking alone at night in the city or they live. The OECD survey found 85% of the people in Finland, Switzerland, Iceland, Slovenia and Norway, feel safe to do so (OECD, 2020).

The approach taken by this paper is that a person's perception of safety from crime to his person and property is influenced by multiple factors. The findings of a report in Saskatchewan, Canada (Jewell, 2014) suggest factors other than criminal victimisation may play important roles in influencing the perception of safety and fear of crime in society. (see also van Dijk, *et al.* (2007); Community Safety - Auckland Council, 2012)

Perception of safety from crime and demography

Perception of safety from crime may be influenced by demographic factors such as age and level of education. According to Bell (2009), there is a positive correlation between level of education and perception of personal safety. Those with higher level of education seem to find it more important to feel safe. Bell also found that those between the age of 18-24, particularly women, desire a higher level of safety. This group felt unsafe to be out at night and fear walking in dark and low-lit areas. The British Crime Survey also found that the elderly, women and those living in inner city areas are more concerned about their personal safety than other groups. (Box *et al.* 1988)

Perception of safety from crime in the neighbourhood

The condition of the neighbourhood may also affect a person's sense of safety. According to Skogan (1986), fear of crime in a neighbourhood are often not consistent with the real situation or rate of crime in a particular area. Fear of crime is influenced by primary and secondary knowledge of the level or rate of crime in a neighbourhood area. It is also influenced by observation of social and physical disorganisation in a locality. This perceived lack of order may affect the social cohesion of a community and may lead to further social deterioration which in turn increases sense of vulnerability.

According to Donnelly (1989), individuals' interaction with the conditions of their neighbourhood may affect the level of their fear of crime. A sense of losing control of one's personal safety in relation to the surrounding environment could induce powerlessness and thus, accentuate fear of crime. This condition will exacerbate when a person has to live in a socially and physically disorganised neighbourhood and suffering from persistent incivility. Thus, factors in the community where one lives in may affect his sense of safety from crime (O'Mahony and Quinn, 1999). The composition of the population in an area in terms of ethnic mixture, health condition, and poverty may significantly influence perception on crime and safety, often more than the physical condition of the neighbourhood itself (Mellgren, 2011). Austin et al. (2007) in their study also found that the quality of the neighbourhood and housing may impact on the local satisfactory level and perception of feeling safe. Neighbourhood degradations have a negative effect on perception of safety and incivility will further accentuate fear of crime. Their study also supports Donnelly (1989) arguments that a sense of diminishing control would lower the sense of safety. A study by Vitala (2011) on Mexico City points towards the increased number of gated communities as a reaction to perceived crime risk. However, living in such communities does not necessarily reduce fear of crime significantly in comparison to those living in non-gated communities. Vitala noted that overall socio-economic deprivation, social marginality and city planning, which causes social organisation, have a strong impact on perception of crime.

The strength of relationship among members of a community in a neighbourhood is also a key factor that affects perception of safety. A study by Wilson-Doenges (2000) found that, despite living in gated communities, the apparent lack of community solidarity in those neighbourhood may not improve the sense of safety after all.

A study in Malaysia by Md Sakip *et al.* (2013) on perception of safety in gated and non-gated communities, found that it is affected by multiple factors: attitude, experience, the condition of the surroundings, the relationship among members of the community, home ownership, culture and way of life. In their analysis, good relationship among members of the community is a very important factor in increasing the sense of safety in the neighbourhood. Those living in non-gated communities does not feel less safe than those in gated community where their strong social bond persists.

Perception of safety from crime in public places

A sense of safety in public places is an important factor that affects a person's freedom individually and collectively. Irrational or unfounded fear of being in public places will have detrimental effects on the socio-economic and cultural development of a locality. (see Hanslmaier, M., 2013)

Various factors affect the perception of safety in public places. The surrounding conditions of public places, such as the condition of public pathways could affect social capital and perception of personal safety. It is very important to pay attention to social and physical condition of public places to ensure sense of safety from crime (see Wood *et al.*, 2008). Foster *et al.* (2014) found that fear of crime affects pedestrians' use of public places and therefore, it is necessary to improve the design of public spaces and built environment to improve and enhance their sense of safety. Well-designed public space could draw more members of the public to such areas and will lead to increase social interaction and reduction in fear of crime. These are among the main reasons for the employment of CPTED (Crime Prevention Through Environmental Design) for public places (Cozens *et al.* 2005). Technologies like GIS (*geographical information system*) and holistic town planning could also increase sense of safety in public area. Users and visitors should feel safer if they are able to know the safety status of a locality and make rational decision on visiting that area.

Additionally, users and visitors of public places at night will feel safer if the areas are well-lit (Boyce *et al.* 2000). Good lightings will increase sense of safety and reduce fear of crime (Painter, 1988). Users of this space at night will be able to see potential threats and be more aware of their surroundings.

Perception of safety from crime on public transport

Being safe from crime when using public transportation is as critical to users as good services and punctuality (Khalid, 2014). It is very important to ensure passengers and other users that public transportation is safe because fear and avoidance of public transportation may affect personal freedom of movement as well as long term environmental objective. Additionally, the surrounding built environment of train stations, lightings, as well as social and commercial activities need to assuage users' perception of safety (Coppola and Silvestri, 2020). Technologies like smartphone apps could also facilitate public transport users' sense of safety (Hamilton, 2011)

Public transport users are often under pressure to use the facilities due to the demand to travel to work and business. A study on paratransit services in Bandung Indonesia, found that a lower perception of safety could be caused by users feeling under pressure to

use the particular mode of transportation coupled with a perceived weak law enforcement in the area due to low police or other security presence (Joewono and Kubota, 2005).

Thus, lightings and safety facilities, presence of security guards, behaviour of other users as well as the arrangements and designs of a station could affect users' sense of safety (Abdul Hamid, et al. 2015). Female users are particularly concerned about sexual harassment when using public transportation during peak hours. On this aspect, Yavuz dan Welch (2010) found that female passengers using transit trains look for sign of surveillance and availability of assistance on the locations. They are also affected by the physical conditions of trains and stations, as well civility of other users.

Perception of safety from cybercrime

Increasing social interaction and doing business online correlate with increasing concerns about cybercrime (Yar, 2009). The advent of the Internet creates new social, economic and political opportunities as well new forms of criminal threat, risk, and behaviour. (Brenner, 2004). Cybercrime generally refers to crimes that are facilitated by the computer including computer networks. Cybercrime poses a major challenge to the development of the Internet. (Britz, 2008) As personal, social and economic life in the 21st century become more intertwined with the Internet, it is very important not only to inhibit cybercrime, but also to reduce fear of online criminal victimisation.

Various researches on cybercrime have identified the problems of fear of online criminal victimisation (Holt and Bossler, 2008). According to Roberts et.al (2013), fear of becoming victim of cybercrime, especially identity theft has become the biggest threat to quality of life. Fear of cybercrime is now on par with fear of conventional crimes. Brands et al. (2019) focusses their study on financial crimes on the Internet and found that there is a moderate level of anxiety among the population of Netherlands for this type of crimes. However, their study shows that the persistence of avoidance behaviour could be indicative of fear of crime online.

Fear of cybercrime creates a hurdle to personal freedom and opportunities online. According to Roberts et.al (2003), fear of cybercrime creates bad implications on the trustworthiness and confidence of users in using the Internet, especially for the purpose of e-commerce. Forsythe dan Shi (2003) look at negative perception of risk on the behaviour of shoppers online. They found uncertainty in the outcome of online transaction has caused shoppers to avoid Internet business transaction. Fear of financial risk has also caused users to avoid making huge spending online.

Increasing pervasiveness of e-commerce activities is accompanied by fear of becoming victim of identity theft and abuse of personal data. Nonetheless, such concerns have led to proliferation of e-commerce websites or portal that promise protection of privacy and more secure transaction. Similarly, Internet shoppers tend to avoid less trustworthy or reputable e-commerce websites and portals (Hille, et al. 2015).

Fear of cybercrime could soon, quantitatively and qualitatively, exceeds fear of conventional crimes. Low confidence in Internet protection and a sense of losing control online will greatly magnify this problem. On the other hand, Internet crime is also real and some of the fears are not totally unfounded. Internet fraud, primarily love scams, are serious cybercrime problems in Malaysia. Studies have shown that these fraudsters and scammers utilise notorious strategies to defraud their victims (see Shaari *et al.* 2019). Fear of cybercrime has impacted users' confidence of the Internet and could stall the progress of e-commerce (Roberts *et al.* 2013). Even worse and more debilitating is when the level of fear has reached paranoia caused by delusion and misinformation. (Mason *et al.* 2014)

However, Internet users and e-shoppers are adopting strategies and techniques to avoid becoming victim of cybercrime. These efforts are indicative of resilience, although at the same time, could be driven by irrational fear of victimisation and abuse. However, Internet users who are under educated about online self-protection may feel defeated and may limit their online interactions (Brands and Wilsem, 2019). Lamentably, users with lower self-control could also be inadvertently contributing to exposure to cybercrimes and making themselves vulnerable to fraudsters (see Ngo, and Paternoster, 2011; Bossler and Holt, 2010).

Nonetheless, Internet users who had actually been victim of online crimes or knew of a victim are more likely to be antagonistic of online safety (Brands and van Wilsem, 2019). A study by Virtanen (2017) found that individuals who had been victims of cybercrimes – especially women and individuals from lower social status – have a high fear of becoming a victim again. Ashalan (2006) also found that elderly Internet users tend to have a higher level of fear of cybercrime than younger Internet users.

Media and perception of safety from crime

Recent discourse on fear of crime has acknowledged the potent impact of social media on perception of crime and safety. Media has positive and negative impact on perception of crime and safety among the public. Media reports on crime are susceptible to bias and inaccuracy.

Preceding the advent of the Internet, broadcast or print media have been identified as key influencers on individual and society's perception of crime (Lowry *et al.* 2003). Studies have shown that news reports on violent crimes on printed media have contributed significantly to fear crime among readers (Chadee, 2001) According to Capobianco (2008), media provide the main source of information on crime. Perhaps, this is because media news and information are readily accessible to the public as compared to official government information.

Conventional and social media are important sources of information on crime and have a major influence on perception of safety from crime. A study by Curiel et.al (2020) of 32 million tweets on the Tweeter apps in 18 Latin American countries over a period of 70 days found that 15 out of 100 tweets are about crime and fear of crime. The study found that social media is comparable to conventional media in the way that it is prone to report violent and sexual crimes. The study concludes that social media should be considered as a manifestation of fear of crime.

Jones (2017) also found that social media has a more significant influence on perception of crime and safety in comparison to conventional media. This is due to a higher frequency of visit to social media and that it has become a norm to refer to social media for news and information on crime.

The level of media-induced fear of crime will depend on the level of trustworthiness of the media among readers as well as the way articles are written and the location of crime reported (Roger, 2005). However, as media reporting may lead to a skewed perception of safety, it is very important in crime prevention strategy to prevent abuse of the media and the distribution of false information on crime (Cappobiano, 2008). Government strategy in controlling fear of crime need to include developing the sharing of information between government and the media to ensure correct information on crime is disseminated and to avoid misperception of the actual situation on crime and safety. Social media could be used to assist the police in controlling crime, but requires public confidence in them as well.

Qualitative methodology: online focus group discussion

The main objective of this study is to explore and identify the perception of safety from crime based on analysis of focus group discussions of selected Malaysians. Based on the literatures discussed above, this study conceptualises perception of safety from crime as a construct of multiple factors. The schedule of areas of discussion for this focus group is as follows:

- i. *General perception of safety*
- ii. *General perception of the rate of crime*
- iii. *Perception of safety from crime in the neighbourhood*
- iv. *Perception of safety from crime in public places*
- v. *Perception of safety from crime when using public transportaion*
- vi. *Perception of safety from crime when using online services*
- vii. *Perception of safety and information on crime*

The prime reason for conducting qualitative research which employs focus group discussion is because this approach allows for the collection of data containing subjective views of the selected groups. As a comparison, qualitative interviews will only gather data from the interviewee's individual perspective.

The focus group approach enables the exploration of the perception of the participants interactively. This appraoch will enable the collection of data that is more open to the experience, views and feelings of the focus group participants and thus, illustrating the perspectives of the research participants in more detail (see Creswell, 2014). This process of inquiry is a social inquiry that focusses on how human interpret and give meaning to their experience and the world they live in (Othman, 2012). It enables the researcher to understand the meanings given by the participants in their natural setting (Denzin and Lincoln, 1994). Thus, a qualitative inquiry could provide answers to the questions of 'why' and 'how' in relation to the phenomena under the study (Syed Muhammad, 2016).

Focus droup discussions also enable interactions among participants in the group which would lead to views or opinions that are collective in nature (Fok Han-Leung, 2009). This approach is very suitable in collecting views and opinions on feeling safe which is esentially connected to the lives of those from the same background. This qualitative approach will make it possible to dwelve into the concerns and worries that are shared among the group members, as well as those which are more unique to the individual participant. Detail responses comments would provide a more detailed data as compared to quantitative responses. The main focus of focus group discussion is to scrutinise the meanings that were collectively provided by a group towards issues that were discussed. The spontaneity of focus group discussions could generate unexpected perceptions and findings which will be made explicit through a thematic analysis of the transcripts.

It is important to remember that each focus group discussion was not able to thoroughly cover all matters in the schedule. This was a discursive activity where the dynamics of a group may lead groups to spend more their discussion on areas differently from other groups. The facilitators, however, had ensured that all aspects of the discussions were covered in all the focus group discussions.

Focus group participants

The focus group discussion for this study covers ten groups involving fifty one participants of whom nineteen are males and thirty two are females. Their average age is 30. The youngest participant was 19 years old and the oldest was 53 years old. More than half of the participants were private sector and government employees. The rest were students at higher education institutions and housewives. A small number of them are self-employed or looking for employment.

The focus groups were from the states of Kuala Lumpur (Federal Territory), Selangor, Terenganu, Kelantan, and Sabah. Geographically, Kuala Lumpur and Selangor are in the west coast of the Peninsular of Malaysia. Both Terenganu and Kelantan are

in the east coast. Sabah is a state in East Malaysia located in the north of Borneo. The focus groups from Kuala Lumpur and Selangor were all from urban areas. The rest of the participants were from a mixture of urban, semi-urban and rural areas.

The focus group discussions were originally planned to be conducted face to face. Due to the Covid-19 pandemic, the Federal Government of Malaysia had imposed strict control on movements (backed by criminal sanctions) in the month of January and February of 2021, the focus group discussions had to be held online. During this period, the Federal Government had prohibited movement across districts and state boundaries and imposes restrictions on face-to-face gatherings (Lobe *et al.* 2020). At the same time, focus group facilitators and participants also wished to avoid infection from the virus. As a consequence, the focus group discussions had to be held online (Stancanelli, 2010). Potential participants were contacted by telephone, emails and messenger apps (such as *WhatsApp*).

Data collection and analysis

There are major differences between online and face-to face focus group discussions (Murgado-Armenteros *et al.* 2012). The distance and separation between researchers and focus group participants proves to be very challenging (Lijadi and van Schalkwyk, 2015). One problem with organising online focus group discussions, as in this study, was the difficulty in setting up meeting date and time because participants were at home under a lockdown. This situation is in contrast to conventional face-to-face focus group discussion where groups will be meeting at appointed locations. In these focus group discussions, online meetings had to be conducted at night after most of the participants working hours. As most of the participants would join the meeting while at home, their domestic conditions would, at times, interrupted the discussion. Additionally, technological issues may affect discussion as well. Most participants were using smartphones with varying quality which affects the audio and video clarity of the discussions. On a number of occasions, the discussions were interrupted by bad Internet connections and participants hardware issues.

Moderators and participants would arrange the date and time for the online focus group discussions. Sometimes, the agreed date and time had to be changed at the very last minute. Consequently, the agreed date and time for the meeting tended to be decided very close to the actual date of the meeting. As a consequence, virtually all the focus group meetings had to be held at night when the participant could be at home and not encumbered by their work.

Before a focus group session began, participants were informed on the basic informations about the research and the matters that the discussion will cover as well as the duration of the discussion. Focus group members were brief as to the research and were informed that for the purpose of the discussion, 'crime' would refer to crimes against the person and property.

Focus groups participants were also introduced to the facilitator and the assistants. Participants were briefed on the rules of the discussion and were informed that the session would be recorded. They were also informed that their privacy would be protected. The discussions began after participants understood that they were doing so voluntarily, gave their consent and agreed to join the discussion.

The focus group online discussions were facilitated by Google Meet apps. The Google Meet apps was chosen because the researchers and the participants were familiar with it (Santosh et al. 2020). This app is easy to download into smartphones and very user friendly. Nearly all participants joined the discussions using smartphones. The advent of the Covid-19 pandemic has necessitated the use of these form of apps among Malaysians for the purpose of work, study and socialising. More importantly, Google Meet enables discussions to be recorded in a video format and saved in Google Drive. This was valuable because it greatly assists the process of transcribing the discussions.

The recorded discussion from every focus group were transcribed (Halcomb and Davidson, 2006). Statements in the transcripts were quoted and categorised based on the seven areas of discussion identified from the literatures. The focus of the analysis is to form themes which relates to the broader research problem. The analysis is focussed on matters that affect the perception of safety by participants of the focus group discussion.

Results

Perception of Safety from crime in general

Almost all of the focus group participants indicated that generally, they felt a high sense of safety from crime. Nonetheless, they remarked that it is difficult to have a complete sense of safety from crime. One focus group from the state of Sabah, however, felt their sense of safety from crime was only moderate and not high. Participants in this focus group, though, admitted that those living in urban areas are less likely to have a higher sense of safety in comparison to those living in the rural areas.

Despite their general perception that living in Malaysia very safe, participants generally believed that the rate of crime is high. This situation is rather perplexing and anomalous because, despite the perception that the rate of crime is high, the participants generally feel safe. Clearly, there is a disjunctive relationship between the sense of safety and the perception of rate of crime among the participants. This contradiction, therefore, provides the underlying basis for further analysis of the focus groups' responses: Why do the focus group participants feel safe when they perceived the rate of crime to be high?

Perception of safety is a combination of various factors that influence the mind and emotion of a person. Participants were further asked on factors that might affect their general sense of safety from crime.

Government and law enforcement initiatives

Participants' perception of safety from crime is influenced by their perception of government and law enforcement crime prevention and crime reduction activities. Police efforts in ensuring safety and security, such as regular police patrol and road blocks engenders a higher sense of safety among the participants. A number of participants reported feeling safer during the movement control order put in place by the federal government to tackle the Covid-19 pandemic. Participants felt that higher police presence and their patrols would hinder criminal activities. Thus, it could be said that the visibility of and accessibility to the police are important factors to feeling safe. The participants also alluded on how various crime reduction activities by the police, particularly those that engages members of the public, have help to increase their sense of feeling safe.

Personal vigilance

Even though, in general, the participants' perception of risk of criminal victimisation is low, they felt that they need to be in constant vigilance because such risk continues to persist. Being vigilant against threat to personal safety or risk avoidance is not an abnormal human trait provided that it is rational and well founded.

Arguably, an important factor influencing their perception of safety would be the information that they received on crime, and how they reacted to it. News and information that they received about crimes in Malaysia and their localities, generated concerns that there is still risk of criminal victimisation and hence, the need to remain watchful. Similarly, concerns about safety are also influenced by information they received from close friends and relatives. The more they trust the information, the higher would be their concerns. Consequently, televised news and social media reports on crime seem to have significant effect on participants perception of safety.

Self-protection and Self-control

Participants reported that they have taken steps to increase the security of their homes. These steps include installing security alarm, close circuit television (or CCTV) as well as metal grills on doors and windows of their residences. These actions show steps were taken to mitigate possible risk of criminal victimisation. A sense of ability to protect or preserve ones' personal safety is important to a person's sense of safety (Asencio et al. 2014). Focus group participants stated that they have a stronger sense of safety when they feel able and empowered to protect themselves. The ability to self-protect effectively is important because it provide a sense control to the individual, and assuage the pressure to be vigilance. Conversely, a sense of losing control of one's own safety would generate sense of exposure and vulnerability.

Conversely, the persistency of self-protection behaviour, whether to protect one's self and his or her family are indicative of concerns about safety from crime. Some participants sense of vulnerability could be rooted in personal experience of victimisation or hearing the experience of others (Jackson, 2009). One participant reported installing CCTV and metal grills (on door and windows) after experiencing an attempt at house invasion of her family home. Thus, steps and measures to self-protect, even to extent of target hardening one's property, can be described as signs of personal resilience, self-initiatives and autonomy. Participants do not seem to think that their behaviour is irrational or abnormal. It is common for home owners in Malaysia to fence their house and install metal grills on doors and windows of their homes for added security.

Perception of current socio-economic condition

The perceived socio-economic downturned due to Covid-19 pandemic created the impression that unemployment and lack of employment opportunity would compel more individuals into crime. They were concerned about possible increase in theft and robbery caused by socio-economic disparity since envy or jealousy could drive some individuals to victimise those who are perceived to be more economically well-off.

In some areas, persistent presence of drug addict provided a source of concerns about personal safety. Drug addicts are linked to lack of employment or economic opportunity. It was also presumed that drug addicts, driven by their addiction and lack of money, would quickly resort to petty crimes to fund their addiction.

Presence of foreigners

Participants general sense of safety seemed negatively affected by their perception of high number of foreigners in Malaysia. This remarked is particularly in reference to foreign labourers, the majority of whom are from Indonesia, Bangladesh and Myanmar as well as undocumented or illegal immigrants. These groups are often blamed, although contradicted by statistics, for increase crimes Malaysia. The focus group from the state of Sabah were particularly concerned that economic downturn due to lack of economic opportunity caused by the Covid-19 pandemic would cause illegal foreigners to commit crime when they were out of work.

Comparison with other countries

Comparison with other, more developed countries is also a source of feeling less safe in Malaysia. Participants who had been to or lived in more developed countries such as Singapore and western countries, had experienced a higher sense of safety. Nonetheless, participants remarked that, in general, Malaysia is still safer in comparison to countries with high crime rate.

Perception of safety from crime in the neighbourhood

The focus groups also discussed about their sense of safety from crime in their neighbourhood. The physical and social conditions of their neighbourhood significantly influence their perception of safety. The level of social interaction within their community also affects their confidence in the ability of their community to deal with crime and safety issues. More specific factors could be identified from the focus group discussion.

Neighbourhood cooperation and community relationship

Close cooperation and relationship among members of a community are very important factors affecting the sense of safety from crime in a community. Close knit community create strong ties that generate a sense of belonging and mutual assistance. Participants generally feel safer living in a community that look after each other. They may benefit from collective vigilance which will increase their sense of safety in the community. This informal trust framework, in which members of a community trust each other is thus, fundamental to their collective efficacy.

Eventually, the perceived level of unity among members of a community would also influence the sense of safety in their neighbourhood. The ability of the community to work together, such as in conducting regular neighbourhood voluntary patrol, is seen as evidence of this unity and hence, increase sense of safety. However, when the relationship among members of the community is weaker where there is a lack of mutual voluntary effort to protect each other, their sense of safety is negatively affected. (see Velasquez, A.J., et.al, 2021)

Community safety and security practices

Conversely, however, the presence of neighbourhood-based community protection effort, whether formally or informally organised could increase the sense of safety in a neighbourhood. Focus groups participants felt that activities, such as community patrols, by Rukun Tetangga (neighbourhood unity programme) voluntary patrol scheme and Ikatan Relawan Rakyat or RELA (Malaysia Volunteers Corps) in the neighbourhood, have significantly improved their sense of safety from crime particularly in comparison to the times when such patrol was absent. Their sense of safety is further enhanced when these neighbourhood patrol activities were conducted together with the support of the Royal Malaysian Police.

In contrast, focus group participants who lived in gated communities and apartments had to rely on private security guards to assist in protecting their community. This shows that where the 'community' voluntary effort is missing, the gap would be replaced by private security providers. However, a broader concern is that community with weak ties might opt to pay private security firms to provide security.

Technology and information sharing

Communication and security technology play important role in ensuring safety from crime. Participants living in areas with private security (gated neighbourhood, apartments with security) were appreciative of the CCTVs (closed circuit television) in their neighbourhood. Some participants also felt the need to have CCTV in their private homes believing it would deter potential criminals.

Being able to share information about crime and safety on their neighbourhood through social media and messaging apps such as WhatsApp also significantly improve participants' sense of safety in their neighbourhood.

Perception of rising crime rate in the neighbourhood

As alluded to above, constant occurrence of certain crimes in their locality and its vicinity affects some participants perception of safety. A number of participants observed that petty crimes, such as theft of agricultural product from fruit farms, seemed to occur endlessly and almost to be expected. Regular and observable presence of drug addicts in their neighbourhood, even in small number, had generated consternation among the participants. These conditions caused anxiety and pressure to be vigilance, thus, affecting their sense of safety. Similarly, a serious or violent crime that occur in the immediate community would have a profound and lasting effect on the sense of safety of themselves and their families (See Yuan et al. 2015).

Perception of Safety from Crime in Public Places

Focus group participants were also asked about their perception of safety from crime when there were in public places. In general, participants did not regard public places as highly safe. A number of factors affect their perception of safety in this space.

Familiarity and proximity to home

Despite a general sense of foreboding when in public places, most focus group participants felt safer when they were in locations that are familiar or close to their homes. Thus, a higher sense of anxiety commonly permeates them when they were in public places that are unfamiliar or far from home. Female participants are generally more concerned about being away from home or its vicinity.

The pressure to be vigilance against risk

Responses from focus group participants seem to indicate that they felt pressured to be more vigilant when they were in public places. (see Zhang, F. et.al, 2021). They felt that being in this space increases their vulnerability to risk and threats which are not immediately known to themselves. Personal experience of or knowledge about crimes that had happened in an area would have contributed to this sense of vulnerability. A focus group participant from the state of Kelantan related that, despite a particular public area was generally safe, he was worried about the safety of his motorcycle as the area was notorious for motorcycle theft.

Female participants felt the need to be more alert and vigilant particularly when they are not familiar with a place, being distant from their locality or neighbourhood and travelling alone. They also perceived crowded places as posing higher risk of victimisation.

Some female participants also felt that they have to take precautionary measures, such as carrying sling bags instead of handbags, in order to avoid being targeted. The precautions, risk avoidance and self-protection measures that they have taken indicate a strong sense of autonomy and self-control in the face of a perceived sense of lack of safety from crime. However, unfounded fear of crime could lead towards excessive self-protection measures and irrational decision to avoid public places, and thus, reducing their own personal freedom.

Experience of criminal victimization

Experience of incivility, harassment and crime in public places may have affected participants confidence of this space. For example, a focus group participant related her experience of sexual harassment while visiting a bank.

On the other hand, personal sense of safety would improve despite being in an unfamiliar place if one is accompanied by someone close or known to the participants. Hence, female participants, in particular, reported feeling more secure in public places when they were travelling with their spouse or a family member.

Additionally, knowledge or awareness of sources of assistance in case any trouble happened, also contribute to a better sense of safety. Participants reported that, for example, the presence of auxiliary police post in the vicinity of some Light Rail Transit stations help to attenuate any worries of crime risk.

The presence of foreigners

Some focus group participants expressed concerns about the presence of foreign workers in public places. The presence of large numbers of foreign workers congregating in some parts of the capital city, Kuala Lumpur, over the weekends, engenders a feeling of insecurity and uneasiness, especially among some female participants. Some participants seemed to link foreign workers with illegal immigrants who had been blamed for incivility, harassment, violence and robbery. Clearly, the bad reputation or stereotypes attached to some segments of foreign workers have a negative effect on the perception of safety from crime in public place.

Perception of safety from crime when using public transportation

Focus groups participants generally did not perceived public transportation in Malaysia as highly safe from crime. However, most are of the view that there had been tremendous improvements in the quality of public transportation and ancillary services in this country including noticeable enhancement of safety from crime. Participants who were living in Kuala Lumpur (the capital city of Malaysia) and the adjacent state of Selangor were highly appreciative of the provision of women-only coach on commuter trains. There are participants who mentioned that public transportation drivers nowadays, seemed to have been trained to be more sensitive to passengers' need for safety, especially from harassments. Some participants also stated that the use of information technology, particularly by e-hailing providers, had significantly increase their sense of safety when using such services.

Nonetheless, the participants generally have a low perception of safety in relation to using public transportation. According to some participants, they were using public transportation out of necessity and would avoid doing so if they can afford it. Clearly, this lack of choice imposes pressure to be vigilance on the part of users.

Participants in rural area were especially concerned about their safety from crime when using public transportation because they would have to travel longer distances. When using taxi in rural areas, participants related about having to share the journey with other strangers. However, they would feel more anxious and vulnerable when travelling alone with the driver on such a journey.

In the conurbation of Kuala Lumpur and adjacent cities in Selangor, participants remarked that the use of public transportation is necessary in order to travel to and from work. Female participants felt particularly vulnerable when travelling on crowded commuter trains and buses. They were more concerned for their safety especially when travelling home at night.

Personal experience of victimization when using public transportation also affects some participants sense of safety. One participant related her experience of physical molestation as well as witnessing other passenger being molested when using public transport.

Another participant shared her experience of not receiving assistance from a bus driver when she feared for her safety during a bus ride in Kuala Lumpur.

Perception of safety from online crimes

The safety of online transactions and services are a major concern to focus group participants. Participants generally expressed a moderate to low perception of safety of online services, particularly e-commerce.

Despite these concerns, a number of factors have helped to maintain some degree of confidence in using online transaction and services. Participants generally voiced their confidence and trust in Malaysian online banking facilities. They were also broadly confident in the integrity of online security system of government bodies and private sector operators. Their sense of safety is supported by their perception that Malaysian laws and regulations relating to online services are satisfactory and could provide some degree of protection. They saw these laws and regulations as well as government policies and initiatives were in place to tackle abuse of online services. Thus, serious attendance to issues of cyber security through law enforcement and monitoring by relevant agencies could help to sustain users' sense of safety in online services.

As mentioned above, a number of factors seem to affect the participants' sense of safety in online services.

Fear of online fraud and internet scammer

Participants' concerns about crime on the Internet is largely due to news they received about Internet frauds and e-commerce scams. Participants' responses indicate that they perceived a prevalence of online scammers taking advantage of e-commerce. Although this reaction could be partly described as technophobia, some participants reported of being victims of online fraud, attempted fraud, and transaction failures, which they blamed on persistent scammers.

A participant's remark that on the Internet 'anything can happen now', shows a sense of lack of control which increases their feeling of vulnerability when online. This sense of vulnerability was accentuated by the fact that during the lockdowns under movement control orders, many had to resort to online purchasing. Participants, thus, perceived scammers were taking advantage of this surge, especially of consumers who are ignorant or lack knowledge on safe online transactions. Participants were also generally concerned about loss of personal data, abuse of personal data and identity theft.

The pressure to be vigilance and self-education on online safety

The sense of lack of safety in online services engendered high pressure to be alert and vigilant. This situation is aggravated by participants' anxiety on their lack of knowledge on online security and self-protection. They felt exposed due to lack of support on how to avoid becoming a victim of Internet fraud and other cybercrimes. Most participants felt that they had to rely on information shared by other users on Internet fraud and various techniques and means to self-protect. One participant remarked on how he had to self-learn an app to detect online scam before he proceeded with an e-commerce transaction.

However, it is noted that despite concerns about risks of cybercrime, participants were also aware that they could still have access to the services of reputable online e-commerce providers and services. The sharing of information among consumers through social media on matters and issues pertaining to e-commerce safety enabled them to make decisions on which e-commerce platform to use, how to reduce risk and protect themselves online.

The Impact of Information on Crime on Perception of Safety.

Information on crime that participants received or accessed, has a significant impact on their perception of safety. Participants indicated that the social media is their usual and common source of information on crime. Facebook and messenger apps like WhatsApp are the common source of information on crime. Most often, this information would be received from or shared by family members and friends as well as community WhatsApp groups and work colleagues.

Generally, participants were of the view that messages which are fresh and forwarded from trusted persons (parents, spouse, children, siblings and close friends) are quite reliable. This is especially the case where the information is about local issues and thus, not obtainable from conventional media. The level of confidence in the information is further strengthened by videos and images of the crime incident. The information would be further augmented by links to news sources on both online and conventional media.

Paradoxically, most focus group participants admitted that information on crime on social media are often unreliable and vulnerable to mistake and fabrication. They agreed that this form of information often requires verifications. Instead, conventional media (broadcast and print media) and formal news can still be trusted.

The analysis of the focus group discussions also looked into the reasons for social media influence on participants as a source of information of crime.

Social nature of information sharing

On social media, information and news on crime are created and shared along with all sorts of information that attract immediate attention. Sensational news like the one which are 'trending' or 'viral', tends to attract higher attentions and circulations. At the same

time, information sharing is social in nature and are often intended to invite further conversations and comments. Although, this would lead to a social pressure to continue feeding information to sustain group excitement and interactivity.

Brief but instantaneous, current and local.

Information shared on social media, particularly messaging apps, is highly accessible to users because it is brief, instantaneous and perceived to be current. This could create a dependence on social media as a medium for and source of information on crime. Local crime information tends to be shared frequently and swiftly.

This sharing of information is largely to do with a sense of obligation to alert their online social groups. Especially when information is local and consistent with the receiver's identity. Although the benefit of this sharing is mutual self-protection, the weak quality of the information, in terms of their verifiability and authority, could add to unnecessary anxiety about crime in the users' locality. One participant noted how he appreciated the local district police provision of fairly up-to-date information on crime in the locality.

As source of information and medium of social interaction, social media clearly has a significant influence on perception of safety from crime. This situation has negative and positive implications. One particular issue is public's exposure to low quality information on crime. Information shared on social media is often incomplete because it is created instantaneously and lacks verification or authentication. This situation has the potential to create irrational concerns about crime and safety.

Conclusion

This study proposes that perception of safety from crime is formed by interaction of various factors. More importantly, perception of safety from crime is also contextual. Despite a higher sense of safety in general, individuals may perceive lower level of safety in relation to specific places, time, activities and situations. Overall, the findings from the focus group discussions show that despite a high perception of safety from crime in general, participants felt less safe when they were in public places and when interacting with online services. More specifically, public places were perceived to be risky, particularly by female participants, when they were unaccompanied and the location was a distant away from home. On the other hand, both male and female participants felt vulnerable when using online services.

The analysis of the focus group discussions broadly suggest that two interconnecting factors are critical to participants perception of safety from crime. As most participants had never been a direct victim themselves, their perception of safety is affected by the pressure to be vigilance whether at home, in their neighbourhood, in public places and online. In other words, their concerns about the risk or possibility of becoming a victim of crime and the consequent reactive instinct to self-protect or be more cautious and alert eventually inhibited their sense of safety. Their perception of safety is therefore, bounded by the pressure to be vigilant and to avoid risk from criminal victimisation.

Another critical factor is the influence of social media on perception of crime and safety. The focus group discussions show that Malaysians are becoming very attached to social media, including messaging apps, as their source of information on crime. Despite the awareness that crime information on social media is less trustworthy and often unreliable, in certain context, social media was able to provide information that is current, localised and compatible with the identity of the recipients. However, the price for quick access to unreliable crime information is heighten anxiety about the risk of criminal victimization. Stories rather than facts dominates the imagination on crime. Consequently, despite statistics showing reduction in index crimes, many Malaysians still perceive the rate of crime to be high. The lesson from these findings is that it is important in public safety strategy to ensure access to information on crime that is local, up-to-date and immediately accessible through social media. Providers of official information on crime, particularly the Police, is in constant competition with socially created local news on crime. (see Crump, J, 2011). It is urgent, therefore, that these bodies improve their services in this area to prevent further decline in public sense of safety from crime.

The analysis of these focus group discussions also provides further pointers as to how the perception of safety from crime could be enhanced. Individual and society's perception of their safety from crime is very much connected to their day-to-day experience. The perception of safety from crime in their neighbourhood – where they live and conduct their social and economic lives – is the most dominant factor that influence the overall perception of safety from crime. Evidently, crime and safety are very much a local issue. Efforts to increase the sense of safety among Malaysians must focus on local initiatives that involve improving social cohesion, enhancing community-police relationship, and also ensuring information on crime, albeit accessible on social media, is localised, current, verifiable and officially sourced.

Studies into perception of safety from crime could provide an alternative viewpoint to the commonly fear of crime analysis. As discussed above, perception of safety from crime is multifactorial and contextual. Further development of this proposition through more detailed research is necessary and would require exploring and analysis into other factors not covered in this study.

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References

- Abdul Hamid, N., Tan, P. L., Mohamad Zali, M. F., Rahamat, N. U., & Abd Aziz, N. (2015). Safety and security needs of commuter rail services – traveller's perception. *Journal of the Eastern Asia Society for Transportation Studies*, 11, 1495-1506.
- Alshalan, A. (2006). *Cyber-Crime Fear and Victimization: An Analysis of a National Survey* (Doctoral Dissertation). Mississippi State University: United States. Retrieved from <https://hdl.handle.net/11668/16977>.
- Asencio, E. K., Merrill, M., & Steiner, M. (2014). Self-esteem, the fear of crime, and the decision to protect oneself from victimization. *Sociological Forum*, 29(3), 587–606.
- Astro Awani. (2016). *Fear of crime among Malaysians drops to 61*. Retrieved from <https://www.astroawani.com/berita-malaysia/fear-crime-drops-61-percent-year-126408>
- Austin, D. M., Furr, L. A., & Spine, M. (2002). The effects of neighborhood conditions on perceptions of safety. *Journal of Criminal Justice*, 30, 417–427.
- Bernama. (2020). *Crime Cases down by 21.4 pct in 2020 – Mohd Uzir*. Retrieved from https://www.bernama.com/en/crime_courts/news.php?id=2027224#:~:text=KUALA%20LUMPUR%2C%20Nov%2025%20%2D%2D,Seri%20Dr%20Mohd%20Uzir%20Mahidin.
- Bell, N. (2009). Lighting and the perception of safety. *Lighting Journal*, 1-13.
- Bossler, A. M., & Holt, T. J. (2010). The effect of self-control on victimization in the cyberworld. *Journal of Criminal Justice*, 38, 227-236.
- Box, S. Hale, C., and Andrews, G. (1988) Explaining Fear of Crime. *British Journal of Criminology*, 28(3), 340-356.
- Boyce, P. R., Eklund, N. H., Hamilton, B. J., & Bruno, L. D. (2000). Perceptions of safety at night in different lighting conditions. *Lighting Research Technology*, 32(2), 79-91.
- Brands, J., & van Wilsem, J. (2021). Connected and fearful? Exploring fear of online financial crime, Internet behaviour and their relationship. *European Journal of Criminology*, 18(12), 213-234.
- Brands, J., Suojanen, I., & van Doorn, J. (2021). What do people talk about when they talk about experiencing safety? In Jacobs, G., Suojanen, I., Horton, K. E., & Bayerls, P. S. (Ed.). *International Security Management. Advanced Sciences and Technologies for Security Applications* (pp. 67–81). Springer, Cham
- Brenner, S. W. (2004). Cybercrime metrics: Old wine, new bottles?. *Virginia Journal of Law & Technology*, 9(13), 1-52.
- Brenner, S. W. (2014). *Cyberthreats and the decline of the nation-state*. Abingdon: Routledge.
- Britz, M. T. (2008). *Computer forensics and cyber crime: An introduction*. New Jersey: Prentice Hall.
- Capobianco, L. (2008). *The media, crime prevention and urban safety: A brief discussion on media influence and areas for further exploration*. International Centre for The Prevention of Crime, Montreal. Retrieved from https://cipc-icpc.org/wp-content/uploads/2019/08/The_Media__Crime_Prevention_and_Urban_Safety_ANG.pdf
- Chadee, D. (2001). Fear of crime and the media: From perceptions to reality. *Criminal Justice Matters*, 43(1), 10-11.
- Community Safety - Auckland Council. (2012). *Public perceptions of safety from crime in the Auckland region*. Retrieved from https://img.scoop.co.nz/media/pdfs/1207/Perceptions_of_Safety_Report_2011_Final_March_2012_v2.pdf
- Coppola, P., & Silvestri, F. (2020). Assessing travellers' safety and security perception in railway stations. *Case Studies on Transport Policy*, 8(4), 1127-1136.
- Cozens, P., Saville, G., & Hillier, D. (2005). Crime prevention through environmental design (CPTED): A review and modern bibliography. *Journal of Property Management*, 23, 328–356
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. United States of America: SAGE
- Crump, J. (2011). What are the Police Doing on Twitter? Social Media, the Police and the Public. *Policy & Internet*, 3 (4), 1-27
- Curiel, R. P., Cresci, S., Muntean, C. I., & Bishop, S. R. (2020). Crime and its fear in social media. *Palgrave Communications*. 6(1), 1-12.
- Denzin, N. K., & Lincoln, Y. S. (1994). *Handbook of Qualitative Research*. Thousand Oaks, CA: SAGE.
- Donnelly, P. G. (1989). Individual and neighbourhood influences on fear of crime. *Sociological Focus*, 22(1), 69-85.
- Fok, H.-L. (2009). Spotlight on focus groups. *Canadian Family Physician*, 55(2), 218–219.
- Forsythe, S. M., & Shi, B. (2003). Consumer patronage and risk perceptions in internet shopping. *Journal of Business Research*, 56, 867 – 875.
- Foster, S., Giles-Corti, B., & Knuiman, M. (2014). Does fear of crime discourage walkers? A social-ecological exploration of fear as a deterrent to walking. *Environment and Behavior*. 46(6), 698–717.
- Garofalo, J. and Laub, J. (1978) Fear of Crime - Broadening Our Perspective. *Victimology*, 3(3/4), 242-253
- Grabosky, P. N. (2001). Virtual criminality: Old wine in new bottles? *Social & Legal Studies*, 10(2), 243–249.
- Halcomb, E. J., & Davidson, P. M. (2006). Is verbatim transcription of interview data always necessary?. *Applied Nursing Research*, 19, 38-42.

- Hamilton, M., Salim, F., Cheng, E., & Choy, S. L. (2011). Transafe: A crowd sourced mobile platform for crime and safety perception management. *SIGCAS Computers and Society*, 41(2), 32-37.
- Hansmaier, M. (2013). Crime, fear and subjective well-being: How victimization and street crime affect fear and life satisfaction. *European Journal of Criminology*, 10 (5), 515-533.
- Hille, P., Walsh, G., & Cleveland, M. (2015). Consumer fear of online identity theft: Scale development and validation. *Journal of Interactive Marketing*, 30, 1-19.
- Hinkle, J. (2014). Emotional fear of crime vs. perceived safety and risk: Implications for measuring "fear" and testing the broken windows thesis. *American Journal of Criminal Justice*, 40, 147-168.
- Holt, T. J., & Bossler, A. M. (2008). Examining the applicability of lifestyle-routine activities theory for cybercrime victimization. *Deviant Behaviour*, 30(1), 1-25.
- Department of Statistics Malaysia. (2020). *Crime Statistic 2019*. Retrieved from https://www.dosm.gov.my/v1/index.php/index.php?r=column/cthemByCat&cat=455&bul_id=MEs4QzNxWkNZZDEyM08yM0Jsd05vQT09&menu_id=U3VPMldoYUxzVzFaYmNkWXZteGduZz09
- Jackson, J. (2009). A psychological perspective on vulnerability in the fear of crime. *Psychology, Crime and Law*, 15(4), 1-25.
- Jansson, C. (2019). Factors important to street user's perceived safety on a main street. Retrieved from <http://kth.diva-portal.org/smash/get/diva2:1354309/FULLTEXT01.pdf>
- Jewell, L. (2014). Perceptions of crime, feelings of safety, and experiences of victimization in Saskatchewan jurisdictions policed by the Royal Canadian Mounted Police. Retrieved from https://cfbsjs.usask.ca/documents/research/research_papers/PerceptionOfCrime.pdf
- Joewono, T. B., & Kubota, H. (2005). A user perception model concerning safety and security of paratransit services in Bandung, Indonesia. *Jurnal Transportasi*, 5(1), 25-36.
- Jones, J. R. (2017). Media and social media's impact on citizens' perception of the frequency of crime occurrence in the United States. *American International Journal of Social Science*, 6(3), 97-102
- Khalid, U. A., Bachok, S., Mohamed Osman, M., & Ibrahim, M. (2014). User perceptions of rail public transport services in Kuala Lumpur, Malaysia: KTM Komuter. *Procedia - Social and Behavioral Sciences*, 153, 566 – 573.
- Leukfeldt, E. R. (2015). Comparing victims of phishing and malware attacks. Unravelling risk factors and possibilities for situational crime prevention. *International Journal of Advanced Studies in Computer Science and Engineering*, 4(5), 26-32.
- Lijadi, A. A., & van Schalkwyk, G. J. (2015). Online Facebook focus group research of hard-to-reach participants. *International Journal of Qualitative Methods*, 1-9.
- Lobe, B., Morgan, D., & Hoffman, K. A. (2020). Qualitative data collection in an era of social distancing. *International Journal of Qualitative Methods*, 19, 1-8.
- Lowry, D. T., Nio, T. C. J., & Leitner, D. W. (2003). Setting the public fear agenda: A longitudinal analysis of network tv crime reporting, public perceptions of crime, and FBI crime statistics. *Journal of Communication*, 53(1), 61-73.
- Mason, O. J., Stevenson, C., & Freedman, F. (2014). Ever-present threats from information technology: The cyber-paranoia and fear scale. *Frontier Psychology*, 5, 1298.
- Md Sakip., S. R. M., Johari, N., & Mohd Salleh, M. N. (2013). Perception of safety in gated and non-gated communities. *Procedia - Social and Behavioral Sciences*, 85, 383 – 391.
- Mellgren, C. (2011). Neighbourhood influences on fear of crime and victimization in Sweden: A review of the crime survey literature. *Internet Journal of Criminology*, 1-23. Retrieved from <https://mau.diva-portal.org/smash/get/diva2:1402040/FULLTEXT01.pdf>
- Murgado-Armenteros, E. M., Torres-Ruiz, F. J., & Zamora, M. V. (2012). Differences between online and face to face focus groups, viewed through two approaches. *Journal of Theoretical and Applied Electronic Commerce Research. Electronic Version*, 7(2), 73-86.
- Ngo, F. T., & Paternoster, R. (2011). Cybercrime victimization: An examination of individual and situational level factors. *International Journal of Cyber Criminology*, 5(1), 773-793.
- Organisation for Economic Co-operation and Development (OECD). (2020). *How's Life? 2020: Measuring Well-being*. Retrieved from https://www.oecd-ilibrary.org/economics/how-s-life/volume-/issue-_9870c393-en
- O'Mahony, D., & Quinn, K. (1999). Fear of crime and locale: The impact of community related factors upon fear of crime. *International Review of Victimology*, 6, 231-251.
- Othman, L. (2012). Qualitative research: An introduction to theory and methods. Malaysia: Universiti Pendidikan Sultan Idris.
- Painter, K. (1988). *Lighting and crime prevention: The Edmonton Project*. Hatfield, UK: Middlesex Polytechnic.
- Painter, K. (1996). The influence of street lighting improvements on crime, fear and pedestrian street use, after dark. *Landscape and Urban Planning*, 35, 193-201
- Petersson, I., Lilja, M., & Borell, L. (2012). To feel safe in everyday life at home – A study of older adults after home modifications. *Ageing and Society*, 32, 791-811.
- Roberts, L. D., Indermaur, D., & Spiranic, C. (2013). Fear of cyber-identity theft and related fraudulent activity. *Psychiatry, Psychology and Law*, 20(3), 315-328.
- Rogers, T. (2005). Towards an analytical framework on fear of crime and its relationship to print media reportage. *Sheffield Online Papers in Social Research*. Retrieved from https://www.sheffield.ac.uk/polopoly_fs/1.714091/file/8rogers.pdf

- Santosh, L., Rojas, J. C., & Lyons, P. G. (2020). Zooming into focus groups: Strategies for qualitative research in the era of social distancing. *ATS Scholar*, 1-9. Retrieved from <https://www.atsjournals.org/doi/full/10.34197/ats-scholar.2020-0127PS>
- Shaari, A. H., Kamaluddin, M. R., Paizi@Fauzi, W. F., & Mohd, M. (2019). Online-dating romance scam in Malaysia: An analysis of online conversations between scammers and victims. *GEMA Online® Journal of Language Studies*, 19(1), 97-115.
- Skogan, W. (1986). Fear of crime and neighbourhood change. *Crime and Justice*, 8, 203-229.
- Stancanelli, J. (2010). Conducting an online focus group. *The Qualitative Report*, 15(3), 761-765.
- Syed Muhammad, S. K. (2016). Basic Guidelines for Research: An Introductory Approach for All Disciplines. Chittagong: Book Zone.
- Tates, K., Zwaanswijk, M., Otten, R., van Dulmen, S., Hoogerbrugge, P. M., Kamps, W. A. & Bensing, J. M. (2009). Online focus groups as a tool to collect data in hard-to-include populations: examples from paediatric oncology. *BMC Medical Research Methodology*, 9(15), 1-8.
- The Sun Daily. (2018). *Fear of crime still high: IGP*. Retrieved from <https://www.thesundaily.my/archive/fear-crime-still-high-igp-CUARCH535398>
- van Dijk, J., Manchin, R., van Kesteren, J., & Hideg, G. (2007). *The burden of crime in the EU: A comparative analysis of the European survey of crime and safety*. Gallup Europe, Brussels.
- Velasquez, A.J., Douglas, J.A., Guo, F. and Robinette, J.W. (2021) What predicts how safe people feel in their neighborhoods and does it depend on functional status? *SSM-Population Health*. 16 (December), 100927
- Virtanen, S. M. (2017). Fear of cybercrime in Europe: Examining the effects of victimization and vulnerabilities. *Psychiatry, Psychology and Law*, 24(3), 323–338.
- Vitala, C. J. (2011). Fear of crime in gated communities and apartment buildings: A comparison of housing types and a test of theories. *Journal of Housing and the Built Environment*, 26(2), 107-121.
- Wilson-Doenges, G. (2000). An exploration of sense of community and fear of crime in gated communities. *Environment And Behavior*, 32(5), 597-611.
- Wood, L., Shannon, T., Bulsara, M., Pikora, T., McCormack, G., & Giles-Corti, B. (2008). The anatomy of the safe and social suburb: An exploratory study of the built environment, social capital and residents' perceptions of safety. *Health & Place*, 14, 15–31.
- Yanich, D. (2001). Location, Location, Location: Urban and suburban crime on local tv news. *Journal of Urban Affairs*, 23(3/4), 221-241.
- Yar, M. (2009). Public perceptions and public opinion about Internet crime. In Jewkes, Y., & Yar, M. (Ed.). *Handbook of Internet Crime* (pp. 104–119). New York: Willan Publishing.
- Yavuz, N., & Welch, E. W. (2010). Addressing fear of crime in public space: gender differences in reaction to safety measures in train transit. *Urban Studies Journal*, 47(12), 2491–2515.
- Yuan, Y., Dong, B., & Melde, C. (2015). Neighbourhood context, street efficacy, and fear of violent victimization. *Youth Violence and Juvenile Justice*, 1-19.
- Zhang, F, Fan, Z., Kang, Y., Hu, Y, and Ratti, C. (2021) "Perception bias": Deciphering a mismatch between urban crime and perception of safety. *Landscape and Urban Planning*, 207, (March), 104003.

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